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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA – SAN FRANCISCO DIVISION

REBECCA TAYLOR, and C.T., a minor by
 REBECCA TAYLOR, C.T.'s parent and
 guardian, on behalf of themselves and all
 others similarly situated,

Plaintiff,

v.

APPLE, INC.,

Defendant.

Case No. 5:20-cv-03906-RS

**FIRST AMENDED CLASS ACTION
 COMPLAINT**

CLASS ACTION

District Judge Richard Seeborg
 Courtroom 3, 17th Floor

Complaint Filed: June 12, 2020
 Trial Date: Not Set

JURY TRIAL DEMANDED

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1 “We should be very reticent of creating an experience where the outcome can be
2 influenced by spending money. *Loot boxes play on all the mechanics of gambling except*
3 *for the ability to get more money out in the end.*”

4 “Do we want to be like Las Vegas, with slot machines or do we want to be widely
5 respected as creators of products that customers can trust?”

6 “*We have businesses that profit by doing their customers harm.*”

7
8 - Tim Sweeney, Co-Founder of Epic Games

9
10 “**No company should be setting kids up for addiction by teaching them to gamble on**
11 **the content of these loot boxes.**”

12 - Claire Murdoch, Mental Health Director of United Kingdom’s National Health Service
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1 Plaintiffs Rebecca Taylor, and C.T., a minor by Rebecca Taylor, C.T.'s parent and legal
 2 guardian ("Plaintiffs"), file this First Amended Class Action Complaint against Apple, Inc. ("Apple"
 3 or "the Company") on behalf of themselves and all others similarly situated. Plaintiffs bring this
 4 action based upon personal knowledge of the facts pertaining to themselves, and on information and
 5 belief as to all other matters, by and through undersigned counsel.

6 **NATURE OF THE ACTION**

7 1. Apple, in concert with game developers, has devised a highly lucrative scheme to
 8 monetize free videogames through the development, promotion, and sale of "loot boxes." Loot
 9 boxes are a type of slot machine that cause and exploit the same form of compulsive behavior and
 10 addiction caused by other gambling activities. Loot boxes offer the randomized chance to win prizes.
 11 Playing a loot box takes no skill. One simply pays money and then clicks on the loot box, like a
 12 gambler pulling the arm of a slot machine. The loot box then lights up, flashes, and makes noises to
 13 build excitement as the player anxiously waits to see if he or she will win a rare and valuable prize.
 14 The chance of winning a prize is intentionally randomized, with the more desirable prizes much
 15 more difficult to win. Playing a loot box is a gamble because one never knows what the player will
 16 win until after the wager is made and the loot box is opened. Sought-after prizes include important
 17 or better weapons, costumes, or player appearances (called "skins"), or some other in-game item or
 18 feature designed or perceived to enhance gameplay or provide competitive advantage. By design,
 19 the prizes that are the least likely to win are the most valuable to players.

20 2. The prizes are valuable. They often can be bartered or sold, either through markets
 21 created or permitted by Apple and the game developers or through other methods. Even when a
 22 market is not allowed to be created, it is because of restrictions placed by Apple or the developer,
 23 and not because the prizes do not have monetary value. The prizes also have inherent and hedonic
 24 value. Apple, in concert with game developers, purposefully limits the availability of certain prizes
 25 so their scarcity increases their value; conceptually like the JPG file by the artist Beeple that recently
 26 sold at an art auction for \$69.3 million. Beeple's JPG file is nothing but a virtual image that could
 27 be infinitely, indefinitely, and perfectly duplicated. However, because the artist made the JPG file
 28 scarce – limited to just one copy – it broke art sale records. The virtual file has value to the purchaser,

1 which is why the purchaser was willing to pay money for it, just like the virtual prizes offered
2 through loot boxes.

3 3. Loot boxes are very common, frequently found in games targeted to children and
4 teenagers. 59% of the top-100 grossing games in the Apple App Store contained loot boxes. Of
5 those games, under Apple's rating rules, 24% were rated as suitable for children aged 4 and older,
6 56% were rated as suitable for children 9 and older, and 95% were rated as suitable for children
7 12 and older.

8 4. Loot boxes constitute an illegal gambling device under California law and their sale
9 violates public policy and is immoral, unethical, and unscrupulous. The California Legislature has
10 declared gambling against public policy and has enacted laws broadly defining and prohibiting it,
11 including prohibiting the control, operation, and dissemination of gambling devices. As the
12 Legislature declared: "Gambling can become addictive and is not an activity to be promoted or
13 legitimized as entertainment for children and families." Cal. Bus. & Prof. Code § 19801(c). The
14 Legislature also passed the Unfair Competition Law to curtail new schemes that violate fundamental
15 rules of honesty and fair dealing, specifically including "new schemes which the fertility of man's
16 invention would contrive."

17 5. In violation of these laws and policies, Apple works hand-in-glove with game
18 developers in the creation, marketing, and sale of loot boxes in its games. By doing so, Apple brings
19 24/7 access to gambling into the homes of families everywhere, and exploits people as young as
20 four years old for profit.

21 6. Apple exercises absolute control over the types of games and other activities
22 permitted on its Apple App Store. While Apple prohibits other forms of gambling, it permits,
23 promotes, and encourages game developers to place loot boxes in games because they are such an
24 effective method of monetizing "free" games. It even coaches game developers on the "path to
25 monetization" using a "freemium business model."¹ Apple instructs its developer partners to allow
26

27 ¹ "Freemium," a combination of "free" and "premium," is a pricing strategy by which a basic
28 product or service is provided free or charge, but money (a premium) is charged for additional
features, services, or virtual (online) or physical (offline) goods and services.

1 users to first pay nothing to download the app, giving them “time to enjoy an app [so] they may be
 2 more inclined to invest in paid features.” Once “attract[ing] more users by lowering the barrier to
 3 download,” Apple instructs developers to build and grow their app’s revenue streams through sales
 4 of in-app “consumable” digital goods like loot boxes. In return for its active participation in
 5 permitting, facilitating, controlling, and developing loot boxes, Apple receives 30% of the revenue
 6 from loot box plays sold through the App Store.

7 7. With loot boxes, Defendant’s App Store is like a physical casino. Just like a casino,
 8 Apple permits, promotes, facilitates, and profits off gambling. Because Apple makes it so, the App
 9 Store is the only place to buy the currency needed to play a loot box and it is the only place where
 10 loot boxes can be accessed. Just like casinos, while Apple does not create the slot machine or set its
 11 random-chance algorithm, Apple houses the slot machine and takes a cut off the top from every
 12 wager that is placed.

13 8. Governments, regulators, psychologists, and other researchers agree loot boxes are
 14 predatory gambling devices that foster, create, and reinforce compulsive and addictive behaviors.
 15 Researchers agree loot boxes have all the structural and psychological hallmarks of gambling and
 16 correlate with compulsive behavior and problem gambling among children, teenagers, and adults.
 17 The proven link to problem gambling is robust. Given the structural and psychological similarities,
 18 researchers recognize loot boxes as the “gamblification of gaming” (Brooks & Clark 2019) by using
 19 “predatory monetization schemes” that disguise long-term costs to “entrap” the player in a belief
 20 that repeated spending of money is justified as it increases the likelihood of obtaining valuable items
 21 (King & Delfabbro 2018). The “disguised character” of the loot box gambling game “is extra
 22 problematic in the case of children.”²

23 9. Numerous regulators around the world have prohibited or restricted the use of loot
 24 boxes. Countries that have expressly regulated or are considering regulations of loot boxes include
 25
 26

27 ² Belgian Gaming Commission, *Research Report on Loot Boxes* (April 2018), available at
 28 https://www.gamingcommission.be/opencms/export/sites/default/jhksweb_nl/documents/onderzoekrapport-loot-boxen-Engels-publicatie.pdf

1 the Netherlands, Belgium, the United Kingdom, Japan, France, Spain, and China.

2 10. By exploiting this compulsive behavior, Apple makes hundreds of millions of dollars
3 annually in violation California's gambling laws and established public policies designed to protect
4 children, families, and other consumers from this type of predatory conduct.

5 11. Plaintiffs bring this action on behalf of all persons who paid for a play on a loot box
6 within an app downloaded from Apple's App Store. On behalf of themselves and the Class, Plaintiffs
7 assert claims violations of the unlawful prong of Californian Business & Professions Code § 17200,
8 the unfair prong of California Business & Professions Code § 17200, the Consumers Legal
9 Remedies Act, and unjust enrichment for damages, restitution, and injunctive relief.

10 **THE PARTIES**

11 12. Plaintiff Rebecca Taylor is the parent and legal guardian of C.T., a minor. She and
12 C.T. are and at all relevant times were citizens of the State of California who reside in Huntington
13 Beach, California. Since at least 2019, C.T. has owned and played Brawl Stars, a game app marketed
14 and distributed by Apple and downloaded onto Apple devices. While playing Brawl Stars and other
15 games on Apple devices, Plaintiff's son C.T. spent his mother's money and his own money to
16 purchase loot boxes in-game from Apple. Specifically, C.T. purchased chances on a "Brawl Box,"
17 which is the name given the loot box in Brawl Stars. Plaintiff and her son lost money and property
18 by purchasing loot boxes and suffered injury in fact. They lost money when C.T. purchased virtual
19 coins to buy chances on loot boxes and lost property in the form of the virtual coins when he used
20 them to buy chances on loot boxes. Therefore, Plaintiff and C.T. lost money and property as a result
21 of Apple's unfair business practices alleged.

22 13. C.T.'s mother estimates C.T. has paid Apple more than \$25 on in-app purchases from
23 the Apple App Store, including on purchasing loot boxes. C.T. used his own money (iTunes gift
24 cards) and his parents' credit card to buy the loot boxes, which is on file with Apple. C.T. played,
25 and continues to play, Brawl Stars and other App Store games which contain loot box games on the
26 Apple devices. To the extent he plays these games in the future, he will be subjected to Apple's
27 predatory conduct involving loot boxes.
28

14. Defendant Apple, Inc. is a corporation organized and existing under the laws of the State of California with its principal place of business at 1 Apple Park Way, Cupertino, California, 95014-0642. Apple is engaged in continuous and significant business throughout the state of California, consisting of, among other things, retail operations, advertising, marketing, and distribution activities. Apple developed, owns, controls, manages, and operates the Apple App Store, the iOS mobile operating system, and the Apple mobile hardware devices exclusively using the iOS operating system.

JURISDICTION AND VENUE

15. This Court has diversity jurisdiction over the claims asserted herein on behalf of a nationwide class pursuant to 28 U.S.C. § 1332, as amended in February 2005 by the Class Action Fairness Act. Jurisdiction is proper because:

(a) The proposed class includes more than 100 members, and many of the named Plaintiffs and class members are citizens of states that are diverse from the state of Defendant's citizenship, the amount in controversy in this class action exceeds five million dollars, exclusive of interest and costs; and

(b) Defendant has purposefully availed itself of the privilege of conducting business activities within the State of California, where Apple has its principal place of business; where its officers direct, control, and coordinate Apple's activities, and where Apple engaged in the unlawful conduct alleged herein.

16. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391, because a substantial part of the challenged conduct or omissions complained of herein occurred in this judicial district, and defendant caused harm to at least one of the named Plaintiffs and numerous Class members in this judicial district.

INTRADISTRICT ASSIGNMENT

17. Pursuant to Civil L.R. 3-2(c) and (d), assignment to the San Jose Division is proper because a substantial part of the conduct which gives rise to Plaintiffs' claims occurred in this district and specifically in Santa Clara County where Defendant is headquartered.

SUBSTANTIVE ALLEGATIONS

A. The Rise of In-App Purchases, Apple’s App Store, and Apple’s Control of Apps

18. Videogames have been popular for decades. For much of that time, game developers created and sold videogames to consumers either directly or through third-party retailers, such as GameStop, a model known as “pay-to-play.” Before the widespread use of the internet, pay-to-play was the way videogames generated revenue. Under this model, consumers paid an upfront, single price to obtain a fully functional videogame. Consumers bought a physical computer disc or cartridge loaded with the game. With the widespread use of the internet, the “free-to-play” model began, which was further accelerated by the rise of smartphone use and apps. With the free-to-play model, anyone could play the functional game for free, but the game had a mixed variety of paid and free business models with assorted monetization strategies. These strategies included selling advertisements, but also “microtransactions,” also known as “in-app purchases.” “Microtransactions” are transactions where players can purchase virtual items for relatively small amounts of money. They are commonly employed in free-to-play games. Loot boxes are a form of in-app microtransaction.

19. As the pay-to-play model started to disappear, Apple met the demand for free and low-cost apps through its App Store. Today there are about 1.5 billion active Apple mobile devices loaded with Apple’s iOS operating system. To download an app onto any Apple mobile device, Apple requires consumers to use Apple’s App Store, accessed through its own app that comes preloaded on Apple devices.

20. The Apple App Store features over 4.3 million apps. About 960,000 of them are videogame apps. As of March 2021, 93% of App Store apps are free to download. Apple promotes and markets game apps directly to those with Apple iOS devices and places the apps on virtual shelves in its Apple App Store.

21. In concert with game developers, Apple makes enormous revenues from its free-to-download videogames through in-app microtransactions, including loot boxes, something for which Apple’s App Store is ideally optimized.

22. Apple requires all game developers with iOS compatible games to make them exclusively available at the App Store. They must also agree to the “Apple Developer Program License Agreement.” By its terms, the Apple Developer Program License Agreement creates an agency relationship between Apple and the game developers in the commercial enterprise of distributing, marketing, and selling games apps, loot box plays and their contents. Apple and the game developers consider loot boxes to be products. The Apple Developer Program License Agreement states:³

7.1 Delivery of Free Licensed Applications via the App Store or Custom App Distribution

If Your Application qualifies as a Licensed Application, it is eligible for delivery to end-users via the App Store or Custom App Distribution by Apple and/or an Apple Subsidiary. If You would like Apple and/or an Apple Subsidiary to deliver Your Licensed Application or authorize additional content, functionality or services You make available in Your Licensed Application through the use of the In-App Purchase API to end-users for free (no charge) via the App Store or Custom App Distribution, then You appoint Apple and Apple Subsidiaries as Your legal agent and/or commissionaire pursuant to the terms of Schedule 1 for Licensed Applications designated by You as free-of-charge applications.

* * *

7.2 Schedule 2 and Schedule 3 for Fee-Based Licensed Applications; Receipts

If Your Application qualifies as a Licensed Application and You intend to charge end-users a fee of any kind for Your Licensed Application or within Your Licensed Application through the use of the In-App Purchase API, You must enter into a separate agreement (Schedule 2) with Apple and/or an Apple Subsidiary before any such commercial distribution of Your Licensed Application may take place via the App Store or before any such commercial delivery of additional content, functionality or services for which You charge end-users a fee may be authorized through the use of the In-App Purchase API in Your Licensed Application...

* * *

³ A copy of the adhesionary Apple Developer Program License Agreement is available at Exhibit B to the September 15, 2020, Declaration of Philip W. Schiller, Apple Fellow and former Senior Vice President, Worldwide Marketing, which was filed by Apple at ECF No. 74 in *Epic Games, Inc. v. Apple Inc.*, Case No. 4:20-cv-05640-YGR (N.D. Cal.) (“September 15, 2020, Philip Schiller Declaration”)

Schedule 1, Section 1.1 You hereby appoint Apple and Apple Subsidiaries (collectively “Apple”) as: (i) Your agent for the marketing and delivery of the Licensed Applications to end-users located in those countries listed on Exhibit A, Section 1 to this Schedule 1, subject to change; and (ii) Your commissionaire for the marketing and delivery of the Licensed Applications to end-users located in those countries listed on Exhibit A, Section 2 to this Schedule 1, subject to change, during the Delivery Period.⁴

* * *

Schedule 1, Section 1.3 The parties acknowledge and agree that their relationship under this Schedule 1 is, and shall be, that of principal and agent, or principal and commissionaire, as the case may be, as described in Exhibit A, Section 1 and Exhibit A, Section 2 respectively, and that You, as principal, are, and shall be, solely responsible for any and all claims and liabilities involving or relating to, the Licensed Applications, as provided in this Schedule 1. The parties acknowledge and agree that Your appointment of Apple as Your agent or commissionaire, as the case may be, under this Schedule 1 is non-exclusive. You hereby represent and warrant that You own or control the necessary rights in order to appoint Apple and Apple Subsidiaries as Your worldwide agent and/or commissionaire for the delivery of Your Licensed Applications, and that the fulfillment of such appointment by Apple and Apple Subsidiaries shall not violate or infringe the rights of any third party.

* * *

Schedule 2, Section 1.1 You hereby appoint Apple and Apple Subsidiaries (collectively “Apple”) as: (i) Your agent for the marketing and delivery of the Licensed Applications to End-Users located in those countries listed on Exhibit A, Section 1 to this Schedule 2, subject to change; and (ii) Your commissionaire for the marketing and delivery of the Licensed Applications to End-Users located in those countries listed on Exhibit A, Section 2 to this Schedule 2, subject to change, during the Delivery Period. The most current list of App Store countries among which You may select shall be set forth in the App Store Connect tool and may be updated by Apple from time to time. You hereby acknowledge that Apple will market and make the Licensed Applications available for download by End-Users through one or more App Stores, for You and on Your behalf.⁵

⁴ Exhibit A to Section 1 to this Schedule 1 states “You appoint Apple Inc. as Your agent pursuant to California Civil Code §§ 2295 et seq. for the marketing and end-user download of the Licensed Applications by end-users located in...United States”.

⁵ Exhibit A to Section 1 to this Schedule 2 states “You appoint Apple Inc. as Your agent pursuant to California Civil Code §§ 2295 et seq. for the marketing and end-user download of the Licensed Applications by End-Users located in...United States”. Additionally, “Licensed Applications” is defined by Apple to include not just the app itself, but also any in-app content or

23. The Apple Developer Program License Agreement contains the following definitions:

“App Store” means an electronic store and its storefronts branded, owned, and/or controlled by Apple, or an Apple Subsidiary or other affiliate of Apple, through which Licensed Applications may be acquired.

“In-App Purchase API” means the Documented API that enables additional content, functionality or services to be delivered or made available for use within an Application with or without an additional fee.

“Licensed Application” means an Application that (a) meets and complies with all of the Documentation and Program Requirements, and (b) has been selected and digitally signed by Apple for distribution, and includes any additional permitted functionality, content or services provided by You from within an Application using the In-App Purchase API.

“You” means and refers to the person(s) or legal entity (whether the company, organization, educational institution, or governmental agency, instrumentality, or department) that has accepted this Agreement under its own developer account and that is using the Apple Software or otherwise exercising rights under this Agreement.

24. The Apple Developer Program License Agreement contains numerous other provisions in which Apple is given the right and sole authority to act on behalf of the game developer, including exercising sole control over payment for loot boxes, the collection and payment of taxes (at Apple’s discretion), and payment refunds to consumers (again, at Apple’s sole discretion). The Apple Developer Program License Agreement forbids developers from issuing refunds to consumers for loot boxes. Through the Apple Developer Program License Agreement, Apple is also given the right to “repackage” any app “in order to deliver a more optimized version” of the app to Apple devices.

25. Before Apple will allow an app to be distributed at its App Store, the app must comply with Apple’s app rules and be reviewed and approved by Apple.

26. Apple requires all app developers to use Apple’s payment processing service, called the “In-App Purchase” or “IAP” mechanism, when selling loot boxes and other in-app purchases,

services (e.g., loot boxes) offered in the software application.

known as selling “digital goods and services,” to consumers. Apple describes the In-App Purchase mechanism as follows:

Apple’s In-App Purchase mechanism (“IAP”) is the App Store’s centralized payment system. It lets users make in-app purchases; that is, purchase digital goods and services within apps without the inconvenience and security risks of registering their payment information with each developer. The business model for the App Store has remained unchanged since it launched in 2008: if you charge for software purchased through the App Store, Apple takes a percentage of the charge as commission.⁶

27. In part through the IAP mechanism, Apple supports, encourages and expands developers’ ability to monetize apps, including through loot boxes. For example, because all sales go through Apple, it collects and manages all of the consumer transaction records. Apple uses these records to perform customized business analytics which it provides to its app developer partners that allow those developers to optimize in-game interactions to increase in-app transactions, including the sale of loot box plays.⁷

28. Apple also helps game developers design loot boxes to maximize revenue, including providing software development kits to assist game developers in creating loot boxes. According to Apple, “the App Store is not simply a marketplace – it is part of a larger bundle of tools, technologies and services that Apple makes available to developers to develop and create great applications for iPhone, iPad and other Apple products.” “Not only has Apple supplied tools and technologies for [developers] to build its apps, but it also provided a marketplace—the App Store—to help make them a success...[this] underscores the value Apple brings to developers.” Apple “invests significant resources to ensure that apps meet high standards for privacy, security, content, and

⁶ See Paragraph 3 of the August 21, 2020, Declaration of Philip W. Schiller, Apple Fellow and former Senior Vice President, Worldwide Marketing, filed by Apple at ECF No. 37 in *Epic Games, Inc. v. Apple Inc.*, Case No. 4:20-cv-05640-YGR (N.D. Cal.).

⁷ See Paragraph 36 of the September 15, 2020, Philip Schiller Declaration; *see also* <https://developer.apple.com/app-store/measuring-app-performance/> (describing Apple’s publishing platform called App Store Connect, which helps developers manage their products, track app performance, facilitate customer payments, handle tax obligations, and get paid).

1 quality; [Apple has] reviewers located on three continents, representing 81 languages, and reviewing
 2 on average 100,000 submissions per week.”^{8 9}

3 29. According to Apple, its “investment in tools, services, and support to developers is a
 4 key reason for the App Store’s success. It helps ensure the store is filled with creative, useful, high-
 5 quality, and innovative apps.”¹⁰ Apple readily concedes it promotes games and their in-app
 6 purchases. In ongoing litigation against one game developer over the sale of loot boxes and other
 7 in-app goods and services, Apple admits “In addition to providing engineering, technical, and
 8 hardware-related support, Apple has also provided Epic with an extraordinary amount of marketing
 9 and promotion support.”¹¹ Apple concedes “all developers to some degree take advantage of the
 10 support and guidance that Apple provides.”¹²

11 30. Apple is well paid for the assistance it provides in the development and sale of loot
 12 boxes, which goes well beyond merely processing payments. An online payment processor charges
 13 about 3% for processing payments over the internet. In recognition of the role Apple plays, Apple
 14 and its game developers have a revenue sharing agreement where Apple receives 30% of all revenue
 15 from the sale of loot boxes.

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 17
 18 ⁸ See July 10, 2020, letter from Apple to Epic Games, filed by Apple at ECF No. 74-5 in *Epic Games v. Apple, Inc.*, Case No. 4:20-cv-05640-YGR (N.D. Cal.). Materially identical statements are made in Paragraph 73 of the September 15, 2020, Philip Schiller Declaration.

19 ⁹ According to Apple, it actively works alongside app developers and in some instances “is in near-constant contact” with developers “including close engineer-to-engineer direct communication – to work on technical issues and to ensure [the developer’s app game] prospective updates comply with Apple’s app review guidelines.” See September 15, 2020, Declaration of Apple Game Developer Manager Mark Grimm at ¶¶ 4-5, filed by Apple at ECF No. 76 in *Epic Games v. Apple, Inc.*, Case No. 4:20-cv-05640-YGR (N.D. Cal.). Apple “has expended great effort to accommodate [developers’] specific needs and demands”. *Id.* at ¶ 4. At least as it relates to Epic Games’ gaming apps, Apple states that “[i]n addition to providing engineering, technical, and hardware-related support, Apple has also provided Epic with complimentary promotional support across various platforms.” *Id.* at ¶ 7.

20 ¹⁰ See Paragraph 3 of the September 15, 2020, Declaration of Mike Schmid, Apple’s Head of Games Business Development for the App Store, filed by Apple at ECF No. 79 in *Epic Games, Inc. v. Apple Inc.*, Case No. 4:20-cv-05640-YGR (N.D. Cal.) (“Mike Schmid Declaration”).

21 ¹¹ Mike Schmid Declaration at ¶ 9.

22 ¹² Mike Schmid Declaration at ¶ 17.

31. Apple also exercises absolute control over the activities permitted through the App Store, including whether to permit or prohibit loot boxes and other gambling activity.

32. Apple requires developers to agree to and be bound by the App Store Review Guidelines (the “Guidelines”). The Guidelines provide the rules and requirements that must be met for possible publication on the App Store. Failure to comply with the Guidelines can result in removal from Apple’s Developer Program.¹³

33. Under the Apple Developer Program License Agreement, Apple requires game developers to develop and sell in-app digital goods and services with Apple.¹⁴

34. Through the Apple Developer Program License Agreement and the Guidelines, Apple creates and controls much of the content of these games through a suite of developer tools, software, and other intellectual property for app creation (including Apple’s Xcode and Software Development Kit or “SDK”) and Apple-proprietary software for advanced app development such as Metal Developer Tools for Windows, Reality Composer 1.5 beta, Apple Configurator 2.13 beta, and Schoolwork 2.1 beta.

35. The Guidelines permit loot boxes while prohibiting other types of unlicensed and prohibited gambling activity. This includes a prohibition on using virtual currency to gamble with. The Guidelines also advise game developers that:

Gambling, gaming, and lotteries can be tricky to manage and tend to be one of the most regulated offerings on the App Store. Only include this functionality if you’ve fully vetted your legal obligations everywhere you make your app available and are prepared for extra time during the review process.

///

///

¹³ For a \$99 annual fee, the “Apple Developer Program” provides developers with an assortment of software tools to build, test, and distribute their apps on Apple’s iOS for iPhones and iPads. Apple personnel are also available to advise developers on ways to improve their products and grow their businesses. To participate in this Developer Program, a developer must enter into another contract with Apple – known as the “Apple Developer Agreement.” *See* Paragraphs 4, 11, and 12 of the September 15, 2020, Philip Schiller Declaration. A developer cannot enter into any other agreement with Apple, such as the Developer Program License Agreement, until it first executes the Apple Developer Agreement. *Id.* at ¶ 11.

¹⁴ <https://developer.apple.com/app-store/review/guidelines/>

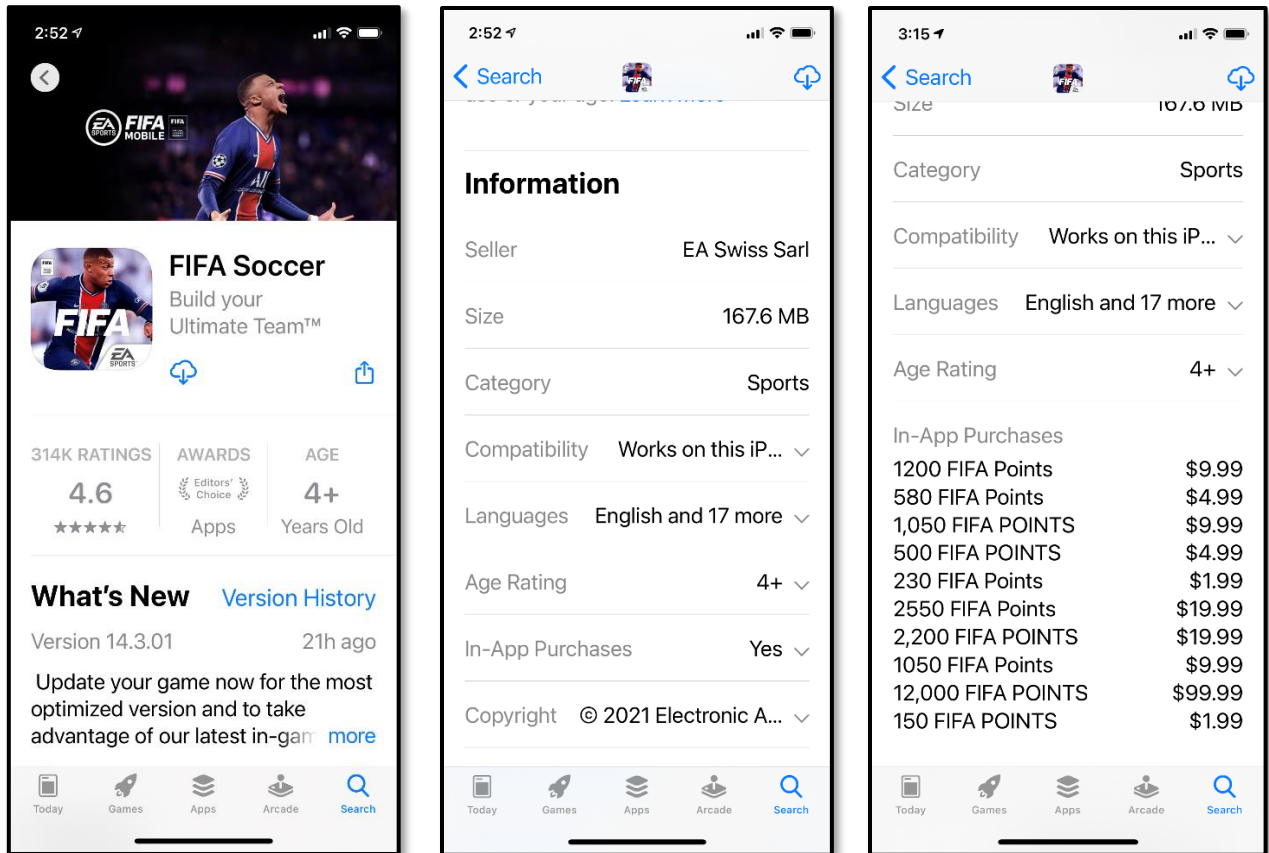
1 36. However, it expressly permits loot boxes, while placing a meaningless condition on
2 their use. The Guidelines provide:

3 Apps offering “loot boxes” or other mechanisms that provide randomized virtual
4 items for purchase must disclose the odds of receiving each type of item to customers
5 prior to purchase.

6 37. Apple generally requires parental disclosures according to specific guidelines
7 determined by Apple and polices those guidelines. Those required disclosures include “age rating”
8 disclosures, which are based on factors including whether games offer activities such as “gambling”
9 or “simulated gambling.” But Apple does not require any disclosure that loot boxes are a form of
10 gambling, or that loot boxes foster compulsive behavior and addiction. By dictating what warnings
11 to make or not, Apple effectively prohibits warnings about loot boxes.

12 38. In the United States, the videogame industry self-regulates through the Entertainment
13 Software Ratings Board (“ESRB”). Apple does not use the ESRB ratings system. Instead, Apple
14 created and uses its own rating system for games offered in the App Store. Apple’s ratings do not
15 disclose the presence of loot boxes, that they are gambling devices, or that they can lead to
16 compulsive behavior and addiction. Apple merely discloses that a game contains “In-App
17 Purchases.” As an example, below are screen shots of the App Store’s disclosures concerning the
18 FIFA game:¹⁵

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28 ¹⁵ See also <https://apps.apple.com/us/app/fifa-soccer/id1094930513> (listing materially identical information about FIFA on the desktop App Store Preview webpage)



39. According to Apple, its age and content ratings are intended to “help your customers make good choices for children and adults.”¹⁶

B. What Is a Loot Box?

40. A loot box is a type of in-app purchase that, for payment, allows a player to take a randomized chance to obtain something of value. A loot box is a gambling device that permits one to engage in an activity, specifically the activity of gambling. Apple describes loot boxes as an in-app “mechanism” that “provide[s] randomized virtual items for purchase.”¹⁷

41. A loot box is sold within another game that Apple typically offers for free. They are available in games that require skill and in games that require no skill at all. Loot boxes work like a slot machine. Functionally, a loot box works the same regardless of the game in which it is found. First, through Apple’s App Store, a player purchases virtual currency (i.e., digital goods) that are used to buy a chance at a loot box. Once purchased, the player clicks on the loot box. The loot box

¹⁶ <https://help.apple.com/app-store-connect/#/dev599d50efb>

¹⁷ <https://developer.apple.com/app-store/review/guidelines/#1.3>

1 then lights up, flashes, and makes noises to build excitement as the player anxiously waits to see if
 2 he or she will win a rare and valuable prize. No skill whatsoever is required – a loot box is purely a
 3 game of chance.

4 42. A loot box play is purchased only through the Apple App Store using money, usually
 5 with a credit card or Apple gift card. The player uses money to purchase virtual currency and then
 6 uses the virtual currency to purchase a chance on a loot box. Whether the purchase is viewed as
 7 being made with fiat currency or with property in the form of virtual currency purchased with
 8 money, a loot box play costs real money.

9 43. With an Apple device, Apple makes it very easy for a player to purchase a loot box.
 10 Once the “Purchase” button is pressed, Apple charges the credit card on file with the Apple App
 11 Store or deducts the amount from the Apple gift card. There is no additional confirmation. A minor
 12 can accomplish the purchase without parental consent or knowledge. Industry-wide, loot boxes
 13 generated revenue of more than \$30 billion for the videogame industry during 2018 and is projected
 14 to reach \$50 billion by 2022.¹⁸

15 44. In accordance with Apple’s game design guidance and to create scarcity, game
 16 developers assign very long odds to the more desirable loot box prizes. In attempt to placate loot
 17 box critics, Apple requires game developers to publish the odds of winning loot box prizes. *See*
 18 Guidelines, § 3.1.1 (“Apps offering “loot boxes” or other mechanisms that provide randomized
 19 virtual items for purchase must disclose the odds of receiving each type of item to customers prior
 20 to purchase.”). However, stating the odds of winning does not deter people from gambling.¹⁹

21 45. Apple permits, encourages, and directs developers to place loot boxes in every
 22 category of game offered through the Apple App Store, including games in the categories of
 23

24 ¹⁸ Mike Wright, *Video gamers will be spending \$50 billion on gambling-like loot box features*
 25 *by 2022, according to analysts*, The Telegraph (Apr. 17, 2018),
 26 [https://www.telegraph.co.uk/technology/2018/04/17/video-gamers-willspending-50-billion-](https://www.telegraph.co.uk/technology/2018/04/17/video-gamers-willspending-50-billion-gambling-like-loot-box/)
[gambling-like-loot-box/](https://www.telegraph.co.uk/technology/2018/04/17/video-gamers-willspending-50-billion-gambling-like-loot-box/).

27 ¹⁹ *See, e.g., Score Family Fun Ctr. v. County of San Diego*, 225 Cal. App. 3d 1217, 1221 (1990)
 28 (rejecting the argument that the ability to calculate odds meant a virtual casino game was not illegal
 gambling: “this [odds] calculation does not predict, to the individual player, whether his particular
 ticket will win”).

“Action,” “Adventure,” “Educational,” “Family,” “Music,” “Puzzle,” “Racing,” “Sports,” “Strategy,” and “Trivia.”

C. Examples of Loot Boxes

46. Below are seven examples of loot boxes found in some of the most popular games. Regardless of the game, loot boxes and the currency for purchasing them remains the same. Like slot machines in a casino, the superficial aspects of loot boxes found in different games – such as the names, graphics, and sounds of the loot boxes – may differ, but the loot box devices are the same and operate in the same way. Regardless of the game, each loot box contains the elements that constitute gambling: consideration, chance, and the possibility to win prizes of value. Any differences are purely cosmetic.

Example 1: Mario Kart Tour

47. Mario Kart Tour is a popular free-to-download animated kart racing game released by Nintendo in September 2019. Apple rates the game “4+,” meaning it is appropriate for children four and older. According to Apple, a 4+ age-rating means “contains no objectionable material.” Mario Kart Tour was downloaded by more than 90 million people during its first week, and 150 million people in its first 100 days (who made \$75 million in in-app purchases). Although it was not released until September, it was Apple’s most downloaded App Store game of 2019.

48. A loot box in Mario Kart is called a “Pipe.” A player purchases a Pipe, clicks on it, and then the Pipe shoots out a random prize of value. The prize may be a driver, kart, or glider of common or rare variety.

49. Virtual “rubies” are the main form of currency in the game. A player buys a “pipe” in-game with the “rubies” purchased for money through the App Store. Apple sells them in various lots. For example, the player can purchase 3 Rubies for \$1.99 (\$0.66 per Ruby), 23 Rubies for \$12.99 (\$0.56 per Ruby), or 135 Rubies for \$69.99 (\$0.52 per Ruby). They can also be earned in limited amounts through game play.

50. The following is a screenshot of a player opening a Pipe:



51. Depending on the Pipe, each Pipe contains a determined amount of “Normal,” “Super,” and “High-End” items that one has a theoretical possibility of winning. With Apple’s guidance, the game developer set the odds of winning a given prize based on their class and rarity. By design, the results are randomized, with the more valuable items being less likely to win. It is most likely a player will win an item that already has been obtained or is otherwise not desirable.

52. As one video game critic noted, the mechanics of Mario Kart’s loot box are designed to cause children to spend money on Pipes:

Mario Kart Tour locks its racers, karts and gliders behind a randomized loot box system, where if you spend a couple of rubies you can get a green Mario pipe to fire out some new item, maybe one of those super rare characters you’ve been wanting or maybe that glider you need to get five stars on that same clone of the same course you’ve raced on five times already. There isn’t even a character I particularly want here, and yet I keep pulling this thing down and reveling in its “surprise mechanic” of an animation, hoping that whatever emerges from that glowing white ball will give me some sort of peace. Spoilers! It won’t.

And this is the beating heart of Mario Kart Tour, the reason that Nintendo turned its game into a morass of currencies, unlocks, XP bars and [loot box] mechanics. The reason is that they work: they give us a little dopamine drip in our brains that the developer can parcel out to push us towards buying rubies on our own rather than “earning” them by grinding through what is bound to be an endless series of samey races. All it needs to do is give you a few rewards for free before you’re hooked into that glorious feeling of pulling that pipe back: it’s why loot boxes in so many games have such elaborate animations and detailed sound effects: those loot boxes are the heart of the experience, and they need to hit your animal brain as hard as they can. And it works in Mario Kart Tour as well as any. I opened up the game to take a screenshot for this article and played a few races, throwing a few more arbitrary stars onto my totals.

I haven't spent any money on Mario Kart Tour yet, and I don't plan on doing so. I can hold out until Shadowkeep for Destiny 2 launches, opening up a much broader and more satisfying dopamine source. ***But others won't be so lucky, particularly children. They'll shell out some huge amount of money for some miniscule chance to unlock musician Mario, and then they'll shell out more for the next thing. It's disappointing to see from Nintendo, but the developer is clearly going to keep doing it. It works.***²⁰

53. In September 2019, Nintendo (the game's developer) announced it was not offering Mario Kart Tour in Belgium because its loot boxes are prohibited under Belgian law. Nevertheless, Apple and Nintendo have continued to market and sell Mario Kart Tour and its in-game loot boxes to consumers throughout the United States.

Example 2: FIFA Soccer

54. FIFA Soccer (mobile) is an online sports game developed by EA Sports that is free to download from the App Store. Apple rates FIFA "4+." FIFA mobile allows players to complete drills and contests, play online against other players, and compete in online tournaments and leagues. In February 2021 alone, FIFA Soccer was downloaded from the App Store over 800,000 times and generated \$3 million in revenue, all in in-game purchases and mostly from loot box sales.

55. A large part of the FIFA game revolves around creating one's own team, which the player uses to play other teams. To get the best players, one can take a chance on FIFA's version of a loot box, known as a "Card Pack" or "Player Pack." These Packs are purchased with FIFA Ultimate Team ("FUT") Coins, the name of the virtual currency used in FIFA and purchased with real money through the App Store. The potential prizes one can win by playing a loot box are players for one's team.

56. Critics recognize the Card and Player Pack loot boxes are slot machines:

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²⁰ Dave Theri, *I'm Still Playing Mario Kart For The Worst Reason*, Forbes (Oct. 1, 2019), <https://www.forbes.com/sites/davidthier/2019/10/01/im-still-playing-mario-kart-tour-for-the-worst-reason/#977582468cad>

“The thrill of opening a pack to hopefully land on of soccer’s most prominent names is similar to rolling the dice in roulette or pulling the lever on a slot machine. It often leads to disappointment, but the potential, however small, to win big keeps players buying packs. When FUT coins run dry, players can purchase FIFA points using real world currency and use them towards card packs. It a vicious cycle and one insidiously glorified in countless loot box YouTube videos.”²¹

57. Researchers have found FIFA’s loot boxes “clearly serve as a proxy for gambling, encouraging money bets on items of chance, which increases a player’s exposure to gambling-related content and promotes perceived-efficacy for gambling.”²²

58. While burying the odds of winning desirable players in a drop-down box, the most desirable players are prominently displayed to sell loot boxes chances. These hard-to-win but prominently displayed soccer players include Mbappe, Lewandowski, and Hazard. While the odds of winning these players are extremely low, players are enticed by the thought of the win.

59. The producer and writer for *Bleacher Reports*’ gaming content described FIFA as a gambling system:

“Like any effective gambling system, the big prizes—say, Lionel Messi or Cristiano Ronaldo—are not going to appear often but always seem within reach. This can lead to accumulating massive spends without knowing. A common response to the survey was players admitting they didn’t realise how much they’d spent until they sat down to work it out. One user estimated spending \$280,000 across a decade.”²³

60. The Belgian Gaming Commission described how the prizes from FIFA loot boxes are valuable:

A win and loss is experienced with the paid loot boxes. The loot boxes always contain one or various players and items that can be used throughout the game to win something. The more expensive the loot box, the bigger and more exceptional the win is portrayed as being. Wins and losses are clearly shown in the system of duplicate prizes. Winning duplicate items in a loot box is a regular occurrence; items that cannot be quickly sold because they are not worth anything and that cannot be saved either, forcing the player to immediately transact them, as it were. This is noteworthy because as soon as the loot box is opened, the computer system lets the

²¹ Thomas Bardwell, *Proof You’ll Regret Wasting Money on That FIFA 20 Loot Box*, CCN Gaming News (Sept. 13, 2019), <https://www.ccn.com/proof-youll-regret-wasting-money-on-that-fifa-20-loot-box/>.

²² Wen Li, Devin Mills, Lia Nower, *The relationship of loot box purchases to problem video gaming and problem gambling*, Addictive Behaviors, 97:27-34 (Oct. 2019).

²³ Nick Ackerman, *Is It Too Expensive To Be Good At FIFA?*, Bleacher Report (May 20, 2019), <https://bleacherreport.com/articles/2836528-is-it-too-expensive-to-be-good-at-fifa>.

1 player know that this is a duplicate prize, which means that this duplicate prize could
2 have been avoided. In the case of a paid loot box, the player has thus received a
useless item, which constitutes a lost wager.

3 The goal of the online game with paid loot boxes is to compile the strongest possible
4 football team in order to win matches and gain status among the other players. If you
5 obtain strong players by purchasing loot boxes, then this constitutes a win in the
game. Rankings are also provided for teams that indicate which position a player has
won or lost. These rankings appear to be greatly locally/regionally oriented.²⁴

6 **Example 3: Roblox**

7 61. Roblox is a popular multiplayer online video game and game creation system that
8 gamers download for free from the App Store. With Roblox, relatively unskilled developers can
9 design games that are then played by others. A wide range of types of games are offered through
10 Roblox, including games that require no skill to play. Many of the games offered, regardless of
11 whether skill is required, contain loot boxes. Roblox-designed games are particularly popular with
12 children and is ranked #1 in App Store in the Adventure category. Roblox has more than 100 million
13 active monthly users and has generated over \$1 billion in revenue.²⁵ Apple rates it “12+.”

14 62. The virtual currency used to buy loot boxes in Roblox is called “Robux” and is
15 purchased with real money from Apple in its App Store.

16 63. Loot boxes have many different names and superficial appearances, depending on
17 the Roblox game. However, they all operate in the same way.

18 64. Apple’s developer guidelines are particularly helpful to many of the Roblox game
19 developers who lack that experience in designing games that optimize revenue from the design of
20 loot boxes.

21 65. Roblox developers admit they often use loot boxes merely to “scam” children.
22 According to one Roblox game developer, “[a] lot of times it always seems as if they were trying to
23 scam children, obviously this is not always the case, but some really do.”²⁶
24

25 ²⁴ Belgian Gaming Commission, *Research Report on Loot Boxes* (April 2018).

26 ²⁵ These numbers include Apple and Google Play users. *See* Katie Williams, *Roblox Mobile*
27 *Has Grossed over \$1 billion in Lifetime Revenue*, Sensor Tower (Nov. 15, 2019),
<https://sensortower.com/blog/roblox-one-billion-revenue>.

28 ²⁶ Available at <https://devforum.roblox.com/t/guidelines-around-users-paying-for-random-virtual-items/307189/66>

Example 4: Brawl Stars

66. Brawl Stars is a multiplayer online battle arena game where players battle against other players. Brawl Stars is free to download from the App Store. Apple rates it “9+.” In February 2021 alone, Brawl Stars was downloaded about one million times from the App Store and generated \$18 million in revenue, largely from the sale of loot box plays.

67. Brawl Stars players can unlock and play against each other (or the computer) with different brawlers. Each brawler has its own unique offensive or defensive “kit.” Players want the best brawlers to increase their chances of winning games.

68. The name of the Brawl Stars’ loot box is the “Brawl Box.” Brawl Boxes are purchased with Brawl Stars’ version of in-game currency called “Gems.” Gems are purchased for money from Apple in its App Store. A “fistful of Gems” is 30 Gems and costs \$1.99, a “pouch” of 80 gems is \$4.99, and a “crate full” of 950 Gems is \$49.99.

69. As required by Apple, Brawl Stars displays the odds of winning Brawl Box prizes. The best brawler in the game – and therefore the most coveted – is a “Legendary Brawler.” A player typically has only a 0.3% chance of winning a Legendary Brawler. That means a gamer must purchase hundreds of loot box plays to be sure to win a Legendary Brawler.²⁷ To tempt players to purchase Brawl Boxes, Brawl Stars uses an algorithm that slightly increases the odds of winning a Legendary Brawler each time the player purchases a Brawl Box.

Example 5: Final Fantasy Brave Exvius

70. Final Fantasy Brave Exvius is a role-playing game where players command their characters to attack and move through a series of stages until they encounter and defeat the “boss.” Final Fantasy Brave Exvius is free to download from the Apple App Store. It has been downloaded over 40 million times. Apple rates Final Fantasy Brave Exvius “12+.”

71. The name of the Final Fantasy Brave Exvius’ loot box is the “Summons.” A Summons is purchased with Final Fantasy Brave Exvius’ version of in-game currency called “Lapis

²⁷ The probability of receiving a specific item from a loot box is referred to as the “drop rate.” Each Brawl Box provides 3 random draws, and each random draw has the same drop rate of approximately 0.1%.

Crystals.” Lapis Crystals are purchased through the Apple App Store for money. A Summons offers the chance of winning rewards and new and better characters. One has the worst odds of obtaining the best characters from a Summons.

72. In an article published in *Polygon* about loot box addiction, the author describes how the Summons loot box works:

The main way of improving your collection is by taking pulls on a slot machine. It’s what many call a gacha game, after Japanese gachapon toy-vending machines. Instead of having characters join the party during the story like they might in a traditional role-playing game, the player buys loot box-like crystals that each contain a single random character in a “summon” tab. Making progress in the game earns a trickle of free Lapis gems, the currency used to buy summons, but the amount pales in comparison to buying Lapis with real money.

That leaves players feeling underfunded, as most pulls only have a 3 percent chance to get the rarest and best rank, a “rainbow” five-star character. And that rate was all rumor and supposition until a patch in late January 2018, when Gumi added the exact chances to pull a four- or five-star character, shortly after Apple announced plans to require posted drop rates for in-game purchases in iOS games. The change didn’t just affect Brave Exvius; gacha games often use low drop rates and limited-time promotions to encourage players to pull and pull and pull to get the latest new addition. And many of these games encourage players to repeatedly pay large amounts.²⁸

73. A middle-aged, married man going by “Nothing024” on Reddit reported spending \$1,500 in a day to obtain one character in Final Fantasy Brave Exvius. The odds of winning the character were 1-in-400, and each try cost \$2.50. The same man described another time when he spent \$700 for a character known as “Greg”:

I put in my money again, \$99....no Greg, \$99....no Greg, \$99....no Greg.... I took a break for a little bit. My family had plans for the day. I was angry now. How could I have spent \$300 and not gotten what I wanted? When nobody was looking, around everyone, I did it again. \$99....no Greg, \$99....no Greg, \$99....no Greg, \$99.... Finally. I had Gilgamesh. [...] Yeah, I spent \$700, but I would stop now. I had enough.²⁹

²⁸ Jay Allen, *Players keep spending thousands of dollars on Final Fantasy Brave Exvius: Community members tell stories of banner addiction*, Polygon (June 8, 2018), <https://www.polygon.com/features/2018/6/8/17435980/final-fantasy-brave-exvius-gambling-addiction-gacha>.

²⁹ *Id.*

74. In November 2018, Square Enix (the game’s developer) announced it was no longer offering Final Fantasy Brave Exvius in Belgium because of “the present uncertain legal status of ‘loot boxes’ under Belgian law.” Nevertheless, Apple and Square Enix have continued to market and sell Final Fantasy Brave Exvius and its in-game loot boxes to consumers throughout the United States.

Example 6: Dragon Ball Z: Dokkan Battle

75. Dragon Ball Z: Dokkan Battle is a free-to-play mobile game based on the Dragon Ball anime franchise and television series. Dragon Ball Z: Dokkan Battle is available from the Apple App Store for free download. Since its release in 2015, the game has exceeded 300 million downloads and grossed more than \$2 billion worldwide. Dragon Ball Z: Dokkan Battle is age-rated “9+” in the Apple App Store.

76. The name of Dragon Ball Z: Dokkan Battle’s loot box is also the “Summons.” A Summons is purchased with Dragon Ball Z: Dokkan Battle’s version of in-game currency called “dragon stones.” Dragon stones are purchased through the Apple App Store for money. One dragon stone costs 99 cents, 6 dragon stones costs \$3.99, and 90 dragon stones costs \$44.99.

77. Dragon Ball Z: Dokkan Battle is made up of levels that play like a board game, with spots dedicated to items, power-ups, traps, and fights. During the fights, gamers can unlock “super attacks,” which is much more powerful than a typical attack. Gamers can also play with different characters. A Summons offers players the chance to win rewards and characters useful in the game.

78. As one online critic wrote about Summonses:³⁰

[The] game requires immense Free-2-Play luck or some cash investment; however, even with cash investments, there’s no guarantee. This is a prime example of subtle gambling (not so much as subtle for adults, but for children) where the player buys a few stones, tries to pull for the character they want, but didn’t get them, so they’ll think, “Why not a few more stones? I really like this character.”

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³⁰ <https://appgrooves.com/app/dragon-ball-z-dokkan-battle-by-bandai-namco-entertainment-inc/negative>

Example 7: “Who Wants To Be A Millionaire?”

79. In the “Trivia” category, Apple offers for free download app game version of the TV game show “Who Wants To Be A Millionaire?” Who Wants To Be A Millionaire? is a trivia game played head-to-head versus other players. Like the television show, during the app’s trivia contests, gamers can use “lifelines” to help them answer trivia questions. Mystery Boxes offer players the chance to win rewards such as “experts” that come in four “rarities: Common, Uncommon, Rare, and Epic,” that are useful in the game to help answer questions.

80. Apple rates Who Wants To Be A Millionaire? “4+.”

81. The name of the loot box is the “Mystery Box.” A Mystery Box is purchased with Who Wants To Be A Millionaire?’s version of in-game currency called “gems.” Gems are purchased from Apple through the Apple App Store for money. 150 gems cost \$1.99, 225 gems cost \$2.99, 400 gems cost \$4.99 (marketed as providing “6% More”), 900 gems cost \$9.99 (“20% More”), 2,000 gems cost \$19.99 (“33% More”), and 5,500 gems cost \$49.99 (“46% More”).

82. Gems can only be used to purchase plays on Mystery Boxes. A “Silver Mystery Box” costs 250 gems, a “Gold Mystery Box” costs 500 gems, and a “Diamond Mystery Box” (which provides the “Best chance for Epic Experts”) costs 750 gems. Playing one Silver Mystery Box for example costs between \$2.27 and \$3.31.

83. The following is a screenshot of a player opening a Mystery Box:

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D. Loot Boxes Create and Reinforce Addictive Behaviors Akin to Gambling Addiction

84. Loot boxes were designed to and do create and reinforce the same addictive, compulsive, and other harmful behaviors associated with other gambling activities. Researchers have found this by first examining the structural aspects and cognitive biases created by loot boxes and comparing them to casino games. They next performed quantitative research. Without exception, they determined loot boxes are strongly associated with problem gambling behavior. Children, teenagers, and others are particularly susceptible to these cognitive traps.

1. Loot Boxes Are Structurally Similar to Traditional Gambling Games and Exploit Gambling’s Cognitive Traps

85. “The ‘starting block’ of problem gambling is often the availability of gambling activities.”³¹ Recent peer-reviewed research (Zendle 2020) found that 59% of the top-100 grossing games in the Apple App Store contained loot boxes. Apple rated 24% suitable for children aged 4 and older, 56% suitable for children aged 9 and older, and 95% of suitable for children 12 and older.

86. Like other forms of Internet gambling, the availability and accessibility of loot boxes magnifies the potential for addictiveness and harm. For one, the Internet removes barriers to gambling based on accessibility and convenience. In contrast to land-based gambling activities, individuals can readily and conveniently play a loot box from the comfort of their homes or workplaces, 24 hours a day, seven days a week, without the need to travel. Further, the Internet provides players with a sense of anonymity, allowing the individual to wager privately without apprehension of stigmatization. Researchers have found that Internet gambling is more strongly associated with problem gambling than non-Internet gambling.³² Based on a survey of 473 undergraduate students, Griffith and Barnes (2008) concluded that Internet gamblers were significantly more likely to gamble frequently, with 60% of Internet gamblers reporting having gambled once a week or more, compared to less than 20% of non-Internet gamblers.³³ Based on analysis of 7,921 gamblers, Wood and Williams (2011) determined that the prevalence of problem gambling was three to four times higher among Internet gamblers compared to non-Internet gamblers.³⁴

³¹ Zendle D, Meyer R, Cairns P, Waters S, Ballou N, *The prevalence of loot boxes in mobile and desktop games*, *Addiction*, 115(9):1768-1772 (September 2020).

³² St-Pierre R.A., Walker D.M., Derevensky J., & Gupta, R., *How availability and accessibility of gambling venues influence problem gambling: A review of the literature*, *Gaming Law Review and Economics*, 18(2):150–172 (2014).

³³ M. Griffiths and A. Barnes, *Internet Gambling: An Online Empirical Study Among Student Gamblers*, *Int’l J. Mental Health & Addiction*, 6:194–204 (2008)

³⁴ R.T. Wood and R.J. Williams, *A Comparative Profile of the Internet Gambler: Demographic Characteristics, Game-Play Patterns, and Problem Gambling Status*, *New Media & Society*, 13:1123-1141 (2011).

1 87. The basic physiology behind problems stemming from both freemium app loot boxes
 2 and traditional casino games is that the activities exploit the brain's "reward system." The human
 3 body has a number of hormones that regulate how one feels at any given moment. Dopamine, known
 4 as the "happy hormone," is the dominant power driver and the chief neurotransmitter in the brain's
 5 reward system. The chase for that next happy dopamine rush keeps some people making decisions
 6 that would otherwise seem unwise. For some this culminates in compulsive behavioral addictions,
 7 such as compulsive gambling.

8 88. One of the hallmarks of gambling is uncertainty. Uncertainty, or more precisely, the
 9 potential for a reward, plays a crucial role in gambling's attraction and addictiveness. Gambling
 10 triggers the brain's reward system which is linked primarily to the brain's pleasure and motivation
 11 centers and results in a release of dopamine. The reward uncertainty from gambling makes the
 12 gambler feel elated while he or she is "putting it on the line" and taking risks. Gambling stimulates
 13 a "thrill" which triggers the brain's reward system to release up to 10 times more than the amount
 14 naturally rewarding experiences would produce.

15 89. Psychologists call the principle of how loot boxes work on the mind "variable ratio
 16 reinforcement." This kind of reward structure underpins many forms of gambling such as slot
 17 machines. It results in people quickly acquiring behaviors and repeating these behaviors frequently
 18 in hopes of receiving a reward by thinking they are one step closer to getting the reward the next
 19 time. Dopamine cells are most active when there is maximum uncertainty, and dopamine responds
 20 more to an uncertain reward than if the same reward delivered on a predictable basis.

21 90. In their paper entitled "Predatory monetization schemes in video games (e.g. 'loot
 22 boxes') and internet gaming disorder," Professors Daniel King and Paul Delfabbro described loot
 23 boxes as follows, noting they all involve purchases with real money and resemble gambling slot
 24 machines:

25 A loot box refers to an in-game reward system that can be purchased repeatedly
 26 with real money to obtain a random selection of virtual items. The low probability
 27 of obtaining a desired item means that the player will have to purchase an
 28 indeterminate number of loot boxes to obtain the item. Loot boxes resemble

1 gambling slot machines because they require no player skill and have a randomly
2 determined outcome (i.e., prize).³⁵

3 91. To further entice consumers to spend money on loot boxes, many of the games use a
4 “virtual” money system within the game. The spending of real money to obtain the requisite virtual
5 in-game currency is referred to as the “eligibility condition” to buying a loot box. That is, just like
6 a casino exchanges cash for chips, instead of buying loot boxes directly for a set dollar amount, the
7 player must first purchase the in-game currency, which is then used for loot boxes. In-game
8 currencies frequently take the form of expensive-sounding items like “gems” or “gold coins” so the
9 player also feels he or she is getting something of value for the money. The fact that loot box games
10 do not allow the player to put physical money in the slot is not relevant, as contemporary gambling
11 also is typically fully digitized (King et al. 2012). Further, the requirement to convert real money to
12 proprietary currencies is the standard for gambling – with casino chips being the classic example.
13 The use of virtual currency, which must be purchased with fiat currency, is an integral part of the
14 scheme.

15 92. This intermediate level of virtual currency acquired through abnormal exchange rates
16 is also designed to reduce the salience of the fiat currency cost of loot box purchases and
17 “disconnect” the gamer from the concern that real money is being gambled. The real money
18 conversion necessary to purchase loot boxes has been analogized to the deception underlying
19 casinos requiring the use of exchanged chips as its “in-game currency” because it is known players
20 gamble “significantly more with chips than real cash.”³⁶ Research has found that loot box systems
21 are more highly associated with problem gambling when the amount players can spend on loot boxes
22 is hidden behind the purchase of in-game currency.³⁷

23
24 ³⁵ Daniel King and Paul H. Delfabbro, *Predatory monetization schemes in video games (e.g.*
25 *‘loot boxes’)* and internet gaming disorder, *Addiction*, 113(11):1967-1969 (November 2018).

26 ³⁶ Leon Y. Xiao and Laura L. Henderson, *Towards and Ethical Game Design Solution to Loot*
27 *Boxes: a Commentary on King and Delfabbro*, *Int J Ment Health Addiction*, 19:177-192 (Feb.
2021). Julius Weintraub coined the famous saying “The guy who invented poker was bright, but the
28 guy who invented the chip was a genius.”

³⁷ Zendle D, Meyer R, Over H, *Adolescents and loot boxes: links with problem gambling and*
motivations for purchase, *R Soc Open Sci*, 6(6):190049 (June 19, 2019).

93. Likewise, the Children’s Commissioner for England explained “the nature of in-game purchases – a series of one-off spends – means that children struggle to keep track of how much they are spending.”³⁸

94. Just like casinos handing out free chips or slot plays to loyal gamblers, certain games also award limited in-game currency for loot boxes as an introductory prize, login bonus, or at certain stages of gameplay. In gambling psychology, these earned or free play perks are an addiction hook to give players a “taste” of what can be more quickly purchased and to keep them coming back time after time.

95. In connection with its investigation into loot boxes, the Brussels Gaming Commission reached a similar conclusion about the deceptiveness of gambling with what is perceived to be virtual currency:

The use of points (coins) and especially their size are psychologically very sophisticated and aimed at creating a personal reality which is then disconnected from the real world. FIFA 18 teaches players to think in FUT currency and FIFA coins. . . . In Overwatch and Star Wars Battlefront II, the value of real money is also fully disconnected from the value of the in-game currency, causing players to lose contact with the real value.³⁹

96. In their 2014 book *Virtual Economies*, Professors Vili Lehdonvirta and Edward Castronova explain there are no differences between “real” or fiat currency and virtual currency – “Both the US Dollar and World of Warcraft coins are fiat money.”⁴⁰ That is, “virtual world money” is just a digital form of money like Bitcoin cryptocurrency or other now innumerable examples.

97. Loot boxes rely heavily on additional cognitive traps and behavioral heuristics involved in gambling – doing everything possible to exploit the brain’s reward system and build up the player’s hoped-for win, tension, and excitement, and in the process exploiting cognitive biases

³⁸ Children’s Commissioner for England, *Gaming the system* (October 2019), <https://www.childrenscommissioner.gov.uk/wp-content/uploads/2019/10/CCO-Gaming-the-System-2019.pdf>.

³⁹ Belgian Gaming Commission, *Research Report on Loot Boxes* (April 2018).

⁴⁰ Vili Lehdonvirta and Edward Castronova, *Virtual Economies: Design and Analysis*, at 191 (2014).

1 such as the gambler's fallacy, near misses, losses disguised as wins, sunk cost bias, an illusion of
2 control, and the gambling behavior known as chasing.

3 98. Keith Whyte, Executive Director of the National Council on Problem Gambling,
4 explained to the FTC that loot boxes and slot machines are "so closely related":

5 Given all everything we know about the similarities between boxes and slot
6 machines, it would actually be astounding and surprising were there not such a
connection. They are, in many ways, so closely related.⁴¹

7 99. The similarities between gambling and loot boxes start with audio-visual effects that
8 provide the sensory feedback long used in casinos. For example, in many games opening the loot
9 box coincides with triumphant music (like the sounds of falling tokens onto a metal tray, loud
10 buzzing or musical tunes after winning on a casino's slot machine), the loot box itself bursting open
11 with bright lights and colors. Yet these manufactured sound effects and colorful animations often
12 give the player common or duplicate items, and rarely does the player get exactly the item he wanted.

13 100. Gambling experts have raised concerns because loot boxes play off the identical
14 sensory feedback used in traditional casino games:

15 I would suggest you watch some of the animations used in games when 'opening a
16 loot box,' try to divorce them from similar animation and sound techniques used on
poker machines, you probably won't be able to.

17

18 When opening the boxes, the possibilities of what may be ultimately draw for the
19 player is scrolled across before them on their screen. This is identical to the way a
20 slot machine scrolls around before ultimately stopping. As with the slot machine, the
21 graphic display eventually stops on an item, which is given to the player – regardless
of whether that is what they desired or not.^{42,43}

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23
24 ⁴¹ Workshop transcript from *Inside the Game: Unlocking the Consumer Issues Surrounding*
25 *Loot Boxes*. An FTC Workshop (Aug. 7, 2019), available at
https://www.ftc.gov/system/files/documents/videos/inside-game-unlocking-consumer-issues-surrounding-loot-boxes-session-2/ftc_loot_boxes_workshop_transcript_segment_2.pdf.

26 ⁴² Commonwealth of Australia, The Senate, *Environment and Communications References*
27 *Committee: Gaming micro-transactions for chance-based items*, at p.37 (Nov. 2018).

28 ⁴³ Similarly, the Belgian Gaming Commission also observed that "the player is confronted with
animations that are very similar to animations used in slot machine operation." Belgian Gaming
Commission, *Research Report on Loot Boxes* (April 2018).

101. The loot box lights and sounds exploit the near-miss psychological effect of gambling. When a player clicks on a loot box, the loot box starts to shake or show other dramatic animations. Exciting and suspenseful noises are made. Players often receive a split-second glimpse of a rare items that might be won. Then, the prize is shown, which is typically something of little or no value, such as an item the player already possesses (a double, a common skin, or common weapon), disappointing the player by not winning anything because the player already owns the won prize and therefore will not benefit from it. The intensity of the effect increases when the “reward prediction error”⁴⁴ is low. This occurs when the player has low expectations, then suddenly glimpses a rare item the player might receive. For a split second, the player sees, for example, the color or outline of a highly valued prize and with it, a rush of dopamine because the player believes he or she is about to win a rare item – only to be disappointed at the reveal when the particular item is something he already owns. Sometimes, a player will win a rare prize, thereby encouraged to try again and again.

102. Loot boxes employ more than the audio-visual effects and near-miss psychologic triggers associated with traditional gambling mechanisms. Loot boxes are also designed, with the assistance of Apple’s loot box design tools, to exploit the other major cognitive biases that explain gambling behavior and create gambling addiction. For instance, loot boxes are designed to create a slot machine effect and play off gambling’s cognitive bias characteristic known as the “gambler’s fallacy,” where even when a player is not receiving the desired result – a frequent occurrence – there still exists a belief and hope that the next loot box will contain the desired item. The bias occurs when “the expectation that the probability of winning increases with the length of an ongoing run of losses.”⁴⁵ This is further reinforced when players view others opening loot boxes and receiving rare prizes. Developers broadcast these types of videos to market loot boxes.⁴⁶

⁴⁴ Reward Prediction Error or “RPE” refers to when low expectations award a higher amount of dopamine at the unexpected pleasant result of an action or event, and when high expectations award a bigger disappointment to the unexpected disappointing result.

⁴⁵ Willem A. Wagenaar, *Paradoxes of Gambling Behaviour*, at 13 (2016 ed.).

⁴⁶ YouTube contains thousands of videos of gamers opening loot boxes in many different games. *See, e.g.*, video of opening FIFA Ultimate Team packs with over 14 million views at: https://www.youtube.com/watch?v=CX0OZtaQ_kQ. The Children’s Commissioner for England

103. One researcher described the physical experience invoked by the loot box mechanism. The prime culprit is dopamine and loot boxes' uncertainty boosting its effects:

Research by Kim (1998) found that waiting for the outcome of a gamble can activate the brain's chemical reward system, releasing endorphins that create pleasure. In a gaming context, think of someone who really wants the Pharah Anubis skin in Overwatch. They buy five loot boxes and get excited during the big flashy box-opening animation. This excitement happens five times in a short space of time, with five flashy box-opening animations that are almost an event in itself.

104. Another cognitive bias exploited by loot boxes is known as "sunk cost" bias. Sunk cost bias describes a decision-making heuristic where an individual escalates his or her commitment to a previously chosen, but unsuccessful course of action to justify the prior "investments" in purchasing loot box plays. For example, if a gamer spends \$5 on loot boxes and does not receive the prize he or she was hoping to win, the gamer faces the choice of either stopping and accepting the loss or spending additional money attempting to recuperate the initial loss. Once a player starts trying to recoup the loss it is often hard to stop. This is particularly true for children, teenagers, and others susceptible to problems associated with gambling.

105. Commenting on loot boxes, Hawaiian congressman Chris Lee noted that loot boxes "are specifically designed to exploit and manipulate the addictive nature of human psychology."

106. Loot boxes are built around the concept of artificial scarcity. The main idea behind loot boxes is that sales will increase because the more items the gamer already has, the less probable he or she will obtain something new from a loot box play. The result of this statistical scarcity is that gamers must purchase more loot boxes to increase their odds of obtaining a valued prize.⁴⁷ Therefore, loot box prizes are classified using value-laden words to describe rarity levels, such as "Common," "Rare," "Epic," and "Legendary," depending on the probability of winning the prize.

reported loot box "openings shared by popular YouTubers, also encourages online spending" with "some children mentioning watching popular YouTubers [] who 'have enough money to buy all the packs', opening FIFA player packs." See Children's Commissioner for England, *Gaming the system* (October 2019).

⁴⁷ In fact, the manufactured odds of receiving some loot box items are so slim the Nevada Gaming Control Board would declare them illegal for slot machines.

107. Loot boxes also often play off notions of seasonal rarity. Seasonal rarity is rarity created around a season, holiday, or special event. The loot boxes and potential prizes are often more aesthetically polished. Most importantly, they are also “time-locked,” meaning a gamer only has a limited time at a chance to win a prize, adding to the pressure to buy the loot box in the moment. The most common time-locked loot boxes are recurrent, with themes like Halloween, Christmas, Chinese New Year, April Fools, Easter, or the game’s own anniversary. Others, on the other hand, are unique or take place more occasionally – like world championships or the Olympics.



108. Larche et al. (2021) conducted experiments that found “loot boxes containing rare items are more valuable, arousing, rewarding and urge-inducing to players, similar to the way slots gamblers treat rare large wins in slots play.”⁴⁸

109. It is most likely a player will win an item that already has been obtained or is otherwise not desirable. However, these “losses disguised as wins,” or “LDWs” as they are known among researchers, are another psychological trigger found in both traditional gambling games and with loot boxes. This psychological factor traditionally occurs when a player gains a credit on the spin of a slot machine, but it is fewer credits than the original wager. It also takes place when casinos offer “complementary” food, drinks, and accommodations. This outcome alters the gambler’s experience because the player feels like he or she won something out of the ordeal, but actually lost. Obtaining a common or duplicate item when opening a loot box is a loss; it is like “winning a free drink” or “winning \$1” after wagering \$2 – the player won something, but net, lost.⁴⁹

⁴⁸ Larche CJ, Chini K, Lee C, Dixon MJ, Fernandes M, *Rare Loot Box Rewards Trigger Larger Arousal and Reward Responses, and Greater Urge to Open More Loot Boxes*, J Gambl Stud, 37(1):141-163 (Mar. 2021).

⁴⁹ Graydon C, Stange M, Dixon MJ, *Losses Disguised as Wins Affect Game Selection on Multiline Slots*, J Gambl Stud, 34:1377–1390 (2018) (“Despite the net loss to the player, LDWs are

110. A phenomenon known as “chasing” (continuing to gamble to recoup losses) is “one of the central characteristics of pathological gamblers.” Chasing is “widely regarded as a defining feature in disordered gambling,” is “the most commonly endorsed item in screening tools for disordered gambling,” and its presence “establishes and maintains a downward spiral of negative consequences for the gambler’s finances, relationships, and mental well-being.”⁵⁰ Loot box mechanics unfairly exploit this central behavioral marker of problem gambling behavior. The Children’s Commissioner for England studied the impact of gaming and loot boxes in children and found that even though loot box mechanics are “a source of great frustration, the fact that the next pack opening could result in a good player means that children continue to open packs even when they are losing.”⁵¹ Loss chasing “is associated with altered executive functions, subserved by fronto-striatal brain circuitry” that “giv[es] rise to impulsivity as the tendency to make rapid, hasty gambling decisions in pursuit of winning” (Zhang & Clark (2020)).

2. Loot Box Gambling Exploits Vulnerable Populations, Including Children and Teenagers

111. Children and adolescents are especially vulnerable to the type of psychological manipulation at play with loot boxes. Teenage gambling is the fastest growing addiction.

112. One of the well-established risk factors for developing problematic gambling behaviors is age. “[S]tudies suggest that younger age (i.e. younger than 29 year old[]) appears to be a significant risk factor for PG [pathological gambling].”⁵² In fact, “[s]tudies have demonstrated that if gambling situations are presented to adolescents, most will participate to some degree.”⁵³ The

accompanied by salient visual graphics and high fidelity winning sounds...players behaviorally miscategorize LDWs as wins” and “LDWs can lead players to continue gambling despite financial loss, and increase play durations.”).

⁵⁰ Ke Zhang and Luke Clark, *Loss-chasing in gambling behaviour: neurocognitive and behavioural economic perspectives*, Current Opinion in Behavioral Sciences, 31:1-7 (Feb. 2020).

⁵¹ Children’s Commissioner for England, *Gaming the system* (October 2019).

⁵² Johansson A, Grant JE, Kim SW, Odlaug BL, Götestam KG, *Risk factors for problematic gambling: a critical literature review*, J Gambl Stud, 25(1):67-92 (March 2009).

⁵³ Mary K. Wilber and Marc N. Potenza, *Adolescent gambling: research and clinical implications*, Psychiatry (Edgmont), 3(10):40-48 (October 2006).

1 neurobiology of adolescence explains why adolescents are two to four times as likely as adults to
2 develop gambling problems.

3 113. First, adolescents have low impulse control.⁵⁴ The teenage brain is still developing;
4 the part of the brain that is responsible for good impulse control and decision making is not fully
5 developed. Dr. Frances Jensen, the chair of the department of neurology at the University of
6 Pennsylvania Perelman School of Medicine and formally Harvard professor and director of
7 neuroscience at Boston's Children's Hospital, explains: "their frontal lobes are there. They're there
8 and they're built. They're just not accessed in as rapid a manner because the insulation to the wiring
9 to them isn't fully developed, so the signals go more slowly. Hence, teenagers are not as readily able
10 to access their frontal lobe to say, oh, I better not do this. An adult is much more likely to control
11 impulses or weigh out different factors in decisions, where a teenager may not actually have full on-
12 line, in-the-moment capacity." Dr. Frances Jensen, *Why Teens are Impulsive- Prone and Should*
13 *Protect Their Brains*, NPR (Jan. 28, 2015). Adolescence is a developmental period characterized by
14 suboptimal decisions and actions. Casey et al., *The Adolescent Brain*, Annals of the New York
15 Academy of Sciences, 1124(1):111–126 (2008). During this time, impulse control is still relatively
16 immature. *Id.*

17 114. Second, gambling has an inherent element of risk and adolescents are more inclined
18 to engage in risk-taking behaviors and risky decision making than are adults. Margo Gardener &
19 Laurence Steinberg, *Peer influence on risk taking, risk preference, and risky decision making in*
20 *adolescence and adulthood: an experimental study*, Developmental Psychology, 41L625-635
21 (2005). Adolescents and young adults are more inclined to risk taking because development of
22 executive brain function and appreciation of risk is continuing in this period. Kelley et al., *Risk*
23 *taking and novelty seeking in adolescence: Introduction to Part I*, Annals of the New York Academy
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27 ⁵⁴ Aaron Drummond and James D. Sauer, *Video game loot boxes are psychologically akin to*
28 *gambling*, Nature Human Behavior, 2:530-532 (June 2018) (stating that "adolescents tend to have
poorer impulse control than adults, potentially increasing their vulnerability to gambling mechanics
and behaviours learned from these [loot box] mechanisms").

of Sciences, 1021(1):27-32 (2004); Laurence Steinberg, *Cognitive and affective development in adolescence*, Trends in Cognitive Sciences, 9(2):69-74 (2005).

115. Third, adolescents are more prone to addiction. “They build a reward circuit around that substance to a much stronger, harder, longer, stronger addiction. That is an important fact for an adolescent to know about themselves - that they can get addicted faster.” Dr. Frances Jensen, *Why Teens are Impulsive- Prone and Should Protect Their Brains*, NPR (Jan. 28, 2015).

116. Last, children and adolescents often lack a critical understanding of money and financial management. Approximately one in four students in the 15 countries and economies that took part in the latest OECD Programme for International Student Assessment (PISA) test of financial literacy are unable to make even simple decisions on everyday spending, while only one in ten can understand complex issues, such as income tax. OECD, PISA 2015 Results (Volume IV); *Students’ Financial Literacy*, PISA, OECD Publishing, Paris (2017).

117. As detailed above, purchasing and opening a loot box is designed to be visually, physically, and aurally stimulating. Opening a loot box gives the player a rush; the moment of anticipation followed by release. The loot box mechanism has been proven to be effective on adults, and its effects are generally intensified when used on minors who are more prone to engage in risk-taking behaviors, more prone to gambling addiction, more likely to have erroneous beliefs of the true odds of gambling activities, and therefore “less equipped to critically appraise the value proposition of these schemes.”⁵⁵

118. Professor David Zendle was one of the invited academic participants to the Federal Trade Commission’s August 2019 workshop investigating loot boxes. Dr. Zendle has published numerous peer-reviewed papers discussing his research and surveys examining links and similarities between gambling and loot boxes. Based on his and others’ scientific findings, Dr. Zendle explained to the FTC the serious potential consequences of exposing vulnerable consumers to videogame loot boxes:

⁵⁵ Daniel L. King and Paul H. Delfabbro, *Predatory monetization schemes in video games (e.g. ‘loot boxes’) and internet gaming disorder*, *Addiction*, 113(11):1967-1969 (November 2018).

1 That's what I'm here to talk about today. So the reason why problem gambling is
 2 such a big topic when it comes to loot boxes, and why people care about gambling
 3 and loot boxes, is because loot boxes look so much like gambling. Both when you're
 4 playing on a roulette wheel or while you're opening a loot box, you're wagering
 5 something that you have in your hand of value now on the uncertain hope of getting
 6 something of greater value later on. It's that reason that loot boxes have tripped
 gambling regulations in a couple of countries within Europe, because of those formal
 similarities, and because of those formal similarities, people are a bit worried for a
 very long time that loot boxes by act as a gateway to problem gambling, particularly
 amongst young and vulnerable populations...

7 We know that one of the main pathways to problem gambling is a process of
 8 conditioning, whereby the gambler comes to need and expect the excitement
 9 associated with the gambling win. So what we think-- one of the possible
 10 explanations for this effect, is a situation in which people are buying a loot box,
 11 getting excitement, buying a loot box, getting excitement, buying a loot box, getting
 12 that reward, getting that hit, going out into the real world, seeing something that has
 many of the formal characteristics of the loot box, like a slot machine, and that
 conditioning transfers over. So therefore, spending money on loot boxes, literally
 causes people to engage in gambling, leading to problem gambling.⁵⁶

13 119. Dan Trolaro, the Assistant Executive Director of the Council on Compulsive
 14 Gambling of New Jersey, explained, "The mechanics within a loot box look and feel like a gamble.
 15 Once minors are exposed to game of chance mechanisms, there is a significantly higher risk that
 16 they will have problems with it at a later stage in their lives. The literature indicates that exposure
 17 at an early age increases the risk of addiction and the severity of the addiction."

18 120. Other experts agree. For example, the Mental Health Director of the UK's National
 19 Health Service summarized their studies by declaring that the gaming industry is "setting kids up
 20 for addiction by teaching them to gamble."

21 121. According to Keith Whyte, the Executive Director of the National Council On
 22 Problem Gambling, "Those who play loot boxes may well be on their way to developing gambling
 23 problems due to their loot box play."

24 122. The magnitude of the harm from exposing these particularly vulnerable children to
 25 gambling is substantial. Similar to studies on the harm from drinking alcohol at an early age, pre-
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 27

28 ⁵⁶ *Id.*

1 and early-adolescent-initiation of gambling is associated with increased severity of psychiatric,
2 family/social, and substance abuse problems.⁵⁷

3 **3. The Published, Quantitative Research Demonstrates Loot Boxes Are** 4 **Linked to Problem Gambling**

5 123. The amount of scientific research examining loot boxes has exploded in the last five
6 years. Numerous teams of researchers have studied thousands of adults, teenagers, and children in
7 industry-independent, peer-reviewed, independently funded, and published studies.

8 124. At least ten articles have been now published, which report findings of original
9 quantitative research on links between loot boxes and gambling. The scientific conclusions from all
10 ten peer-reviewed articles are consistent that loot boxes are strongly correlated with clinically
11 significant, severe gambling behavior in both children and adults:

12 a. Brooks & Clark (2019): Results replicated in two surveys (n=257) that
13 “demonstrate that besides the surface similarity of loot boxes to gambling, loot box engagement is
14 correlated with gambling beliefs and problematic gambling behaviour in adult gamers.”

15 b. Drummond et al. (2020): Survey of people (n=1049) from the United States,
16 New Zealand, and Australian showed effects that were “generally clear cut,” “practically
17 significant,” and “highlight the psychological similarity between loot boxes and traditional modes
18 of gambling” – those “with higher gambling symptoms and more risk loot box related engagement
19 spent more on loot boxes than those without” and “participants with greater loot box spending
20 experienced greater negative mood, and more psychological distress.”⁵⁸

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25 ⁵⁷ Burge AN, Pietrzak RH, Petry NM, *Pre/early adolescent onset of gambling and*
26 *psychosocial problems in treatment-seeking pathological gamblers*, J Gambl Stud, 22(3):263-74
 (Fall 2006).

27 ⁵⁸ Drummond A, Sauer JD, Ferguson CJ, Hall LC, *The relationship between problem*
28 *gambling, excessive gaming, psychological distress and spending on loot boxes in Aotearoa New*
 Zealand, Australia, and the United States-A cross-national survey, PLoS One, 15(3):e0230378 (Mar.
 2020).

c. Kristiansen & Severin (2020): Analysis of participants (n=1137) aged 12-16 showed “a significant positive correlation between loot box engagement and problem gambling severity.”⁵⁹

d. Li, Mills, & Nower (2019): Analysis of adult video gamers (n=618) revealed that “loot box purchasing was directly related to higher online gambling frequency, more extended online gambling sessions, and great problem gambling severity.”⁶⁰

e. Macey & Hamari (2018): International survey of gamers (n=582) with 27% under 18 years old and 31.3% between 18 and 21, revealed “evidence of a strong relationship between loot box opening (paid and unpaid) and gambling.”⁶¹

f. Zendle & Cairns (2018): Large-scale analysis of gamers (n=7422) providing “empirical evidence of a relationship between loot box use and problem gambling” that “was neither small, nor trivial” – “It was stronger than previously observed relationships between problem gambling and factors like alcohol abuse, drug use, and depression.” “[T]he strength of the relationship that was observed here...suggests that important gambling-related harm is experienced by users of loot boxes.”⁶²

g. Zendle & Cairns (2019): Large-scale analysis of gamers (n=1172) that “confirm[ed] the size and positive correlation between loot box spending and problem gambling that was previously observed” in Zendle & Cairns (2018). Results suggested “the relationship between problem gambling and loot box spending may be comparable in strength to the relationship between problem gambling and known risk factors in the gambling literature.”⁶³

⁵⁹ Søren Kristiansen & Majbritt Christine Severin, *Loot box engagement and problem gambling among adolescent gamers: Findings from a national survey*, Addict Behav., 103:106254 (Apr. 2020).

⁶⁰ Wen Li, Devin Mills, Lia Nower, *The relationship of loot box purchases to problem video gaming and problem gambling*, Addictive Behaviors, 97:27-34 (Oct. 2019).

⁶¹ Joseph Macey & Juho Hamari, *eSports, skins and loot boxes: Participants, practices and problematic behavior associated with emergent forms of gambling*, New Media & Society, 21(1):42-59 (2019).

⁶² David Zendle and Paul Cairns, *Video game loot boxes are linked to problem gambling: Results of a large-scale survey*, PLoS One, 13(11):e0206767 (2018).

⁶³ David Zendle and Paul Cairns, *Loot boxes are again linked to problem gambling: Results of a replication study*, PLoS One, 14(3):e0213194 (2019).

h. Zendle (2020): Large-scale analysis of gamers (n=1200) that “strongly suggest that paying money for loot boxes is linked to problem gambling” and that this “robust and reliable” evidence base held true “regardless of the presence or absence of specific features of loot boxes, if they are being sold to players for real-world money.”⁶⁴

i. Zendle, Meyer, & Over (2019): Large-scale analysis of 16- to 18-year-olds (n=1155) provided evidence linking loot box spending and problem gambling in older adolescents with “an order of magnitude larger than relationships between problem gambling and risk factors such as alcohol dependence.”⁶⁵

j. von Meduna et al. (2020): Large-scale analysis of loot box purchasers (n=586) demonstrated “the demand for gambling products and demand for loot boxes are closely related” and “[d]ue to their combination of gambling-like elements with a permanent availability and potentially unlimited number of purchases” the “loot box purchasers are at risk of experiencing gambling problems.”⁶⁶

125. Drs. Zendle, Meyer and Over (2019) proved the link between loot box buying and problem gambling in a survey of 1,115 adolescents aged 16-18 years. They reported that “loot boxes either cause problem gambling among older adolescents, allow game companies to profit from adolescents with gambling problems for massive monetary rewards, or both.”⁶⁷ The researchers found that problem gambling severity increased with the amount of money spent on loot boxes, that these links were even “stronger than relationships previously observed in adults,” and that the reasons for buying loot boxes were similar to common motivations for engaging in conventional forms of gambling. The researchers concluded that “[w]hen taken together, these results clearly

⁶⁴ Zendle D, Cairns P, Barnett H, McCall C, *Paying for loot boxes is linked to problem gambling, regardless of specific features like cash-out and pay-to-win*, Computers in Human Behavior, 102:181-91 (2020).

⁶⁵ Zendle D, Meyer R, Over H, *Adolescents and loot boxes: links with problem gambling and motivations for purchase*, R Soc Open Sci, 6(6):190049 (2019).

⁶⁶ von Meduna M, Steinmetz F, Ante L, Reynolds J, Fiedler, *Loot boxes are gambling-like elements in video games with harmful potential: Results from a large-scale population survey*, Technology in Society, 63:101395 (Sept. 10, 2020).

⁶⁷ Zendle D, Meyer R, Over H, *Adolescents and loot boxes: links with problem gambling and motivations for purchase*, R Soc Open Sci, 6(6):190049 (2019).

1 suggest one thing: spending money on loot boxes is linked to problem gambling in older adolescent
2 populations.”

3 126. Zendle and Cairns (2018) report the findings from their scientific survey of 7,422
4 gamers aged 18 or older. The researchers measured both how much these gamers spent on loot boxes
5 and the severity of their problem gambling in order to “establish[] both the existence, the size, and
6 the importance of links between purchasing loot boxes and problem gambling.” Drs. Zendle and
7 Cairns found their research “provides empirical evidence of a relationship between loot box use and
8 problem gambling. The relationship seen here was neither small, nor trivial. It was stronger than
9 previously observed relationships between problem gambling and factors like alcohol abuse, drug
10 use, and depression.” The relationship between other types of microtransactions and problem
11 gambling was not as strong, indicating a specific roll of loot boxes in this association. The
12 researchers also observed that “[d]ue to the formal features that loot boxes share with other forms
13 of gambling, they may be acting as a ‘gateway’ to problem gambling amongst gamers.”⁶⁸

14 127. Zendle and Cairns’ 2019 peer-reviewed paper titled “Loot boxes are again linked to
15 problem gambling: Results of a replication study,” discussed results of a survey that assessed the
16 replicability of their survey results published in 2018 (discussed in the preceding paragraph). The
17 2019 paper analyzed the researchers’ large-scale survey of 1,172 gamers aged 18 and older. Drs.
18 Zendle and Cairns observed “Loot boxes share psychological and structural features with
19 gambling,” that there was again a “significant link” between problem gambling and loot box
20 spending, and “the severity of the link seen here suggests that relevant authorities should seriously
21 consider restricting access to loot boxes as if they were a form of gambling.”⁶⁹

22 128. Brooks and Clark (2019) found that risky loot box use is associated with increased
23 problem gambling symptoms and gambling related cognitions. Drs. Brooks and Clark studied the
24 relationships between gaming involvement, engagement with loot boxes, and their associations with
25

26 _____
27 ⁶⁸ David Zendle and Paul Cairns, *Video game loot boxes are linked to problem gambling: Results of a large-scale survey*, PLoS ONE, 13(11):e0206767 (2018).

28 ⁶⁹ David Zendle and Paul Cairns, *Loot boxes are again linked to problem gambling: Results of a replication study*, PLoS ONE, 14(3):e0213194 (2019).

1 disordered gambling and gambling-related cognitions. In doing so, the researchers conducted two
 2 different surveys: one involving 144 adults and the other of 113 undergraduate students. According
 3 to the authors, the survey results “demonstrate that besides the surface similarity of loot boxes to
 4 gambling, loot box engagement is correlated with gambling beliefs and problematic gaming
 5 behaviour in adult gamers.”⁷⁰

6 129. In their 2019 peer-reviewed paper, Dr. Wen Li and co-authors from the Center for
 7 Gambling Studies at Rutgers University reported direct associations between problem gambling
 8 symptoms and loot box spending, problem gaming symptoms and loot box purchasing, and loot box
 9 purchasing and psychological distress. The researchers collected data from 618 adult video gamers
 10 via an online survey to explore the relationship between loot box purchases and problem video
 11 gaming and gambling behaviors. Drs. Li et al. observed that “[t]he advent of loot box purchasing in
 12 video games has effectively introduced gambling into the video gaming environment” and
 13 concluded “loot box purchasing was directly related to increased problem video gaming and
 14 problem gambling severity” and “loot box purchases may also be indirectly related to mental distress
 15 due to its association with problem video gaming and problem gambling behavior.”⁷¹

16 130. Profs. Macey and Hamari (2018), who conducted a survey, found “evidence of a
 17 strong relationship between loot box opening (paid and unpaid) and gambling,” stated that “a real-
 18 world analogue [of loot boxes] are lottery scratch cards.”⁷²

19 131. Profs. Kristiansen and Severin (2020) conducted a scientific literature review and
 20 also found the published results to be consistent:

21 Taken together, this research has established that loot box purchasing is associated
 22 with increased scores on gambling severity scales, and that expenditure on loot boxes
 23 is positively correlated with problem gambling severity.⁷³

24 ⁷⁰ Gabriel A. Brooks and Luke Clark, *Associations between loot box use, problematic gaming*
 25 *and gambling, and gambling-related cognitions*, Addictive Behaviors, 96:26-34 (2019).

26 ⁷¹ Wen Li, Devin Mills, Lia Nower, *The relationship of loot box purchases to problem video*
 27 *gaming and problem gambling*, Addictive Behaviors, 97:27-34 (2019).

28 ⁷² Joseph Macey and Juho Hamari, *eSports, skins and loot boxes: Participants, practices and*
problematic behavior associated with emergent forms of gambling, New Media & Society,
 21(1):42-59 (2019).

⁷³ Søren Kristiansen and Majbritt Christine Severin, *Loot box engagement and problem*

132. To analyze potential similarities between adults and children in terms of loot box behavior, Kristiansen and Severin (2020) also conducted a large-scale scientific survey of 5,000 gamers aged 12-16. They did so because “the current knowledge seem to suggest that loot box engagement catalyze monetary gambling and gambling problems among video gamers” and “[c]learly, such schemes may pose a risk to young people, who not fully understand the underlying mechanisms and reward system.” The authors found that loot box use was prevalent among adolescents, at rates that correspond with studies among adult gamers. Likewise, and corresponding with the scientific research on adult usage of loot boxes, Kristiansen and Severin (2020) demonstrated “significant positive correlation between loot box engagement and problem gambling severity.”

133. These psychologists, gambling experts, and social science researchers who have studied the issue unanimously agree that loot boxes have all the structural and psychological hallmarks of gambling and correlate with problem gambling, among both children and adults. The proven link to problem gambling is robust and the results have been replicated. Researchers have determined the scientific findings are “very consistent” among published research:

[T]he findings are very consistent that there is an association between problem gambling and loot box buying among both adolescents and adults (and that the association may be even stronger among adolescents).⁷⁴

E. Countries Have Banned Loot Boxes for Violating Gambling Laws

134. In recent years, many countries have started to regulate or ban loot boxes. Belgium, the Netherlands and Japan have banned loot boxes because they constitute illegal unregulated gambling. China and other countries regulate loot boxes under national lottery laws. Other countries have opened regulatory investigations of loot boxes. In Australia, a 2018 report concluded loot boxes are “psychologically akin to gambling.” In France, the gambling regulator observed loot boxes undermine public policy on gambling because minors play them and they give rise to habits

gambling among adolescent gamers: Findings from a national survey, Addict Behav., 103:106254 (Apr. 2020).

⁷⁴ Mark D. Griffiths, *Loot box buying among adolescent gamers: A cause for concern?*, Education and Health, 37(3):63-66 (2019).

and reflexes introducing minors to gambling. In the United Kingdom, the House of Lords issued a July 2020 report urging the government to immediately “bring loot boxes within the remit of gambling legislation and regulation.” In November 2020, Spain’s gambling regulator announced it would introduce gaming law amendments to classify loot boxes as a game of chance, and in February 2021, launched an official public consultation into whether loot boxes should be regulated within existing gambling laws, whether a new regulation should be implemented, or if loot boxes should be banned outright. Similarly, lawmakers in Hawaii, Minnesota and Washington introduced state legislation to ban loot boxes in video games.

135. The Government of Belgium examined the use of loot boxes in various videogames and determined that they violated that country’s gambling laws. In Belgium, as in California, the definition of gambling consists of three core elements: consideration, prizes, and chance.⁷⁵ The Belgian Gaming Commission found loot boxes contain “all of the constitutive elements of gambling” and stressed that “[i]f there is no adequate intervention, then games of chance in video games will increasingly cause harm to players, families, and society.”⁷⁶ Noting the “importance of protecting minors and vulnerable players,” the report specifically found the loot box games constituted illegal gambling:

The paid loot boxes in the examined games Overwatch, FIFA 18 and Counter-Strike: Global Offensive fit the description of a game of chance because all of the constitutive elements of gambling are present (game, wager, chance, win/loss).⁷⁷

136. Peter Naessens, Director at the Belgian Commission concluded that the sale of loot boxes must stop:

Paying loot boxes are no innocent component of video games which present themselves as a game of skill. Players are tempted and misled by them and none of the protective measures for games of chance are applied. Now that it has become clear that children and vulnerable persons in particular are being exposed to this

⁷⁵ Under Belgian law, it is illegal to operate a game of chance without first obtaining a permit from the Gaming Commission. California’s Gambling Control Act contains the same prohibition. *See* Cal. Bus. & Prof. Code § 19800 et seq.

⁷⁶ Belgian Gaming Commission, *Research Report on Loot Boxes* (April 2008), https://www.gamingcommission.be/opencms/export/sites/default/jhksweb_nl/documents/onderzoek-rapport-loot-boxen-Engels-publicatie.pdf.

⁷⁷ “FIFA Soccer” is the title of the current App version of what used to be called “FIFA 18” which is currently available in Defendant’s App Store in the United States.

1 without any protection, the game producers, and also the parties involved, are called
2 upon to put a stop to this practice.⁷⁸

3 137. The Belgian Gaming Commission also determined that given the active participation
4 required to purchase and open loot boxes, “the game element is present both at the video game level
5 as well as at the loot box level.”

6 138. In September 2019, the British Parliament’s Digital, Culture, Media and Sport
7 Committee issued a report to Parliament determining that loot boxes constitute gambling and
8 encourage addictive behavior, and recommending that the sale of loot boxes to children should be
9 banned. Committee Chair Damian Collins MP said:

10 Loot boxes are particularly lucrative for games companies but come at a high cost,
11 particularly for problem gamblers, while exposing children to potential harm. Buying
12 a loot box is playing a game of chance and it is high time the gambling laws caught
up. We challenge the Government to explain why loot boxes should be exempt from
the Gambling Act.

13 139. The Children’s Commissioner for England issued a report in October 2019 which
14 called for “urgent legislation [] to address the harm being done to children by loot boxes and similar
15 products.” On January 18, 2020, the Mental Health Director of the UK’s National Health Service
16 issued a statement that loot boxes risk “setting kids up for addiction” and “no company should be
17 setting kids up for addiction by teaching them to gamble on the content of these loot boxes. No firm
18 should sell to children loot box games with this element of chance, so yes, those sales should end.”⁷⁹
19 A follow-on report published in July 2020 from the United Kingdom’s House of Lords also
20 recommended immediately “bring[ing] loot boxes within the remit of gambling legislation and
21 regulation.”

22 140. On July 2, 2020, nine months after the UK’s Department of Digital, Culture, Media
23 and Sport concluded that loot boxes should be regulated under the UK’s gambling laws, the House
24 of Lords called for the immediate regulation of loot boxes as gambling: “While we welcome the
25

26 ⁷⁸ https://www.gamingcommission.be/opencms/opencms/jhksweb_en/gamingcommission/news/news_0061.html

27 ⁷⁹ NHS England, *Country’s top mental health burse warns video games pushing young people*
28 *into ‘under the radar’ gambling* (Jan. 18, 2020), <https://www.england.nhs.uk/2020/01/countrys-top-mental-health-nurse-warns-video-games-pushing-young-people-into-under-the-radar-gambling/>.

government’s intention to consider the relationship between gambling and video gaming, we believe that this issue requires more urgent attention.” The House of Lords’ report noted the “evidence we have heard has stressed the urgency of taking action.” Accordingly, the House of Lords “echo the conclusion of the [UK’s] Children’s Commissioner’s report, that if a product looks like gambling and feels like gambling, it should be regulated as gambling” and therefore recommended that loot boxes be immediately deemed gambling.

141. Government officials in the Netherlands studied loot boxes in ten popular games. In its April 2018 report, the Netherlands Gaming Authority determined some loot boxes had gambling elements similar to slot machines with addiction potential similar to blackjack, roulette and other casino gambling games. According to the official report, “all of the loot boxes that were studied could be addictive,” “loot boxes have a moderate to high addiction risk potential,” “have integral elements that are similar to slot machines” where “multiple visual and sound effects are added and a ‘near miss’ effect is used,” and “as a result of opening loot boxes, socially vulnerable groups such as young people could eventually be encouraged to play other games of chance.” Noting that all the loot boxes could “foster the development of addiction,” the report from the Netherlands Gaming Authority also observed online gamers attribute significant social status value on themselves and other gamers based on the prizes they win from playing loot boxes.⁸⁰

142. Australian officials also determined the loot box mechanism constitutes a form of gambling that targets minors and otherwise acts “as a gateway to problem gambling and associated harm later in life.” Accordingly, the March 2020 report prepared by the Australian House of Representatives Standing Committee on Social Policy and Legal recommended mandatory age verification for loot box purchasing:

Given their resemblance to gambling, the Committee considers that loot boxes and other simulated gambling elements in video games should be subject to appropriate age restrictions, including through the use of mandatory age verification.⁸¹

⁸⁰ Netherlands Gaming Authority (Kansspelautoriteit), *Study into loot boxes: A treasure or a burden?* (Apr. 10, 2018), <https://kansspelautoriteit.nl/english/loot-boxes/>.

⁸¹ Parliament of the Commonwealth of Australia, House of Representatives Standing Committee on Social Policy and Legal Affairs, *Protecting the age of innocence: Report of the inquiry into age verification for online wagering and online pornography* (Feb. 2020),

143. The March 2020 Australian report was preceded by an October 2019 report from the Australian Gambling Research Centre finding “the use of ‘loot boxes’ or micro-transactions for chance-based items in online video games [is] a form of gambling that is readily accessible to players under the age of 18 years.” This 2019 Australian report also found the presence of loot boxes in videogames “normalizes gambling”:

The use of for-money, in-game ‘loot boxes’ as a mechanism through which additional in-game items can be obtained familiarises players, many of whom are less than 18 years of age, with a gambling activity that is practically identical to games available on external sites. It coexists there with lotteries, eSports betting and other more explicit gambling activities played in virtual currency. This process of ‘gamblification’ can be seen as analogous to that occurring in the context of sports betting, whereby gambling practices are becoming increasingly normalised as an inherent component of sports engagement (Jenkinson, de Lacy-Vawdon, & Carroll, 2018; Lopez-Gonzalez & Griffiths, 2016).⁸²

144. Here in the United States, the Federal Trade Commission recently hosted a workshop on loot boxes. Meanwhile, U.S. Senators Maggie Hassan (D-NH)), and Josh Hawley (R-MO) introduced a bi-partisan bill co-sponsored by Ed Markey (D-MA) and Richard Blumenthal (D-CT) titled “The Protecting Children From Abusive Games Act” that will prohibit loot boxes in minor-oriented games. The proposed bill includes a prohibition in minor-oriented games of loot boxes, which it defines as “an add-on transaction to an interactive digital entertainment product that in a randomized or partially randomized fashion unlocks a feature of the product or adds to or enhances the entertainment value of the product[.]”

F. The Hague’s October 2020 Ruling That Loot Boxes Are Illegal Gambling

145. In October 2020, an appellate panel at the Court of The Hague determined that loot boxes are unlicensed games of chance that violate gambling laws.⁸³ The gambling law at issue had

https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024436/toc_pdf/Protectingtheageofinnocence.pdf.

⁸² Uma Jatar and Rebecca Jenkinson, *House of Representatives Standing Committee on Social Policy and Legal Affairs: Submission to the Inquiry into Age Verification for Online Wagering and Online Pornography*, Australian Gambling Research Center, Australian Institute of Family Studies (Oct. 25, 2019).

⁸³ See World Today News, *Court: Packs in FIFA are gambling games and EA must adapt game in in the Netherlands* (Oct. 29, 2020), <https://www.world-today-news.com/court-packs-in-fifa-are-gambling-games-and-ea-must-adapt-game-in-the-netherlands-gaming-news/>;

1 the same core elements as the ones here: consideration, prize, and chance. Whether loot boxes are a
 2 game of chance separable from the associated games that included elements of player skill was also
 3 debated.

4 146. The three-judge panel at The Hague affirmed a conclusion by the Dutch Gaming
 5 Authority that Ultimate Team Pack loot boxes in EA's FIFA video games are an unlicensed, illegal
 6 gambling game of chance completely separate from FIFA's game of skill.⁸⁴ Citing the need for
 7 transparency and to warn consumers about the misconduct, The Hague also rejected the game
 8 developer's objections to making the opinion public.

9 147. Grounded in expert testimony, The Hague concluded it has been established "that
 10 there is evidence of a correlation between (buying) loot boxes and gambling problems," and
 11 therefore loot boxes present a "high risk potential" for gambling addiction.

12 148. The Hague also opined that it is particularly problematic that loot boxes expose
 13 vulnerable children to the addictive gambling games:

14 [E]xperts consider it very plausible that there is a risk that, in particular, underage
 15 participants may become more sensitive to addiction as a result of [loot
 16 boxes]. Minors are vulnerable and more easily addicted; if they gamble at a minor
 17 age they are at greater risk of becoming addicted. In FIFA, minors have access to
 18 [loot boxes]. When playing FIFA, they can unintentionally and unprotected come
 19 into contact with a game of chance. Experts warn against loot boxes, individual
 reports have been received from the defendant about loot boxes, including those from
 plaintiffs, about their addictive effects, and media reports from participants have
 appeared.

20 149. Citing public policies about preventing gambling addiction, particularly in minors –
 21 similar to public policies at issue here – The Hague panel held banning loot boxes and imposing
 22 fines for their continued use was "necessary, appropriate and proportional" and that any
 23 "commercial interests do not outweigh the public interests at stake." In particular, the panel cited
 24

25 [https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2020:10428&showbutton](https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2020:10428&showbutton=true&keyword=gokken)
 26 [=true&keyword=gokken](https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2020:10428&showbutton=true&keyword=gokken) (link to official Hague opinion, last visited Mar. 10, 2021).

27 ⁸⁴ There is nothing about The Hague's ultimate findings that is unique to the structure of the
 28 loot boxes in FIFA. The opinion observes similar actions taken involving other loot boxes: "[f]our
 providers of illegal loot boxes have been contacted and several providers have adjusted their
 offerings."

1 “[t]he public interests of the prevention of gambling addiction, in particular among minors, the
 2 protection of the consumer and the prevention of crime and illegality, [which] can be regarded as
 3 legitimate objectives.” These public interests in enforcing the loot box ban were “so great” that it
 4 was not unreasonable to require the game developer to cease and desist within three weeks.

5 150. The Hague also rejected the argument that although its Ultimate Team Pack loot
 6 boxes were not games of chance, they are inseparable from the FIFA video game in which they were
 7 found. Since FIFA (a soccer game) was a game of skill, the loot box must be treated as one, as well.
 8 The Hague rejected the argument because loot boxes can be bought separately and opened separately
 9 from the FIFA game being played and the goods obtained from loot boxes are separate from the
 10 matches. Therefore, loot boxes must be regarded and assessed on their own. There is nothing unique
 11 about the loot boxes in FIFA that properly render them – but not other loot boxes – a separate,
 12 standalone game of chance. As with FIFA, other loot boxes can be bought and opened separate from
 13 playing the associated game.

14 **G. Loot Boxes Constitute Gambling in Violation of California Law**

15 151. Loot boxes are a gambling device and constitute a form of gambling in violation of
 16 California law. Cal. Penal Code §§ 330, *et seq.* Further, by “exposing [loot boxes] for play,” Apple
 17 is conducting a gambling operation in violation of California’s Gambling Control Act. Cal. Bus. &
 18 Prof. Code §§ 19800, *et seq.*

19 **1. Violations of California Penal Code §§ 330, *et seq.***

20 152. Under California law, loot boxes constitute illegal “slot machines or devices” when
 21 played on a mobile phone, tablet, computer, or other similar device. California Penal Code § 330b(d)
 22 broadly defines an unlawful “slot machine or device” as:

23 a machine, apparatus, or device that is adapted, or may readily be converted, for use
 24 in a way that, as a result of the insertion of any piece of money or coin or other object,
 25 or by any other means, the machine or device is caused to operate or may be operated,
 26 and by reason of any element of hazard or chance or of other outcome of operation
 27 unpredictable by him or her, the user may receive or become entitled to receive any
 28 piece of money, credit, allowance, or thing of value, or additional chance or right to
 use the slot machine or device, or any check, slug, token, or memorandum, whether
 of value or otherwise, which may be exchanged for any money, credit, allowance, or
 thing of value, or which may be given in trade, irrespective of whether it may, apart

1 from any element of hazard or chance or unpredictable outcome of operation, also
 2 sell, deliver, or present some merchandise, indication of weight, entertainment, or
 3 other thing of value.

4 153. The California Bureau of Gambling Control describes a “gambling device” as
 5 follows:

6 California’s gambling device statutes are broad in their coverage and prohibit any
 7 person from owning, renting, or possessing illegal gambling devices. (Penal Code,
 8 §§ 330a, 330b, 330.1.) An illegal gambling device has three features:

- 9 1. It is a machine, apparatus, or device (coin operation is not required);
- 10 2. Something of value is given to play the device; and
- 11 3. The player has the opportunity to receive something of value by any element
 12 of hazard or chance (“something of value” is not limited to coins, bills, or
 13 tokens—it also includes free replays, additional playing time, redemption tickets,
 14 gift cards, game credits, or anything else with a value, monetary or otherwise.)
 15 (Penal Code, §§ 330a, 330b & 330.1.)⁸⁵

16 154. The loot boxes at issue meet this definition. First, a player uses his or her Android
 17 device to download game apps that offer loot boxes, turning the Android device into a device on
 18 which to play a loot box. Second, something of value is used to purchase a play on a loot box, either
 19 when the player purchases virtual coins with money to buy chances on loot boxes, or when virtual
 20 coins, which are property, are used. Third, the loot box offers the player a randomized chance to
 21 obtain something valuable.

22 155. The potential prizes are “things of value,” both to the players who spend to win rare
 23 prizes and otherwise. California law broadly defines the types of prizes that come within its
 24 gambling prohibitions. Any “thing of value,” regardless of whether it is capable of being turned into
 25 money, is sufficient. Here, people are willing to spend money to try to win these digital goods,
 26 whether they are cosmetic or improve gameplay. By its very nature, the purpose of purchasing and
 27 opening a loot box is to win something of value. A chance to win a thing of value is the *sine qua*
 28 *non* of selling loot boxes. Apple and the game developers are aware of this. In the games, they

⁸⁵ Bureau of Gambling Control, Law Enforcement Advisory: Illegal Gambling Devices (Nov. 1, 2010), <https://www.abc.ca.gov/wp-content/uploads/2019/06/Law-Enforcement-Advisory-Illegal-Gambling-Devices-1.pdf>.

1 describe potential winnings as common, rare, and legendary. The loot box prizes are described as
 2 “super valuable items.”⁸⁶



17 156. Professor Robert Woodruff explains value in a widely cited published paper: “a
 18 customer perceived preference for and evaluation of those products attributes, attribute
 19 performances, and consequences arising from use that facilitate (or block) achieving the customer’s
 20 goals and purposes in use situations.”⁸⁷ This widely adopted definition is based on the fact that value
 21 comes from a customer’s preferences, evaluations and perceptions. Because the perceived value of

24 ⁸⁶ The graphic below is from the racing game app “Need for Speed.” Loot boxes in Need for
 25 Speed are called “Upgrade Crates” or “Premium Crates.” A player purchases a crate, clicks on it,
 26 and then the crate shoots out a random prize of value. The prize may be a car or car part of
 27 “common,” “uncommon,” “epic,” or “rare” variety. Virtual “gold” is the main form of currency in
 the game. A player buys a crate in-game with the “gold” purchased for money through the App
 Store.

28 ⁸⁷ Robert B. Woodruff, *Customer value: the next source for competitive advantage*, J of the
 Acad Mark Sci, 25(2):139-153 (1997).

1 an item is rationally greater than the cost of obtaining that item, loot boxes are economically valued
2 at no less than the cost to obtain them.

3 157. The value of a loot box's virtual items is derivative of the same factors dictating the
4 value of tangible items. Research demonstrates that "[i]n general, [] virtual items are valued for
5 many of the same reasons as more tangible commodities." Nevertheless, because "the symbolic
6 value of a virtual good stems from its role and meaning inside the game...A person not part of that
7 social world would probably not see the good as valuable at all."⁸⁸ There would be no incentive to
8 acquire or offer loot box items, including cosmetics if they did not have some sort of value to the
9 player.

10 158. Analyzing whether loot boxes provided the random chance opportunity to win things
11 of value, the Belgian Gaming Commission – analyzing a broad definition comparable to California's
12 – answered this question with a resounding yes:

13 [I]t is not important if a 'skin' in Overwatch, FIFA 18 or C-S: GO is merely of
14 aesthetic value. What is important is that players attach value to it and that this value
15 is also emphasized by the game developers themselves. Sometimes colour or numeric
16 codes are used to assign value to items. The items are also often assigned value by
17 creating scarcity. By offering certain items in loot boxes during a certain time frame,
players will be inclined to buy more loot boxes during that specific period (event)
because this is the only chance to obtain this 'valuable' item.⁸⁹

18 159. Economic theory holds that market price is the best indicator of value. Evidence of
19 the real-world value of the randomized loot box items includes that where these virtual items are
20 tradeable for money, transactions of fiat currency occur. Further, most virtual items are sold for less
21 than the cost of a loot box (representing real financial loss), so most of the time a player who opens
22 a loot box loses. Gamers who purchase virtual items also spend significantly more in total on games,
23 demonstrating a willingness to spend additional money to acquire virtual items and the additional
24 financial value of these items over and above the game itself.⁹⁰ Likewise, because the potential loot
25

26 ⁸⁸ Vili Lehdonvirta, *Virtual item sales as a revenue model: identifying attributes that drive*
purchase decisions, Electron Commer Res, 9:97-113 (2009).

27 ⁸⁹ Belgian Gaming Commission, *Research Report on Loot Boxes* (April 2018).

28 ⁹⁰ Drummond A, Sauer JD, Hall LC, Zendle D, Loudon MR, *Why loot boxes could be regulated*
as gambling, Nat Hum Behav, 4(10):986-988 (Oct. 2020). Drummond and co-authors analyzed sales

box prizes are categorized by frequency and rarity, value is inherently assigned to them. The collection of rare items also is seen as a sign of status within the gaming community, thus ascribing a form of social value to the items.⁹¹ With loot boxes and the general economy, much consumer spending occurs to obtain or maintain social status.

160. Professors from the Department of Psychology at the University of Waterloo examined whether “players do indeed find rarer [loot box] items as being subjectively more valuable.”⁹² To do so, Professors Larche et al. (2019) conducted two experiments to observe whether “loot box rewards are treated in much the same way that monetary outcomes are treated in slots play” and therefore “underscore that both reward structure may lead to similar rewards processing and motivational effects.”

161. Results from Experiment 1 showed that “players systematically categorized valuable and non-valuable loots based on increasing rarity, and hence increasing objective value, of the items in a loot box”:

Players subjectively value most those loot boxes with the highest objective worth (e.g., those that contains at least one of the most uncommon ‘legendary’ items) compared to loots that were objectively worth less (e.g., those containing more common items falling into the ‘rare’ and ‘epic’ tiers). Moreover, players also gave larger ratings of arousal, valence and urge as the reward value of the loot box increased.

of 2,319 virtual items from three popular games. In the aggregate, sales of the virtual items exceeded one billion dollars, with the individual items being sold for between \$0.03 and \$743.80 each. “Contradicting the common argument that loot boxes are not gambling because no player loses upon opening a loot box” the “overwhelming majority of players incur financial losses when on-selling loot box items, with ~93% of sales recouping less than the purchase price.”

⁹¹ For instance, Dr. Vili Lehdonvirta, an economic sociologist, professor at the University of Oxford and former game developer, points out that in the game *Ultima Online*, “one of the most highly valued virtual items in the whole system was a small brown lump named ‘horse dung’”. Despite its very modest appearance and complete lack of performance or functionality, people have paid the equivalent of hundreds of U.S. dollars for the item.” Vili Lehdonvirta, *Virtual item sales as a revenue model: identifying attributes that drive purchase decisions*, Electron Commer Res, 9:97-113 (2009).

⁹² Larche CJ, Chini K, Lee C, Dixon MJ, Fernandes M, *Rare Loot Box Rewards Trigger Larger Arousal and Reward Responses, and Greater Urge to Open More Loot Boxes*, J Gambl Stud, 37(1):141-163 (Mar. 2021).

162. In Experiment 2, Professors Larche et al. sought to replicate the results of Experiment 1, and to also analyze if common loot box items produce higher ratings of disappointment and whether prominent measures of hedonic reward and arousal were associated with the levels of loot. The researchers stated, “Experiment 2 successfully replicated the results for these subjective measures, in addition to supplying converging evidence of the arousing, hedonically rewarding and motivating nature of these non-monetary rewards with PRPs [or “post reinforcement pauses” – an index of reward reactivity that is longer following wins], SCRs [or “skin conductance responses” – measuring sweat gland activity, a well-established indicator of physiological arousal], and force measures.” The researchers found that “[s]imilar to the indisputable, rewarding feeling of winning money, we show that obtaining in-game items within a loot box appear to activate the same reward response in a slot machine” and that “such findings are indicative of players’ awareness and sensitivity to the value of different loots.”

163. Professors Drummond, Sauer, Hall, Zendle and Loudon specifically analyzed whether the virtual items that may be won from randomized loot boxes have monetary value. In their 2020 paper published in the top-tier journal *Nature*, Drummond et al. determined that loot boxes have value using numerous economic theories.⁹³ The authors concluded:

We have demonstrated that virtual items have monetary value to gamers irrespective of whether they can be cashed out. Therefore, randomised virtual items (loot boxes) purchased for real money likely satisfy the requirements of value needed to meet the legal definitions of gambling in many jurisdictions.⁹⁴

164. Similarly, Zendle et al. (2020), analyzed 1,200 gamers and determined that the presence of a cash out mechanism is also not a uniquely strong gateway to the robust relationship between loot box spending and problem gambling.⁹⁵ Indeed, Zendle (2020) concluded there was

⁹³ Drummond A, Sauer JD, Hall LC, Zendle D, Loudon MR, *Why loot boxes could be regulated as gambling*, Nat Hum Behav, 4(10):986-988 (Oct. 2020).

⁹⁴ The presence of a cash out mechanism is also not a uniquely strong gateway to the robust relationship between loot box spending and problem gambling. Zendle D, Cairns P, Barnett H, McCall C, *Paying for loot boxes is linked to problem gambling, regardless of specific features like cash-out and pay-to-win*, Computers in Human Behavior, 102:181-191 (Jan. 2020). From a gambling definitional perspective, The Hague appellate panel also noted that it is “irrelevant whether prizes can be converted into real money.”

⁹⁵ Zendle D, Cairns P, Barnett H, McCall C, *Paying for loot boxes is linked to problem*

1 “robust and reliable” evidence linking loot boxes to problem gambling “regardless of whether or
 2 not loot boxes gave players gameplay advantages, allowed them to trade items for real world money,
 3 allowed them to cash-out, or showed near-misses.” From a gambling definitional perspective, The
 4 Hague appellate panel also noted that it is “irrelevant whether prizes can be converted into real
 5 money.”

6 165. While monetization is not a requirement for an item (tangible or not) to provide
 7 value, there are also many ways to monetize the prizes won from loot boxes, thereby demonstrating
 8 that these prizes are “things of value.”⁹⁶ The first is known as platform supported sale. Many game
 9 creators and storefronts allow virtual items to be traded between accounts through digital
 10 marketplaces that involve either fiat or digital currencies that can be used to purchase things that
 11 have monetary value.

12 166. Additionally, because some of these specific high-demand items in the game can be
 13 so difficult (and costly) to obtain, a “gray market” has also sprung up on the internet – websites
 14 where the game accounts and in some cases individual items can be (and are) bought and sold for
 15 real money outside of the game itself. Numerous websites have been created to broker these
 16 transactions, bringing buyer and seller together to sell these items and accounts, for money outside
 17 of the game.

18 167. The second is known as platform supported trade. Some games allow virtual items
 19 to be traded between accounts within the game, often using in-game marketplaces. Theoretically,
 20 no fiat currency is utilized in the transaction, however users may communicate and money is then
 21 exchanged outside the game in exchange for the transfer of the item for a symbolic in-game price.
 22 This is through account exchanges.⁹⁷ There is a market for many of the games’ player accounts to

23 _____
 24 *gambling, regardless of specific features like cash-out and pay-to-win*, Computers in Human
 Behavior, 102:181-191 (Jan. 2020).

25 ⁹⁶ Rockloff et al. (2020) examined the best-selling video games by revenue, and reported that
 26 of games with loot boxes, 84% (43 of 51) “allowed the skins or other items to be sold for cash or
 27 traded for other items with a monetary value (e.g., other skins, in-game currency, etc.).”
 Rockloff M, Russell AMT, Greer MN, Lolé L, Hing N, Browne M, *Loot boxes: Are they grooming*
youth for gambling?, NSW Responsible Gambling Fund (2020).

28 ⁹⁷ For example, Electronic Arts has created an “auction house” for its mobile “Madden” NFL
 game. The auction house allows gamers to buy and sell various players that were won in loot boxes

1 be bought and sold outside of the game itself. The value, or price, of each game account is
 2 determined by the “loot” the player possesses which is “locked” in their account. There are
 3 companies who specialize in buying and selling videogame accounts that contain prizes from loot
 4 boxes.

5 168. The third is third-party sales of loot box items. Third-party companies commonly
 6 referred to as “gold farmers” obtain virtual items and sell them to other players for money, including
 7 fiat currency. The products offered may include items where the cost of obtaining the item is lower
 8 than the average selling price for the item. Gold farmers do not participate in ‘normal’ or ‘for fun
 9 play’ and are therefore able to obtain game resources more rapidly than recreational players.

10 169. The fourth way to monetize loot box prizes in the real-world economy is through
 11 “skin gambling” where players use virtual items and loot boxes as pseudo-currency on third-party
 12 gambling sites.⁹⁸

13 170. While loot box prizes can be monetized in a variety of ways, Professor Elizabeth
 14 Handsley explained why that overly narrow conceptualization of ‘value’ ignores psychological
 15 processes and is ultimately “neither here nor there” when it comes to valuing loot box prizes:

16 [The ability to]...convert loot boxes into real-life money is neither here nor there
 17 because the items that are accessed via loot boxes are of value to the player. That’s
 18 all that really matters from a psychological perspective. Whether that person can then
 19 get money or some real-life tangible good in return for the loot boxes is neither here
 20 nor there. The player is committed to the game. These games are very absorbing.
 21 There are a lot of people who have a lot invested in playing games and getting to
 higher levels, therefore the value to those can be very high. From a psychological
 perspective, that’s what matters. Whether it’s money or some tangible good is really
 not the point.⁹⁹

22
 23
 24
 25 _____
 26 within the game. Other examples of game apps where gamers can sell their loot box prizes include
 NBA 2K and Need for Speed.

27 ⁹⁸ Commonwealth of Australia, The Senate, *Environment and Communications References*
Committee: Gaming micro-transactions for chance-based items, at p.23-24 (Nov. 2018).

28 ⁹⁹ Commonwealth of Australia, The Senate, *Environment and Communications References*
Committee: Gaming micro-transactions for chance-based items, at p.29 (Nov. 2018).

171. Whether the potential loot box items make playing the game easier and more winnable (“functional” items) or allow players to customize the look of their in-game characters (“cosmetic” items), all loot boxes provide a completely randomized chance to win valuable prizes.

172. For example, Hamari et al. (2017) found the value of in-game items that may be obtained to “personalize” video game characters: “One prominent value proposition of a lot of in-game content is that it affords players to differentiate themselves from other players by personalizing their avatar or other belonging in-game.”¹⁰⁰

173. Lehdonvirta (2009) also observed that both functional and cosmetic attributes of virtual goods drive consumers’ purchase decisions. “It could even be speculated that in some cases the functional attributes of a virtual good serve only as an excuse for a purchase that is primarily motivated by hedonic or social aspects, a technique commonly applied in marketing high-performance automobiles.”¹⁰¹

174. On October 22, 2019, the Children’s Commissioner for England published a report titled “Gaming the System.”¹⁰² The report examined gaming experiences as seen through the eyes of children aged 10 to 16. While children reported that games provide positive, fun experiences, they also reported negative aspects to playing games online. Of particular relevance here, children report being “scorned in games [] if they are seen to wear the ‘default skin’ (the free avatar they receive at the start of the game). Children say they feel embarrassed if they cannot afford new ‘skins’, because then their friends see them as poor.” Nina, a 10-year-old, told the researchers “If you’re a default skin, people think you’re trash.” The Children’s Commissioner explained how even though some children describe loot boxes as gambling, they nonetheless purchase loot boxes because of peer pressure, spend unplanned money to try to “chase losses” after losing money from

¹⁰⁰ Hamari J, Alha K, Järvelä S, Kivikangas JM, Koivisto J, & Paavilainen J, *Why do players buy in-game content? An empirical study on concrete purchase motivations*, Computers in Human Behavior, 68:538-546 (2017).

¹⁰¹ Vili Lehdonvirta, *Virtual item sales as a revenue model: identifying attributes that drive purchase decisions*, Electron Commer Res, 9:97-113 (2009).

¹⁰² Children’s Commissioner for England, *Gaming the system* (October 2019).

1 loot boxes, and because “[i]n general, children do not have effective strategies to manage their online
2 spend”:

3 Game design also encourages spending. In games such as FIFA, children can either
4 improve by investing significant time to build up their squad or spend money in the
5 hope of quickly advancing their position. The latter option – to spend money in the
6 hope of progressing – is the most popular option across the sample. With new
7 editions of FIFA being released every year, children feel as though there is an
8 expectation and pressure to buy new players, spend money and build up their team
9 as quickly as possible.

10 In some cases, this spending was done in order to receive a collection of unknown
11 rewards, so-called loot boxes. The most obvious example of this is FIFA player
12 packs, which some children acknowledged as being similar to gambling.

13 The lack of guaranteed reward from these purchases can leave some children feeling
14 as though they have wasted their money. The potential to receive a good reward
15 means that children also feel that they are not in control of their spending, and
16 sometimes try to ‘chase losses’. In general, children do not have effective strategies
17 to manage their online spend.

18 175. The Children’s Commissioner official report included quotes from the children being
19 studied that illustrate ways in which loot boxes unfairly exploit adolescent vulnerabilities and have
20 quickly become the gamblification of gaming:

- 21 • “It takes a long time to get somewhere so you just do that [open player packs].” –
22 Tim, 16 (FIFA soccer player)
- 23 • “It’s like gambling – you could lose your money and not get anyone good, or get
24 someone really good.” – Tim, 16 (FIFA soccer player)
- 25 • “I never get anything out of it [buying packs] but I still do it.” – Lee, 14 (FIFA soccer
26 player)
- 27 • “You feel like it’s a waste of money...and then you open more.” – Nick, 16 (FIFA
28 soccer player)
- “[The excitement] depends on what you’ve got...If you don’t get anyone good it
makes you angry because you’ve wasted money.” – Nigel, 15 (FIFA soccer player)
- “You get told on website or social media when they’re on there [limited-time packs]
I’ll buy them then.” – Brandon, 15 (FIFA soccer player)

176. The Children’s Commissioner for England concluded the social pressures and “in-game mechanics that normalise spending,” which when “couple[d] with the widespread use of in-game features that produce a random selection of items, encouraged children to over-spend and lose track of how much they were spending.”

177. Because of scarcity bias (i.e., humans place a higher value on an object that is scarce), players gamble money to open loot boxes hoping they can win the “rare” loot box items considered more valuable than the “common” items, which are often worthless duplicates.¹⁰³ Knowing this, loot box purveyors “manufacture rarity (also known as ‘artificial scarcity’) to increase the value of the assets they are selling.”¹⁰⁴ The value of potential loot box prizes is not theoretical. At the January 2021 FUT Champions Cup, a staple of the FIFA e-sports calendar, players competed against each other using teams worth \$27,000 based on then-current trading prices.

2. Violations of California’s Gambling Control Act

178. Under California’s Gambling Control Act, all “controlled games” constitute “gambling” and anyone who “exposes for play one or more controlled games that are dealt, operated, carried on, conducted, or maintained for commercial gain” is conducting a “gambling enterprise” or “gambling operation.” *See* Cal. Bus. & Prof. Code §§ 17805(l) (“‘Gambling’ means to deal, operate, carry on, conduct, maintain, or expose for play a controlled game.”), 17805(g) (defining “controlled game”), 17805(m) (defining “gambling enterprise”), 17805(q) (defining “gambling operation”).

179. Loot boxes constitute a “controlled game” because they are a “game of chance...played for currency, check, credit, or any other thing of value.” Cal. Penal Code § 337j(1).

180. The marketing and sale of loot boxes also violates the spirit and public policies behind California’s Gambling Control Act. The Gambling Control Act provides that “gambling can become addictive and is not an activity to be promoted or legitimized as entertainment for children

¹⁰³ Luigi Mittone and Lucia Savadori, *The Scarcity Bias*, *Applied Psychology*, 58(3):453-468 (June 9, 2009).

¹⁰⁴ Vili Lehdonvirta, *Virtual item sales as a revenue model: identifying attributes that drive purchase decisions*, *Electron Commer Res*, 9:97-113 (Mar. 10, 2009) (“Rarity is perhaps the most socially oriented attribute of virtual goods, because its value is strongly associated with its ability to distinguish a (small) group of owners from non-owners.”).

and families,” “[u]nregulated gambling enterprises are inimical to the public health, safety, welfare, and good order,” and no “no person in this state has a right to operate a gambling enterprise except as may be expressly permitted by the laws of this state and by the ordinances of local governmental bodies.” *See* Cal. Bus. & Prof. Code §§ 17801(c), (d); *see also* Cal. Bus. & Prof. Code §§ 19850, 19851, 19852 (requiring state gambling licenses).

181. By exposing loot boxes for play for commercial gain, Apple is operating an illegal gambling enterprise that is inimical to the public health.

CLASS ACTION ALLEGATIONS

182. Pursuant to Federal Rule of Civil Procedure 23, Plaintiffs seek certification of a nationwide class consisting of:

All persons who paid to receive randomized virtual items from a purchase (also known as “loot boxes”) within an app downloaded from the Apple App Store.

183. The Class excludes Apple’s officers and directors, current or former employees, including their immediate family members, as well as any judge, justice or judicial officer presiding over this matter and members of their immediate families and judicial staff. Plaintiffs reserve the right to amend the Class definition or include subclasses if discovery and further investigation reveal that the Class should be expanded or otherwise modified.

184. Plaintiffs’ claims are typical of the claims of the members of the Class because Plaintiffs and all other members of the Class were damaged by the same wrongful conduct committed by Defendant, as alleged more fully herein.

185. Plaintiffs will fairly and adequately protect the interests of the Class. The interests of the class representatives are coincident with, and not antagonistic to, the interests of the other members of the Class.

186. Plaintiffs have retained counsel competent and experienced in the prosecution of class action litigation.

187. Questions of law and fact common to the members of the Class are central here and predominate over questions that may affect only individual members. Among the questions of law and fact common to the Class are:

- 1 (a) Whether loot boxes create or exacerbate addictive behaviors;
- 2 (b) Whether Defendant's conduct violates Cal. Penal Code §§ 330, *et seq.*;
- 3 (c) Whether Defendant's conduct violates California's Gambling Control Act,
- 4 Cal. Bus. & Prof. Code §§ 19800, *et seq.*;
- 5 (d) Whether Defendant's conduct violates the Illegal Gambling Business Act
- 6 (18 U.S.C. § 1955);
- 7 (e) Whether Defendant's conduct violates the Unlawful Internet Gambling
- 8 Enforcement Act of 2006 (31 U.S.C. §§ 5361-5367);
- 9 (f) Whether Apple violated Business & Professions Code § 17200 by engaging
- 10 in an "unlawful" business practice by marketing, selling and distributing loot boxes and videogames
- 11 with gambling features and in violation of various state and federal laws as set forth herein;
- 12 (g) Whether Apple violated Business & Professions Code § 17200 by engaging
- 13 in an "unfair" business practice by marketing, selling and distributing loot boxes and videogames
- 14 with gambling features and that create and/or exacerbate addictive behaviors, especially in minors,
- 15 as alleged herein;
- 16 (h) Whether Apple violated Civil Code §§ 1770(a)(14);
- 17 (i) Whether Apple was unjustly enriched as a result of the conduct alleged
- 18 herein;
- 19 (j) Whether Apple facilitated the sale of loot boxes;
- 20 (k) Whether Apple's conduct violated the other provisions of statutory and
- 21 common law outlined in this Complaint.

22 188. A class action is superior to all other available means for the fair and efficient
 23 adjudication of this controversy. Individualized litigation would create the danger of inconsistent or
 24 contradictory judgments arising from the same set of facts. Individualized litigation would also
 25 increase the delay and expense to all parties and the court system from the issues raised by this
 26 action. The burden and expense that would be entailed by individual litigation makes it
 27 impracticable or impossible for Class members to prosecute their claims individually. Further, the
 28 adjudication of this action presents no unusual management difficulties.

189. Unless a class is certified, Apple will retain monies received as a result of its improper conduct. Unless a classwide injunction is issued, Apple will continue to commit the violations alleged, and will continue to promote and engage in the unfair and unlawful gambling activities discussed herein. Apple has acted or refused to act on grounds that are generally applicable to the Class so that injunctive and declaratory relief is appropriate to the Class as a whole.

FIRST CAUSE OF ACTION

Violation of the “Unlawful Prong” of California’s Unfair Competition Law (“UCL”) (Cal. Bus. & Prof. Code §§ 17200, *et seq.*)

190. Plaintiffs reallege and incorporate by reference the allegations set forth in each of the preceding paragraphs of this Complaint.

191. Plaintiffs and members of the Class may properly allege violations of the UCL. Apple’s Media Services Terms and Conditions provide that “this Agreement and the relationship between you and Apple shall be governed by the laws of the State of California, excluding its conflicts of law provisions. You and Apple agree to submit to the personal and exclusive jurisdiction of the courts located within the county of Santa Clara, California, to resolve any dispute or claim arising from this Agreement.”

192. Plaintiffs and Defendant are “persons” within the meaning of the UCL. Cal. Bus. & Prof. Code § 17201.

193. The UCL defines unfair competition to include any “unlawful, unfair or fraudulent business act or practice.” Cal. Bus. Prof. Code § 17200.

194. As a result of engaging in the conduct alleged in this Complaint, Apple has violated the UCL’s proscription against engaging in “unlawful” conduct by virtue of its violations of the following laws:

(a) **California’s Gambling Control Act (Cal. Bus. & Prof. Code §§ 19800, *et seq.*):** Sections 19801 and 19850 of the Gambling Control Act provide that unless licensed, state law prohibits commercially operated gambling facilities; that no new gambling establishment may be opened except upon affirmative vote of the electors; that all gambling operations and persons having significant involvement therein shall be licensed, registered, and regulated; and that all persons who

1 deal, operate, carry on, conduct, maintain or expose for play any gambling game shall apply for and
 2 obtain a valid state gambling license. Loot boxes constitute a “gambling game” because they are a
 3 “controlled game,” which is “any game of chance, including any gambling device...played for
 4 currency, check, credit, or any other thing of value that is not prohibited and made unlawful by
 5 statute or local ordinance.” Cal. Penal Code § 337j(1). As alleged herein, Apple operates, carries
 6 on, conducts, maintains, and exposes for play gambling activities. Apple has not applied for or
 7 obtained any state gambling license, and therefore violates California’s Gambling Control Act.

8 (b) **California Penal Code § 330a:** Titled “Possession or keeping of slot or card
 9 machine or card dice,” section 330a declares that “[e]very person, who has in his or her possession
 10 or under his or her control...or who permits to be placed, maintained, or kept in any room, space,
 11 inclosure, or building owned, leased, or occupied by him or her, or under his or her management or
 12 control, any slot or card machine, contrivance, appliance or mechanical device, upon the result of
 13 action of which money or other valuable thing is staked or hazarded, and which is operated, or
 14 played, by placing or depositing therein any coins, checks, slugs, balls, or other articles or device,
 15 or in any other manner and by means whereof, or as a result of the operation of which any
 16 merchandise, money, representative or articles of value, checks, or tokens, redeemable in or
 17 exchangeable for money or any other thing of value, is won or lost, or taken from or obtained from
 18 the machine, when the result of action or operation of the machine, contrivance, appliance, or
 19 mechanical device is dependent upon hazard or chance...is guilty of a misdemeanor.” Apple violates
 20 section 330a because as alleged, Apple possesses or permits illegal slot machines or mechanical
 21 devices where money or things of value are won or lost upon chance.

22 (c) **California Penal Code § 330b:** Titled “Possession or keeping of slot
 23 machines or devices,” section 330b declares that “[i]t is unlawful for any person to manufacture,
 24 repair, own, store, possess, sell, rent, lease, let on shares, lend or give away, transport, or expose for
 25 sale or lease, or to offer to repair, sell, rent, lease, let on shares, lend or give away, or permit the
 26 operation, placement, maintenance, or keeping of, in any place, room, space, or building owned,
 27 leased, or occupied, managed, or controlled by that person, any slot machine or device, as defined
 28

in this section.” As alleged, Apple permits the operation, placement, maintenance, or keeping of a slot machine or device as defined by Penal Code § 330b(d).

(d) **California Penal Code § 330.1, *et seq.***: Titled “Manufacture, possession, or disposition of slot machines or device,” section 330.1(a) declares that “Every person who manufactures, owns, stores, keeps, possesses, sells, rents, leases, lets on shares, lends or gives away, transports, or exposes for sale or lease, or offers to sell, rent, lease, let on shares, lend or give away or who permits the operation of or permits to be placed, maintained, used, or kept in any room, space, or building owned, leased, or occupied by him or her or under his or her management or control, any slot machine or device as hereinafter defined, and every person who makes or permits to be made with any person any agreement with reference to any slot machine or device as hereinafter defined, pursuant to which agreement the user thereof, as a result of any element of hazard or chance, may become entitled to receive anything of value or additional chance or right to use that slot machine or device, or to receive any check, slug, token, or memorandum, whether of value or otherwise, entitling the holder to receive anything of value, is guilty of a misdemeanor.” Apple violates section 330.1 because as alleged, Apple possesses or permits illegal slot machines or devices where things of value are won as a result of chance “irrespective of whether it may, apart from any element of hazard or chance, also sell, deliver, or present some...entertainment, or other thing of value” (Cal Penal Code § 330.1(f)).

(e) **California Penal Code § 337j(a)(1)**: By “operat[ing], carry[ing] on, conduct[ing], maintain[ing], or expos[ing] for play” unlicensed gambling in this state, Apple violates Penal Code § 337j(a)(1).

(f) **California Penal Code § 337j(a)(2)**: By “receiv[ing], directly or indirectly, any compensation or reward or any percentage or share of the revenue, for keeping, running, or carrying on any controlled game,” Apple violates Penal Code § 337j(a)(2).

(g) **California Penal Code § 337j(a)(3)**: Through the “manufacture, distribut[ion], or repair [of] any gambling equipment within the boundaries of this state” or “receiv[ing], directly or indirectly, any compensation or reward for the manufacture, distribution,

1 or repair of any gambling equipment within the boundaries of this state” Apple violates Penal Code
2 § 337j(a)(3).

3 (h) **The Illegal Gambling Business Act of 1970 (18 U.S.C. § 1955) (the**
4 **“IGBA”)**: The IGBA declares it a crime to “conduct, finance, manage, supervise, direct, or own all
5 of part” of an illegal gambling business. Apple violates the IGBA because its business involves five
6 or more persons, has been in continuous operation for more than thirty days, and violates
7 California’s gambling laws as alleged herein. By managing, directing, or controlling all or part of
8 the conduct alleged herein with respect to the Apple App Store, virtual currency and loot boxes,
9 Apple violates 18 U.S.C. § 1955.

10 (i) **The Unlawful Internet Gambling Enforcement Act of 2006 (31 U.S.C.**
11 **§§ 5361-5367) (the “UIGEA”)**: The UIGEA makes it illegal for a “person engaged in the business
12 of betting or wagering” to knowingly accept payments “in connection with the participation of
13 another person in unlawful Internet gambling.” 31 U.S.C. § 5633. “Unlawful Internet gambling” is
14 placing, receiving or transmitting a bet or wager through, at least in part, the Internet where such bet
15 or wager “is unlawful under any applicable Federal or State law in the State or Tribal lands in which
16 the bet or wager is initiated, received, or otherwise made.” 15 U.S.C. § 5362(10)(a). By accepting
17 payment in connection with unlawful loot box gambling, Apple has violated the UIGEA.

18 (j) **Consumers Legal Remedies Act, California Civil Code § 1770(a)(14)**: As
19 alleged in Count IV below, Apple’s conduct violates section 1770(a)(14) of the CLRA. Therefore,
20 this constitutes a violation of the UCL’s unlawful prong.

21 195. Plaintiffs reserve the right to allege other violations of law, which constitute other
22 unlawful business acts or practices. Such conduct is ongoing and continues to this date.

23 196. Apple’s violations of the UCL continue to this day. Unless restrained and enjoined,
24 Apple will continue to engage in the unfair conduct described herein.

25 197. Defendant’s conduct caused and continues to cause substantial injury to Plaintiffs
26 and the other Class members. As described herein, Apple promotes, facilitates, and profits off the
27 purchases of loot boxes; indeed, Apple ensures its position as the casino pit boss and takes a rake
28 from each wager. But for Apple’s unlawful and unfair conduct, Plaintiffs and Class members would

1 not and could not have entered into the transactions to purchase loot box plays. Plaintiffs have
 2 suffered injury in fact and have lost money and property as a result of Defendant's unfair conduct.

3 198. Accordingly, Plaintiffs, individually and on behalf of all others similarly situated,
 4 and on behalf of the general public, seek restitution from Defendant of all money obtained from
 5 Plaintiffs and the other members of the Class collected as a result of Defendant's unfair competition.

6 **SECOND CAUSE OF ACTION**

7 **Violation of the "Unfair Prong" of California's Unfair Competition Law ("UCL")** 8 **(Cal. Bus. & Prof. Code §§ 17200, *et seq.*)**

9 199. Plaintiffs reallege and incorporate by reference the allegations set forth in each of the
 10 preceding paragraphs of this Complaint.

11 200. Plaintiffs and members of the Class may properly allege violations of the UCL.
 12 Apple's Media Services Terms and Conditions provide that "this Agreement and the relationship
 13 between you and Apple shall be governed by the laws of the State of California, excluding its
 14 conflicts of law provisions. You and Apple agree to submit to the personal and exclusive jurisdiction
 15 of the courts located within the county of Santa Clara, California, to resolve any dispute or claim
 16 arising from this Agreement."

17 201. Plaintiffs and Defendant are "persons" within the meaning of the UCL. Cal. Bus. &
 18 Prof. Code § 17201.

19 202. The UCL defines unfair competition to include any "unlawful, unfair or fraudulent
 20 business act or practice." Cal. Bus. Prof. Code § 17200.

21 203. As a result of engaging in the conduct alleged in this Complaint, Apple has violated
 22 the UCL's proscription against "unfair" business practices.

23 204. Apple's unfair conduct alleged in this Complaint is illegal, immoral and
 24 unscrupulous. Loot boxes develop compulsive and addictive behaviors as with gambling. They are
 25 in essence slot machines or, in the alternative, from a psychological standpoint, are similar to slot
 26 machines, with all of the same sophisticated gambling-like structural hooks, elements, and cognitive
 27 traps that lead to addiction and the associated psychological and financial harms. Scientists have
 28 concluded that loot boxes are linked to problem gambling by an order of magnitude larger than risk

1 factors such as alcohol dependence. However, because Apple has prioritized profit over ethics,
2 Apple makes loot boxes available to purchase by children and families at all hours, in any place,
3 and without any spending limitation whatsoever.

4 205. Apple's unfair conduct also violates legislatively declared policies articulated in,
5 inter alia, California's Gambling Control Act (Cal. Bus. & Prof. Code §§ 19800, *et seq.*), California
6 Penal Code §§ 330, *et seq.*, the Illegal Gambling Business Act (18 U.S.C. § 1955), and the Unlawful
7 Internet Gambling Enforcement Act of 2006 (31 U.S.C. §§ 5361-5367) by conducting illegal and
8 unlicensed gambling business including at places not suitable for gambling activities, permitting or
9 possessing loot boxes which are illegal slot machines or gambling devices, knowingly accepting
10 payments in connection with unlawful gambling, and promoting predatory gambling as
11 entertainment for children and families.

12 206. California's Legislature found and declared that "Gambling can become addictive
13 and is not an activity to be promoted or legitimized as entertainment for children and families." Cal.
14 Bus. & Prof. Code § 19801(c). In violation of this public policy, Apple's conduct as described in
15 this Complaint promotes, facilitates, legitimizes, and profits off addictive gambling activities
16 masqueraded as entertaining video games that are marketed, sold and made available to children
17 and families.

18 207. California's Legislature also found and declared that "Unregulated gambling
19 enterprises are inimical to the public health, safety, welfare, and good order. Accordingly, no person
20 in this state has a right to operate a gambling enterprise except as may be expressly permitted by the
21 laws of this state and by the ordinances of local governmental bodies." Cal. Bus. & Prof. Code
22 § 19801(d). In violation of this public policy, Defendant operates unregulated gambling enterprises
23 that are inimical to the public health, safety, welfare, and good order. Defendant has not been
24 permitted by the laws of this State and by ordinances of local governmental bodies to engage and
25 operate the gambling enterprise described herein.

26 208. California's Legislature also found and declared that "no new gambling
27 establishment may be opened in a city, county, or city and county in which a gambling establishment
28 was not operating on and before January 1, 1984, except upon the affirmative vote of the electors of

1 that city, county, or city and county.” Cal. Bus. & Prof. Code § 19801(e). In violation of this
 2 Legislative finding and public policy, Defendant has opened a gambling establishment through its
 3 Apple App Store without first receiving the affirmative vote of the electors of any city or county in
 4 this State.

5 209. California’s Legislature also found and declared that “Public trust that permissible
 6 gambling will not endanger public health, safety, or welfare requires that comprehensive measures
 7 be enacted to ensure that gambling is free from criminal and corruptive elements, that it is conducted
 8 honestly and competitively, and that it is conducted in suitable locations.” Cal. Bus. & Prof. Code
 9 § 19801(g). In violation of this public policy, and undermining “public trust,” Apple has brought
 10 unregulated gambling into the homes and pockets of tens of millions of consumers, including
 11 children – 24/7 locations which are not “suitable” to protect the public from the from the dangers of
 12 gambling. California’s Legislature also found and declared that “All gambling operations, all
 13 persons having a significant involvement in gambling operations, all establishments where gambling
 14 is conducted, and all manufacturers, sellers, and distributors of gambling equipment must be
 15 licensed and regulated to protect the public health, safety, and general welfare of the residents of
 16 this state as an exercise of the police powers of the state.” Cal. Bus. & Prof. Code § 19801(g).
 17 “Gambling operations” as defined by California’s Gambling Control Act means “exposing for play
 18 one or more controlled games that are dealt, operated, carried on, conducted, or maintained for
 19 commercial gain.” Cal. Bus. & Prof. Code § 19805(p). In violation of this public policy, Apple
 20 exposes the loot boxes (which are “controlled games”) for play but is not licensed or regulated.

21 210. Apple’s unfair conduct also includes and arises from promoting, facilitating and
 22 profiting from conduct designed to create and exploit addictive tendencies in vulnerable minors and
 23 adults alike.

24 211. Apple has omitted important information and mislead parents of vulnerable minors
 25 and adolescents and others concerning the addictive, costly, and random chance nature of the loot
 26 box mechanism and its use in Defendant’s App Store games. According to psychologists, loot boxes
 27 are a “predatory monetization scheme”:
 28

Predatory monetization schemes in video games are purchasing systems that disguise or withhold the long-term cost of the activity until players are already financially and psychologically committed. Such schemes contribute to the increasing similarity of gaming and gambling and the potential for financial harm for those with Internet gaming disorder.¹⁰⁵

212. Apple also has engaged in unfair business practices under the “balancing test.” Apple’s conduct offends established public policies and is immoral, unethical, oppressive, unscrupulous, or substantially injurious to consumers. There is no utility to Apple’s unethical conduct, which creates a gateway to problem gambling, promotes and reinforces addictive behavior, and markets and sells gambling as entertainment to families, children, and other vulnerable populations. Meanwhile, the gravity of harm from Apple’s unfair conduct is substantial – creating and reinforcing addictive behavior to the financial, social, and psychological detriment of families, children and other vulnerable populations. Some of the impacts of problem gambling include mental health problems (depression, anxiety, stress, reduced self-worth, suicidal thoughts), cross-addiction (increase use of alcohol, drugs, cigarettes etc.), physical health problems (insomnia, headaches, back or neck pain, lung problems, stomach upset etc.), school or work problems (absenteeism, decreased productivity, stealing etc.), financial problems (loss of income, inability to pay bills, increased debt, bankruptcy etc.), legal problems (arrests/incarceration, inability to meet legal financial obligations such as child support etc.), self-care problems (poor eating habits / nutrition, unhealthy personal hygiene etc.), and social problems (arguments, strained relationships, failure to meet responsibilities, alienation, separation, divorce, physical or mental abuse etc.). Problem gambling behavior affects more than just the gambler: it can have negative consequences for the gambler’s family and loved ones, children, workplace, and community.

213. Apple has also engaged in “unfair” business practices under the “tethering” test. Apple’s unfair practices violate public policies that are tethered to specific constitutional, statutory, or regulatory provisions and thereby “violate the policy or spirit” of those provisions. *Cel-Tech Comms., Inc. v. Los Angeles Cellular Telephone Co.*, 20 Cal. 4th 163, 187 (1999). As alleged herein,

¹⁰⁵ King DL, Delfabbro PH. *Predatory monetization schemes in video games (e.g. ‘loot boxes’) and internet gaming disorder*. *Addiction*. 2018 Nov;113(11):1967-1969. doi: 10.1111/add.14286. Epub 2018 Jun 28. PMID: 29952052.

California’s Gambling Control Act (Cal. Bus. & Prof. Code §§ 19800, *et seq.*), California Penal Code §§ 330, *et seq.*, the Illegal Gambling Business Act (18 U.S.C. § 1955), and the Unlawful Internet Gambling Enforcement Act of 2006 (31 U.S.C. §§ 5361-5367) each declare that unlicensed or unregulated gambling or gambling activities are inimical to the public health, safety, welfare, and good order, and are not to be promoted or legitimized as entertainment for children or families. Indeed, because even watching gambling take place acts as a gambling gateway for youth, California’s Gambling Control Act provides that no person under 21 years of age is permitted to enter a gambling establishment. Cal. Bus. & Prof. Code § 19921. Apple’s unfair conduct violates these legislatively tethered public policies.

214. Apple also engaged in “unfair” business practices under the “FTC Act” test. As alleged, the injury to Plaintiffs and Class members is substantial, the injury is not outweighed by any countervailing benefits to consumers or competition, and particularly given the addictive, predatory, and surreptitious nature of the conduct at issue, the injury is such that it could not reasonably have been avoided.

215. There is no societal benefit from Apple’s conduct which includes promoting and facilitating addictive gambling as entertainment for children and families. There is only harm from Apple’s conduct. While Plaintiffs were harmed, Apple was unjustly enriched by its deceptive, predatory, and harmful conduct. As a result, Apple’s conduct is “unfair” because it offended established public policies. Further, Apple engaged in immoral, unethical, oppressive, and unscrupulous activities that are substantially injurious to consumers as the gravity of Apple’s conduct outweighs any alleged benefits attributable to such conduct.

216. There were reasonably available alternatives to further Apple’s legitimate business interests other than the conduct described herein.

217. Apple’s violations of the UCL continue to this day. Unless restrained and enjoined, Apple will continue to engage in the unfair conduct described herein.

218. Defendant’s conduct caused and continues to cause substantial injury to Plaintiffs and the other Class members. As described herein, Apple promotes, facilitates, and profits from the sale of loot boxes; indeed, Apple ensures its position as the casino pit boss and takes a rake from

each wager. But for Apple's unlawful and unfair conduct, Plaintiffs and Class members would not and could not have entered into the transactions to purchase loot box plays. Plaintiffs have suffered injury in fact and have lost money and property as a result of Defendant's unfair conduct.

219. Accordingly, Plaintiffs, individually and on behalf of all others similarly situated, and on behalf of the general public, seek restitution from Defendant of all money obtained from Plaintiffs and the other members of the Class collected as a result of Defendant's unfair competition.

THIRD CAUSE OF ACTION

Violation of the Consumers Legal Remedies Act (Cal. Civ. Code §§ 1750, *et seq.*)

220. Plaintiffs reallege and incorporate by reference the allegations set forth in each of the preceding paragraphs of this Complaint.

221. Plaintiffs and members of the Class may properly allege violations of the CLRA. Apple's Media Services Terms and Conditions provide that "this Agreement and the relationship between you and Apple shall be governed by the laws of the State of California, excluding its conflicts of law provisions. You and Apple agree to submit to the personal and exclusive jurisdiction of the courts located within the county of Santa Clara, California, to resolve any dispute or claim arising from this Agreement."

222. This claim for relief is brought pursuant to the CLRA. Plaintiffs and members of the Class are "consumers," as that term is defined by Civil Code § 1761(d), because they bought virtual currency, loot boxes and Apple App Store services for personal, family, or household purposes.

223. Plaintiffs and Class Members have engaged in a "transaction" with Apple, as that term is defined by Civil Code § 1761(e).

224. The conduct alleged in this Complaint constitutes unfair methods of competition and unfair and deceptive acts and practices for the purposes of the CLRA and were undertaken by Apple in transactions intended to result in, and which resulted in, the sale of goods or services to consumers; namely, the sale of virtual currency, loot boxes and Apple App Store services.

225. According to the Apple Media Services Terms and Conditions, the App Store platform is a "service" "through which you can buy, get, license, rent or subscribe to content, Apps

(as defined below), and other in-app services (collectively ‘Content’).” Plaintiffs and Class members transacted directly with Apple for the services that Apple’s App Store platform provides. Each time Plaintiffs and Class members made purchases of in-game content, they did so through Apple at the Apple App Store, and in so doing, also paid Apple for its App Store services being furnished in connection with the sale of virtual currency and loot boxes.

226. Further, according to Apple, the in-app content it sells through the App Store are “goods or services.” *See* September 15, 2020, Philip Schiller Declaration at ¶¶ 9, 32, 38, 40 (citing Guidelines § 3.1.1 (In-App Purchase) and Apple Developer Program License Agreement at Schedule 2, ¶ 3.4(a) and referring to these in-app sales for which it collects the 30% commission as involving “sales of digital goods and services”). According to Apple, these goods and services are either a “consumable” (“items of content that an end-user consumes or uses up within Your Application”) (“for example, virtual gems”) or a “non-consumable” (“any other content, functionality, services or subscriptions delivered through the use of the In-App Purchase API (e.g., a sword for a game)”). These so-called consumable or non-consumable items purchased from the App Store include the virtual currency and loot boxes, which are thus, according to Apple, “goods or services.”

227. As a result of Apple’s conduct, Plaintiffs and Class members purchased Apple’s App Store goods or services, including the content available through it, to open and play loot boxes, which are prohibited by law.

228. By engaging in the conduct described herein, Apple has violated subdivision (a)(14) of California Civil Code § 1770 by “Representing that a transaction confers or involves rights, remedies, or obligations that it does not have or involve, or that are prohibited by law.” Under this provision, omissions are actionable.

229. Defendant violated the CLRA by representing to or omitting from Plaintiffs and Class members that the transactions involving loot boxes confer or involve rights to potentially valuable prizes, when in fact these transactions constitute unlawful gambling transactions that are prohibited by law, foster compulsive and addictive behavior, are not suitable for children, teenagers and many adults, and are a predatory form of duplicitously profiting from others. These omissions

1 are material because a reasonable consumer would deem them important in determining how to act
2 in the transaction at issue and, if prohibited by law, should not have been permitted to purchase loot
3 box plays. Further, the omissions about loot boxes are misleading in light of other facts that Apple
4 did disclose.

5 230. Defendant's violations of the CLRA proximately caused injury in fact to Plaintiffs
6 and the Class.

7 231. Plaintiffs and the Class members transacted with Defendant on the belief that the
8 transaction was lawful. Indeed, a reasonable consumer believes in the lawfulness of his or her
9 transactions.

10 232. Pursuant to Cal. Civ. Code § 1782(d), Plaintiffs, individually and on behalf of the
11 other members of the Class, seek a Court order enjoining the above-described wrongful acts and
12 practices of Defendant and for restitution and disgorgement.

13 233. Pursuant to Cal. Civ. Code § 1782(a), Defendant was notified in writing by certified
14 mail of the particular violations of Section 1770 of the CLRA, which notification demanded that
15 Defendant rectify the problems associated with the actions detailed above and give notice to all
16 affected consumers of Defendant's intent to so act. A copy of the letter is attached as Exhibit A to
17 the Complaint filed June 12, 2020. *See* ECF No. 1-1.

18 234. Defendant has failed to rectify or agree to rectify the problems associated with the
19 actions detailed above or give notice to all affected consumers within 30 days of the date of written
20 notice pursuant to § 1782 of the Act. Therefore, Plaintiffs further seek claims for actual, punitive
21 and statutory damages, as appropriate.

22 235. Defendant's conduct is fraudulent, wanton, and malicious.

23 236. Pursuant to § 1780(d) of the Act, attached as Exhibit B to the Complaint filed on
24 June 12, 2020 (ECF No. 1-2) is the affidavit showing that this action has been commenced in the
25 proper forum.
26
27
28

FOURTH CAUSE OF ACTION

Unjust Enrichment

237. Plaintiffs reallege and incorporate by reference the allegations set forth in each of the preceding paragraphs of this Complaint.

238. Plaintiffs and Class members bring this claim for unjust enrichment under California law. Apple's Media Services Terms and Conditions provide that "this Agreement and the relationship between you and Apple shall be governed by the laws of the State of California, excluding its conflicts of law provisions. You and Apple agree to submit to the personal and exclusive jurisdiction of the courts located within the county of Santa Clara, California, to resolve any dispute or claim arising from this Agreement."

239. By its wrongful acts and omissions, Apple was unjustly enriched at the expense of and to the detriment of Plaintiffs and the Class. Apple was unjustly enriched as a result of the compensation it received from facilitating, marketing, promoting and selling the unlawful and unfair loot boxes to Plaintiffs and the Class and the virtual currency it reasonably and foreseeably knew was being purchased to wager on loot boxes.

240. Because of Apple's conduct, Apple's App Store has become a gateway to problem gambling behavior and its well-established, associated financial, social, and mental harms. Apple has received hundreds of millions of dollars off its conduct which promotes and legitimizes addictive gambling as a form of entertainment for children and families.

241. Plaintiffs and the Class seek restitution from Apple and seek an order of this Court disgorging all profits, benefits, and other compensation obtained by Apple from its wrongful conduct.

242. Plaintiffs and the Class have no adequate remedy at law.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs, on behalf of themselves and all others similarly situated, pray for relief in this Complaint as follows:

(a) For an order certifying the Class as requested herein;

(b) For restitution and disgorgement of the revenues wrongfully retained as a result of Apple's wrongful conduct;

(c) For declaratory and injunctive relief as permitted by law or equity;

(d) For an award of attorney fees, where applicable;

(e) For an award of costs; and

(f) For any and all other relief the Court deems just and appropriate.

DEMAND FOR JURY TRIAL

Based on the foregoing, Plaintiffs, on behalf of themselves, and all others similarly situated, hereby demand a jury trial for all claims so triable.

Respectfully submitted,

Dated: April 8, 2021

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CERTIFICATE OF SERVICE

I hereby certify that on April 8, 2021, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the e-mail addresses denoted on the Electronic Mail Notice List, and I hereby certify that I have mailed the foregoing document or paper via the United States Postal Service to the non-CM/ECF participants indicated on the Electronic Mail Notice List.

I certify under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on April 8, 2021.

s/ Timothy G. Blood

TIMOTHY G. BLOOD