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PULLTAB GAMING

Abstract

A pulltab game includes a set of pulltab cards, wherein each winning card within the set comprises a prize-verification code. In some examples, the prize-verification code is encoded by a scannable code printed underneath one of the perforated tabs of the winning card. A prize-verification device is configured to scan the scannable code to verify a prize-verification code for the winning card. The prize-verification device can include a kiosk machine, a point-of-sale (POS) terminal, and/or a handheld mobile optical scanner.

Related U.S. Application Data

Publication Classification

Background/Summary

PRIORITY CLAIM [0001] This U.S. non-provisional utility patent application claims priority to: [0002] U.S. Provisional Patent Application No. 63/554,909, filed on Feb. 16, 2024, and entitled "PULLTAB GAMING"; [0003] U.S. Non-Provisional patent application Ser. No. 18/605,766, filed on Mar. 14, 2024, and entitled "PULLTAB GAMING"; and [0004] U.S. Design patent application Ser. No. 29/934,702, filed on Mar. 27, 2024, and entitled "PULLTAB CARDS." [0005] The entire contents of each of these applications are hereby incorporated by reference.

FIELD OF TECHNOLOGY
[0006] The present disclosure generally relates to card-based games and lottery-type games, including collectible trading cards and pulltab games.
BACKGROUND
[0007] "Pulltabs" (or "pull-tabs") is an incredibly popular lottery-type game played in bars, pubs, breweries, and restaurants throughout the world. Known also by the names "pop-opens," "break-opens," and "pickle cards," pulltabs involves a set of small cardboard cards (or "tickets") available for purchase by customers of the hosting establishment. Often, a ticket booth staffed by a designated vendor manages sales of the cards, however, bartenders or other employees of the establishment can run the game as well. Typical pulltab cards include two or more cardboard layers coupled together-a bottom layer, featuring one or more randomized gaming entries; and a perforated top layer adhered overtop of the bottom layer to initially conceal the gaming entries. After purchase, the player can rip open a set of perforated strips (or "tabs") on the top layer of the card in order to reveal the gaming entry concealed underneath. Upon revealing a "winning" gaming entry, the player can return the opened card to the vendor in exchange for a cash prize.
SUMMARY OF THE INVENTION
[0008] Disclosed herein are various example systems, devices, and methods for automating certain aspects of a pulltab game, as well as a set of associated ornamental designs of various components.
[0009] In some examples, a pulltab-game system includes: a vending machine configured to retain and dispense a set of pulltab cards of a pulltab game; and a prize-verification device configured to: scan a prize-verification code displayed on a pulltab card from the set of pulltab cards; and identify the pulltab card as a winning card.
[0010] In some examples, a prize-verification device of a pulltab-game system includes: means for receiving data comprising a set of game data corresponding to a pulltab game; a digital memory configured to store the set of game data; a scanner configured to scan a scannable code printed under a perforated tab on a winning card of the pulltab game; and processing circuitry configured to: determine a prize-verification code encoded by the scannable code printed on the winning card; identify a winning entry within the set of game data that includes the prize-verification code; determine, from the winning entry, a prize denomination corresponding to the prize-verification code; and output an indication of the prize denomination for display, or cause the prize-verification device to output a cash prize corresponding to the prize denomination.
[0011] In some examples, a non-tangible, computer-readable medium encodes program instructions that, when executed by a processor, cause the processor to: determine, based on a scanned code

printed on a pulltab card, a prize-verification code encoded by the scanned code; verify, based on the prize-verification code, that the pulltab card is a winning card; determine, based on the prize-verification code, that the winning card has not already been redeemed; and responsive to determining that the winning card has not already been redeemed, output an indication of a cash prize associated with the winning card.

[0012] The aspects, features, advantages, benefits, and objects of the invention will become clear to those skilled in the art by reference to the following description, claims and drawings.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. **1** is a conceptual diagram of an automated pulltab-game system, in accordance with techniques of this disclosure.

[0014] FIG. **2** is a conceptual diagram of a portion of the pulltab-game system of FIG. **1**, showing some example components thereof.

[0015] FIG. **3** is a perspective view of an example pulltab-card vending machine of the system of FIG. **2**.

[0016] FIG. **4**A is a front view of an example collectible pulltab card from the system of FIGS. **1** and **2**.

[0017] FIG. **4**B is a back view or rear view of the collectible pulltab card of FIG. **4**A, having a set of perforated tabs in a "sealed" or "closed" configuration.

[0018] FIG. **4**C is a back view of the pulltab card of FIGS. **4**A and **4**B, with its perforated tabs in an "unsealed" or "open" configuration.

[0019] FIG. **5**A is a front view of a first example prize-verification device for the system of FIG. **2**.

[0020] FIG. **5**B is a perspective view of a second example prize-verification device for the system of FIG. **2**.

[0021] FIG. **5**C is a front view of a third example prize-verification device for the system of FIG. **2**.

[0022] FIG. **6** is a spreadsheet depicting an example of a set of pulltab-game data for the system of FIG. **2**.

[0023] FIG. **7** is a conceptual block diagram of an example central computing system of the pulltab-game system of FIG. **2**.

[0024] FIG. **8**A is a screenshot of an example graphical user interface (GUI) of a website run by the central computing system of FIGS. **2** and **7**.

[0025] FIG. **8**B is a screenshot of an example GUI of a customized Customer-Relationship Management ("CRM") software application run by the central computer of FIGS. **2** and **7**.

[0026] FIGS. **9**A-**9**L are screenshots of example GUIs of the CRM application of FIG. **8**B.

[0027] FIG. **10** is a flowchart illustrating a method of running an automatic pulltab game.

DETAILED DESCRIPTION

[0028] In general, the present disclosure is directed to systems, devices, and techniques for automating one or more aspects of a pulltab game and, by extension, managing an expanded network of pulltab games all running concurrently, thereby enabling the games to be played significantly faster, cheaper, more accurately, more securely, and efficiently scaled to a wider audience. For instance, FIG. **1** is a conceptual diagram of an example automatic pulltab-game system **100**, in accordance with the techniques of this disclosure. As illustrated in FIG. **1**, system **100** includes a central manager **102** and a plurality of game-hosting establishments **104**A . . . **104**N, such as bars, pubs, restaurants, etc.

[0029] Upon request, central manager **102** provides sets of specialized, collectible pulltab cards **106** such that the respective pulltab games may be hosted within the various contracting establishments **104**. As described herein, central manager **102** manages one or more additional

aspects of the pulltab games, such that, from the perspective of the hosting establishments **104**, the games are at least partially (and in some examples, fully) automated. Of particular note among the numerous advantages of described below is the total elimination of cheating. That is, unlike with all other known pulltab-game systems, a player is entirely prevented from attempting to redeem a winning pulltab card at more than one hosting establishment **106** in order to unfairly collect the same prize multiple times.

[0030] FIG. **2** is a conceptual diagram of a portion of system **100** of FIG. **1**, specifically, illustrating an example relationship between central manager **102** and a single hosting establishment **204** (e.g., any one of establishments **104** of FIG. **1**). As illustrated in FIG. **2**, central manager **102** includes a computer network **208** (or simply, "computer **208**") configured to execute a uniquely tailored Customer-Relationship Management ("CRM") software application **210**. System **100** further includes a card-vending machine **212** and a prize-verification device **214** located within hosting establishment **204** (i.e., within each hosting establishment **104**A . . . **104**N of FIG. **1**).

[0031] During operation of system **100**, in response to the appropriate user input, central computing device **208** is configured to run CRM **210** in order to generate a new pulltab game, which includes a set of graphical card images **216** and a corresponding set of game data **218**. As elaborated further below, graphical card images **216** include a number of unique features corresponding to game data **218** in order to facilitate at-least-partial automation of the pulltab game.

[0032] Central computer **208** is configured to transmit the graphical card images **216** to a pulltab-card printer **220** via any suitable data-communication conduit, whether wired (e.g., via a local-area network (LAN)) or wireless (e.g., email transmitted via Wi-Fi). Card printer **220** can range from a suitable single-printer device (e.g., a standard inkjet/toner printer), up to a designated mass-printing facility, capable of generating a complete set of physical pulltab cards **106** based on the graphical card images **216**. In accordance with certain aspects of this disclosure, and as detailed further below, pulltab cards **106** may be constructed to provide dual gaming functionality-a front side of each card corresponds to a collectible trading-card game, and a back side of each card corresponds to the pulltab game.

[0033] The physical pulltab cards **106** are delivered to the game-hosting establishment **204** and securely deposited within a pulltab-card vending machine **212**. Meanwhile, a prize-verification device **214** is situated locally to the vending machine **212**, e.g., either at the same hosting establishment **204**, or within a substantially short (e.g., "walking") distance away. Although FIG. **2** depicts vending machine **212** and prize-verification device **214** as two physically distinct components, in other examples of system **100**, vending machine **212** and prize-verification device **214** are integrated within a common housing to form a single device, or equivalently, a single device is configured with the functionality ascribed to both vending machine **212** and prize-verification device **214**.

[0034] Prize-verification device **214** is configured to receive the set of game data **218** associated with the pulltab cards **106** of a particular game. As detailed further below with respect to FIG. **6**, game data **218** can include, for example: a first unique identifier (e.g., a serial number) associated with a particular pulltab game to which all of pulltab cards **106** belong; a second unique identifier for each winning pulltab card from a particular game; and a prize indicator for each winning card. In some cases, game data **218** can be manually uploaded to prize-verification device **214**, such as by inserting a USB flash drive, SD card, or other suitable removable digital storage volume, into the device **214**, and copying the contents into a local memory of the device **214**. Additionally or alternatively, game data **218** can be remotely transmitted to prize-verification device **214** from central computer network **208**, such as via a wired and/or wireless network connection. In other examples, game data **218** is not directly transmitted to a local memory within prize-verification device **214**, but rather, prize-verification device **214** includes Internet-access capabilities, and is configured to interface with CRM software application **210** via the Internet.

[0035] With the physical cards **106** secured within card-vending machine **212**, and with game data **218** uploaded locally to prize-verification device **214** (where applicable), the pulltab game can begin. Players **222**, such as customers or patrons of the hosting establishment **204**, can take turns engaging with card-vending machine **212**, a detailed example of which is shown in FIG. **3**.

[0036] FIG. **3** is a front-perspective view of an example implementation of the pulltab-card vending machine **212** of FIG. **2**. As shown in FIG. **3**, vending machine **212** includes: a lockable card safe **324**, a cash-deposit slot **326**, a plurality of selectable buttons **328**A-**328**E, and a pulltab-card-output slot **330**.

[0037] In the illustrative, non-limiting example depicted in FIG. **3**, lockable card safe **324** contains four columns or stacks **332**A-**332**D of pulltab cards, as viewed through transparent window **334**. Each column or stack **332** corresponds to one of four different pulltab games running simultaneously. For instance, stack **332**A includes pulltab cards available for $1 each, as indicated by button **328**A. Stack **332**B includes pulltab cards available for $2 each, as indicated by button **328**B. Stack **332**C includes pulltab cards available for $5 each, as indicated by button **328**C. And stack **332**D includes pulltab cards available for $10 each, as indicated by button **328**D. In other examples, lockable card safe **324** can retain pulltab cards from more, fewer, or different games. For instance, in a different example, columns **332**A and **332**B could include pulltab cards from the same game, in which case buttons **328**A and **328**B would display the same dollar amount for purchase.

[0038] During use, a player **222** (FIG. **2**) initiates a transaction by depositing cash into the cash-deposit slot **326**. Upon receiving cash through cash-deposit slot **326**, one or more of buttons **328**A-**328**D may be configured to illuminate, indicating which stacks **332** of pulltab cards the player **222** can select from. For instance, if the player **222** deposited $5, then buttons **328**A, **328**B, and **328**C would illuminate, but not button **328**D, as the player **222** did not deposit enough cash to purchase a $10 pulltab card from stack **332**D. In that case, the player **222** can select from any combination of buttons **328**A-**328**C to purchase a number of pulltab cards collectively adding up to $5. As a few examples, the player **222** could select button **328**A five times; or the player could select button **328**A three times and button **328**B one time; or the player **222** could select button **328**C one time.

[0039] Vending machine **212** also includes an "ALL" button **328**E. By selecting this button, the player **222** indicates to vending machine **212** that they would like to select "all" of their cards from a common stack **332**. For instance, rather than pressing button **328**A five times in a row, the player **222** could press the "ALL" button **328**E, and then press button **328**A, and vending machine **212** will automatically begin grabbing pulltab cards drawn from stack **332**A, and dispensing each pulltab card **336** outward through card-output slot **330**, until either (1) the player's cash deposit is spent, or (2) the player **222** aborts the dispensing by pressing a different button **328**. Other examples of vending machine **212** can include additional and/or different types of user-input devices other than pressable buttons **328**, such as a digital touchscreen, a joystick, a scroll wheel, or any other suitable mechanism for indicating the player's card-stack selection to vending machine **212**.

[0040] FIGS. **4**A-**4**C depict an illustrative, non-limiting example of a pulltab card **336** (FIG. **3**) that may be dispensed from vending machine **212**. Pulltab card **336** of FIGS. **4**A-**4**C is one example of such a card belonging to a larger set of pulltab cards **106** (FIG. **1**) associated with a common pulltab game.

[0041] As referenced above, pulltab cards of the present disclosure can provide dual gaming functionality. For instance, as shown in FIG. **4**A, a front side (or "first" side) **438**A of pulltab card **336** corresponds to a collectible trading-card game, e.g., featuring graphical imagery associated with an athlete, an anime character, or any other suitable object that belongs to a larger collection of similar (but non-identical) objects.

[0042] Concurrently, as shown in FIGS. **4**B and **4**C, a back side (or "second" side) **438**B of pulltab card **336** corresponds to a pulltab game, in accordance with system **100** described throughout this

disclosure. Accordingly, in some examples of the present disclosure, each pulltab card **336** is formed from two layers of material (e.g., cardboard, or the functional equivalent). During manufacture of each card **336**, printer **220** (FIG. **2**) prints graphical imagery onto both surfaces **440**A, **440**B of a first cardboard layer, and onto just one surface **440**C of the second cardboard layer, and then the two cardboard layers are adhesively assembled into the card **336**. For instance, as depicted in FIG. **4**A, a first printed surface **440**A of a first cardboard layer constitutes the "collectible" front side **438**A of the assembled pulltab card **336**. As depicted in FIGS. **4**B and **4**C, the second surface **440**B of the first cardboard layer, and the first surface **440**C of the second cardboard layer, collectively form the "pulltab-game" back side **438**B of the assembled card **336**.

[0043] As shown in FIGS. **4**B and **4**C, the outer surface **440**C of the second cardboard layer of pulltab card **336** defines one or more perforated tabs **442**A-**442**E. In this non-limiting example, back-outer surface **440**C defines five vertically aligned perforated tabs **442**; other examples of pulltab card **336** can include more than five tabs or fewer than five tabs **442**, as desired. As detailed further below, the back-outer surface **440**C further includes an outer scannable code **444**, such as a quick-response ("QR") code, a barcode, or the like.

[0044] The second cardboard layer is adhered onto the back surface **440**B of the first cardboard layer, such that back-inner surface **440**B of the first cardboard layer and the back-outer surface **440**C of the second cardboard layer face the same direction, i.e., opposite from the direction of the front surface **440**A of the first cardboard layer.

[0045] In the example shown in FIG. **4**C, the player **222** (FIG. **2**) has ripped open all five perforated tabs **442**A-**442**E of the second cardboard layer, thereby revealing certain portions of the printed back surface **440**B of the first cardboard layer thereunder. Specifically, the printed back surface **440**B of the first cardboard layer includes one or more pulltab-game entries **446**A-**446**D, with each game entry **446** strategically positioned underneath a respective perforated tab **442**A-**442**D of the second cardboard layer.

[0046] For instance, upon tearing open the first perforated tab **442**A, the player **222** discovers that the game entry **446**A concealed underneath the tab **442**A includes a particular sequence of icons **448** (depicted here as three consecutive football-shaped icons **448**), which, under the rules of the corresponding pulltab game, constitutes a winning game entry **446**—thus, pulltab card **336** is a winning card.

[0047] At the time each pulltab game is originally generated, central computer **208** (FIG. **2**) automatically identifies all of the winning game entries for that game, and graphically marks the winning game entries with a horizontal line **450** (which printer **220** prints onto the back surface **440**B of the first cardboard layer), in order to simplify and expedite the game for player **222**.

[0048] Additionally, upon generating a winning game entry **446**A, computing device **208** determines a cash prize associated with the winning sequence of icons **448**, and generates a numerical cash-prize indication **452** overtop of the winning game entry **446**A (or, in other examples, overtop of a different (non-winning) game entry **446**B-**446**D on the same card **336**).

[0049] Even further, in accordance with the techniques of this disclosure, computing device **208**, upon generating a winning game entry **446**A, is configured to designate the winning card **336** with a unique identifier, thereby enabling automation of a subsequent portion of the game in which player **222** collects their cash prize. In FIG. **4**C, this unique identifier is printed onto the back surface **440**B of the first cardboard layer and strategically concealed beneath the fifth perforated tab **442**E, and includes both a numeric (or alphanumeric) prize-verification code **454**, and an (inner) machine-scannable code **456**, such as a barcode, QR code, etc., that digitally encodes the prize-verification code **454**.

[0050] In the example shown, prize-verification code **454** and scannable code **456** occupy the space on the printed back surface **440**B of the first cardboard layer that would otherwise be occupied by a fifth game entry. But since pulltab card **336** is already a winning card, game entries other than the winning game entry **446**A are not necessary to be included on the same card.

[0051] Prize-verification code **454** is shown in FIG. **4**C as an eleven-digit numeric sequence, although other sequences are also contemplated, such as a six-character or seven-character alphanumeric sequence (as just two examples). The prize-verification code **454** is mapped, within game data **218** (FIG. **2**), to a unique "game" serial number **458** (FIG. **4**A) indicating which pulltab game the card **336** belongs to, when game data **218** is originally generated by central computer **208**.

[0052] After tearing open the fifth perforated tab **442**E to reveal inner scannable code **456**, the winning player **222** can then bring the winning card **336** to a local prize-verification device **214** to verify the winning card **336** and claim their prize. FIGS. **5**A-**5**C depict three example implementations **514**A-**514**C, respectively, of prize-verification device **214**.

[0053] For instance, FIG. **5**A is a front view of a first example prize-verification device **514**A in the form of a "kiosk" machine. As shown in FIG. **5**A, prize-verification kiosk **514**A includes an integrated code scanner **562**A (i.e., an optical scanner, or the functional equivalent). Upon detecting a valid scannable code **456** (FIG. **4**C) placed in front of the scanner **562**A, prize-verification kiosk **514**A is configured to extract the prize-verification code **454** encoded by the scannable code **456**, and either (1) compare the prize-verification code **454** to game data **218** stored in the internal digital memory of prize kiosk **514**A, or (2) transmit the prize-verification code **454** via the Internet to central computer network **208** (FIG. **2**), whereby central computer network **208** compares the code **454** to game data **218** and replies with a "valid" or "invalid" indication. Additionally or alternatively, prize-verification kiosk **514**A can include a user interface **564**A, such as a digital touchscreen displaying a graphical user interface (GUI), that enables player **222** to manually enter the prize-verification code **454** from the winning card **336**. If prize-verification kiosk **514**A identifies a match between the prize-verification code **454** and game data **218**, it will automatically dispense a corresponding amount of prize money from cash dispenser **566**A. In some examples, prize-verification kiosk **514**A can include dual (or even higher-order) functionality. For instance, prize-verification kiosk **514**A can be fully functional as an automated teller machine (ATM), and/or a redemption kiosk for other types of games in addition to pulltabs.

[0054] FIG. **5**B is a front perspective view of a second example prize-verification device **514**B in the form of a "point-of-sale" ("POS") terminal. As shown in FIG. **5**B, POS **514**B includes an integrated and/or handheld code scanner **562**B (i.e., an optical scanner, or the functional equivalent). Upon detecting a valid scannable code **456** (FIG. **4**C) placed in front of the scanner **562**B, POS **514**B is configured to extract the prize-verification code **454** encoded by the scannable code **456**, and either (1) compare the prize-verification code **454** to game data **218** stored in the internal digital memory of POS **514**B, or (2) transmit the prize-verification code **454** via the Internet to central computer network **208** (FIG. **2**), whereby central computer network **208** compares the code **454** to game data **218** and replies with a "valid" or "invalid" indication. Additionally or alternatively, POS **514**B can include a user interface **564**B, such as a digital touchscreen displaying a graphical user interface (GUI), that enables player **222** to manually enter the prize-verification code **454** from the winning card **336**. In some examples, when POS **514**B identifies a match between the prize-verification code **454** and game data **218**, POS **514**B can indicate on display **564**B an amount of prize money for an authorized game host to dispense from cash register **566**B. In other examples, POS **514**B may print, from ticket printer **568**, a paper ticket with a scannable code indicating an amount of prize money, in which case the player **222** can then use a separate machine (such as prize-verification kiosk **514**A of FIG. **5**A) to scan the ticket and automatically dispense the corresponding cash prize.

[0055] FIG. **5**C is a front perspective view of a third example prize-verification device **514**C in the form of a mobile (or "handheld") scanner device. Two illustrative, non-limiting examples of such a device are the "Sonim Scan XP8" and the "Sonim Scan XP10" manufactured by Sonim Technologies, Inc., of San Diego, California.

[0056] As shown in FIG. **5**C, mobile scanner **514**C includes an integrated code scanner **562**C (i.e., an optical scanner, or the functional equivalent). Upon detecting a valid scannable code **456** (FIG.

4C) placed in front of the scanner **562**C, mobile scanner **514**C is configured to extract the prize-verification code **454** encoded by the scannable code **456**, and either (1) compare the prize-verification code **454** to game data **218** stored in the internal digital memory of mobile scanner **514**C, or (2) transmit the prize-verification code **454** via the Internet to central computer network **208** (FIG. **2**), whereby central computer network **208** compares the code **454** to game data **218** and replies with a "valid" or "invalid" indication. Additionally or alternatively, mobile scanner **514**C can include a user interface **564**C, such as a digital touchscreen displaying a graphical user interface (GUI), that enables an authorized game host to manually enter the prize-verification code **454** from the winning card **336**. In some examples, when mobile scanner **514**C identifies a match between the prize-verification code **454** and game data **218**, mobile scanner **514**C can indicate on display **564**C an amount of prize money for the authorized game host to provide to the player **222**, such as from cash register **566**B of FIG. **5B**. In other examples, mobile scanner **514**C may print, from an integrated ticket printer (not shown) or from a physically distinct ticket printer **568** (FIG. **5B**), a paper ticket with a scannable code indicating an amount of prize money, in which case the player **222** can then use a separate machine (such as prize-verification kiosk **514**A of FIG. **5A**) to scan the ticket and automatically dispense the corresponding cash prize.

[0057] FIG. **6** is a spreadsheet **670** illustrating an example set of game data **218** that might be generated by the appropriate software running on computing device **208** (FIG. **2**) and, in some examples (but not all examples) uploaded to local memory of prize-verification device **214**. In this example, game data **218** is formatted as a Comma-Separated Values ("CSV") file with four data parameters (e.g., columns) for each entry (e.g., row), wherein each entry represents a different winning pulltab card from the same pulltab game. Column A encodes the unique "game" serial number **458** (FIG. **4A**) assigned to each pulltab game. Column B encodes a dollar amount **452** (FIG. **4C**) of the cash prize for the pulltab card corresponding to that row. For instance, in the value "0001D.pdf," the number "0001" represents a prize amount of $1, and the letter "D" indicates which game entry **446** (e.g., the fourth game entry **446**D concealed underneath the fourth perforated tab **442**D) was the winning game entry on the card **336**. Column C encodes the prize-verification code **454** for a winning pulltab card **336**, which is also encoded by the inner scannable code **456** (FIG. **4C**). And Column D encodes an artwork template identifier (ID) **460** (FIG. **4A**), which is used by printer **220** (FIG. **2**) when printing physical cards **106**.

[0058] In accordance with techniques of this disclosure, when a winning player **222** collects a cash prize by scanning the inner scannable code **456** on the code scanner **562** of an appropriate prize-verification device **214/514**, the prize-verification device **214/514** can be configured to automatically store an indication that the associated prize-verification code **454** has been "claimed," i.e., such that the same prize cannot be collected multiple times. Equivalently, in example in which the prize-verification device **214/514** interfaces with central computer **208** via the Internet to verify the code **454**, central computer **208** can be configured to automatically store an indication that the prize-verification code **454** has been claimed and cannot be subsequently claimed again in the future.

[0059] FIG. **7** is a conceptual block diagram of an example implementation of central computer **208** of FIG. **2**. Although depicted in FIG. **7** as a single functional unit, in practice, central computer **208** can be or can include one or more communicatively-connected computing devices, e.g., each having a unique processor (or "processing circuitry") **772** and/or a digital memory **774**. For instance, central computer **208** can be or can include a cloud-based server and/or one or more "local" devices. Memory **774** encodes one or more software applications ("apps" or "modules") for generating and managing pulltab games for a network of customers or clients, such as hosting establishments **104**A-**104**N of FIG. **1**.

[0060] For instance, as shown in FIG. **7**, central computer **208** is configured to run or execute a pulltab-game generator **776**. When executed, game generator **776** is configured to automatically generate a new pulltab game that includes a set of game data **218** (e.g. a .csv file), and

corresponding digital, graphical pulltab-card images **216** (e.g., a .jpg, .bmp, .webp file etc.), each featuring randomized sets of game entries **446** (FIG. **4**C).

[0061] Central computer **208** is further configured to host (e.g., store in memory **662**) and run (e.g., execute) a public-facing website **778**, accessible via the Internet. Players **222** can access website **778** with, for instance, a personal computer, laptop, smartphone, smartwatch, or tablet, in order to learn more information about a pulltab game, or in some cases, to enroll in an additional bonus game.

[0062] As one example, a winning player **222** can use their smartphone to scan the outer scannable code **444** (FIG. **4**B) on the back side **438**B of their winning pulltab card **336**. The outer scannable code **444** will direct their smartphone's mobile browser to website **778**, where player **222** can enter a "second-chance" drawing to win an additional prize.

[0063] FIG. **8**A is a screenshot of an example graphical user interface (GUI) **886**A of public-facing website **778** of FIG. **7**, and FIG. **8**B is a screenshot of an example GUI **886**B of a corresponding page of a uniquely tailored Customer-Relationship-Management (CRM) software application **210** run by central computer **208** of FIGS. **2** and **7**. As shown in FIG. **8**A, GUI **886**A enables a winning player **222** to submit their name, contact info, and the prize-verification code **454** from their winning card **336** in order to be entered into a periodic, randomized "second-chance" drawing to win an additional prize. The drawing can occur weekly, monthly, semi-annually, or annually, as a few illustrative examples.

[0064] The public-facing website **778** can be configured to interface with CRM **210**. For instance, as shown in FIG. **8**B, CRM **210** is configured to receive, via website **778**, the second-chance drawing entry data from winning player **222**. Additionally, CRM **210** can retrieve and consult game data **218** in order to verify the winning player's prize-verification code **454** and confirm their entry into the next drawing. Equivalently, game generator **776** can automatically transmit game data **218** to CRM **210** every time it generates a new pulltab game. In some examples, CRM **210** is configured to run all drawing entries through a validation process by matching each player's entry (e.g., game serial number **458**, name of pulltab game, and prize-verification code **454**) with game data **218** stored in memory **774**. If CRM **210** validates a player's entry, the player's entry receives an positive-validation indicator within GUI **988**A, such as by displaying that player's entry in green.

[0065] In one non-limiting, illustrative example, CRM **210** can be configured to help run the drawing annually by randomly selecting among all the player entries submitted during the previous calendar year (i.e., January 1 through December 31). The winner of the drawing can be contacted directly using the player's entry data, and announced publicly on website **778**. Through CRM **210**, every drawing entry is assigned a drawing date to help differentiate between different promotions (e.g., subsequent years' drawings).

[0066] In some examples, CRM **210** can also use the player's drawing-entry data to keep track of the number of redeemed winning pulltab cards for each game, as they are purchased and opened over time. Such data can help inform pulltab-game inventory management, another function performed by CRM **210**. For instance, central game manager(s) **102** (FIG. **1**) can use CRM **210** to help decide whether to either increase or decrease the rate at which new pulltab games are generated, based on the rate at which winning cards **336** are purchased and redeemed.

[0067] FIGS. **9**A-**9**L are a series of screenshots **988**A-**988**L, respectively, showing an example process for how an authorized user (e.g., a hosting establishment **104/204**) with an appropriate prize-verification device **514** (e.g., POS **514**B of FIG. **5**B and/or mobile scanner **514**C of FIG. **5**C) can access CRM **210** (via website **778**) to redeem a winning pulltab card **336** on behalf of a player **222**. For instance, the authorized user (for instance a bar owner, bartender, or other authorized representative of a hosting establishment) can open a web browser on the prize-verification device **514** and use their personalized login credentials to access an instance of CRM **210**, an example of which is shown in FIG. **9**A. As shown in FIG. **9**B, the authorized user can navigate to "Winner

Reporting" and select "Redeem Ticket." Once the GUI **988**C of FIG. **9**C is displayed on electronic display **564**, the user can use the optical scanner **562** to scan the scannable code **456** on the winning pulltab card **336** (FIG. **9**D), and then select "Check" on the electronic display **564** to verify the corresponding prize-verification code **454**. In the case of multiple scannable codes, the user can scan all of the codes prior to selecting "Check" (FIG. **9**E) in order to verify the validity of all of the pulltab cards simultaneously (FIG. **9**F).

[0068] Once the validity of the pulltab cards has been checked, the user can select "Redeem" in order to redeem the winner(s) and pay out the corresponding cash prize(s) to the player(s) **222**, as shown in FIG. **9**G. As shown in FIG. **9**H, CRM **210** is configured to automatically generate a redemption record for each redeemed pulltab cards-that is, the corresponding prize-verification codes will be marked as "redeemed" within the records of CRM **210**. In this way, CRM **210** prevents unscrupulous players from attempting to redeem the same winning pulltab card more than once. As shown in FIG. **9**I, by selecting "View," the user can review additional details for all of the winning pulltab cards redeemed up to that point.

[0069] As shown in FIG. **9**J, CRM **210** enables the user (e.g., the hosting establishment **104/204**) to calculate an amount of profit generated through sales of the pulltab cards for a particular period. For instance, the user can navigate to "Deal Profit" and select "Add New." The user can then select a particular pulltab game for which to record profit. CRM **210** will automatically generate a corresponding profit record, which the user can then use to periodically record income generated from sales of the cards. That is, CRM **210** enables the user to determine the amount of profit, either by manually entering prize redemptions (i.e., cash payouts for winning pulltab cards) when the prize-redemption device **214/514** verifies the ticket using game data **218** stored in local memory, and/or by computing total prizes redeemed online through CRM **210** via the process shown in FIGS. **9**A-**9**H.

[0070] As shown in FIGS. **9**K and **9**L, the user can further use CRM **210** to determine the income/profit from pulltab-card sales for a particular period of time. For instance, the user can select "Add New Period" and then choose a redemption period, input the UPC of the game to display, and then manually enter the number of pulltab cards sold (CRM **210** will then automatically calculate the gross sales as the number of cards sold times the price per card). Upon clicking "Save," CRM **210** will calculate and display the profit for the selected time period. Through CRM **210**, the user is able to select and view as many profit-and-loss periods as desired— the system will continue aggregating total winning-card redemptions (YTD vs. selected period) and total card sales (YTD vs. selected period) until all of the pulltab cards for the selected game have been sold and/or all of the winning pulltab cards from that game have been redeemed.

[0071] FIG. **10** is a flowchart illustrating a method or process **1000** for automating one or more aspects of a pulltab game. Process **1000** is described from the perspective of prize-redemption kiosk **514**A of FIG. **5**A.

[0072] At Step **1002**, prize kiosk **514**A receives a set of game data **218** for a new pulltab game, either locally, e.g., from a removable digital storage inserted into the kiosk, or remotely, e.g., via the Internet from a central computer **208**. At Step **1004**, prize kiosk **514**A stores a copy of game data **218** in its local memory.

[0073] At Step **1006**, prize kiosk **514**A detects a scannable code **456**, such as a barcode or QR code, printed on a pulltab card **336** placed in front of its integrated optical scanner **562**A. Optical scanner **562**A scans the code **456**, and at Step **1008**, extracts the prize-verification code **454** encoded thereby. At Step **1010**, prize kiosk **514**A compares the prize-verification code **454** to the complete set of prize-verification codes included in game data **218** stored in local memory. At Step **1012**, prize kiosk **514**A identifies a matching number, and also verifies that prize-verification code **454** has not already been redeemed, thereby confirming that pulltab card **336** is a valid, winning card. In such cases, at Step **1014**, prize kiosk **514**A retrieves, from within game data **218**, a prize denomination corresponding to prize-verification code **454**, and at Step **1016**, automatically

dispenses a cash prize from prize dispenser **566**A, in an amount corresponding to the prize denomination.

[0074] Although the systems, devices, and methods of the invention have been described in connection with the field of trading cards, card-based games, and lottery-type gaming, it can readily be appreciated that the invention is not limited solely to such fields, and can be used in other fields.

[0075] For simplicity and clarity of illustration, the drawing figures illustrate the general manner of construction, and descriptions and details of well-known features and techniques may be omitted to avoid unnecessarily obscuring the present disclosure. Additionally, elements in the drawing figures are not necessarily drawn to scale. For example, the dimensions of some of the elements in the figures may be exaggerated relative to other elements to help improve understanding of embodiments of the present disclosure. The same reference numerals in different figures denote the same elements.

[0076] The terms "first," "second," "third," "fourth," and the like in the description and in the claims, if any, are used for distinguishing between similar elements and not necessarily for describing a particular sequential or chronological order. It is to be understood that the terms so used are interchangeable under appropriate circumstances such that the embodiments described herein are, for example, capable of operation in sequences other than those illustrated or otherwise described herein. Furthermore, the terms "include," and "have," and any variations thereof, are intended to cover a non-exclusive inclusion, such that a process, method, system, article, device, or apparatus that comprises a list of elements is not necessarily limited to those elements, but may include other elements not expressly listed or inherent to such process, method, system, article, device, or apparatus.

[0077] The terms "left," "right," "front," "back," "top," "bottom," "over," "under," and the like in the description and in the claims, if any, are used for descriptive purposes and not necessarily for describing permanent relative positions. It is to be understood that the terms so used are interchangeable under appropriate circumstances such that the embodiments of the apparatus, methods, and/or articles of manufacture described herein are, for example, capable of operation in other orientations than those illustrated or otherwise described herein.

[0078] Although the invention or elements thereof may by described in terms of vertical, horizontal, transverse (lateral), longitudinal, and the like, it should be understood that variations from the absolute vertical, horizontal, transverse, and longitudinal are also deemed to be within the scope of the invention.

[0079] The terms "couple," "coupled," "couples," "coupling," and the like should be broadly understood and refer to connecting two or more elements mechanically and/or otherwise. Two or more electrical elements may be electrically coupled together, but not be mechanically or otherwise coupled together. Coupling may be for any length of time, e.g., permanent or semi-permanent or only for an instant. "Electrical coupling" and the like should be broadly understood and include electrical coupling of all types. The absence of the word "removably," "removable," and the like near the word "coupled," and the like does not mean that the coupling, etc., in question is (or is not) removable.

[0080] As defined herein, "approximately" can, in some embodiments, mean within plus or minus ten percent of the stated value. In other embodiments, "approximately" can mean within plus or minus five percent of the stated value. In further embodiments, "approximately" can mean within plus or minus three percent of the stated value. In yet other embodiments, "approximately" can mean within plus or minus one percent of the stated value.

[0081] The embodiments above are chosen, described and illustrated so that persons skilled in the art will be able to understand the invention and the manner and process of making and using it. The descriptions and the accompanying drawings should be interpreted in the illustrative and not the exhaustive or limited sense. The invention is not intended to be limited to the exact forms

disclosed. While the application attempts to disclose all of the embodiments of the invention that are reasonably foreseeable, there may be unforeseeable insubstantial modifications that remain as equivalents. It should be understood by persons skilled in the art that there may be other embodiments than those disclosed which fall within the scope of the invention as defined by the claims. Where a claim, if any, is expressed as a means or step for performing a specified function it is intended that such claim be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof, including both structural equivalents and equivalent structures, material-based equivalents and equivalent materials, and act-based equivalents and equivalent acts.

Claims

1. A device comprising: an optical scanner configured to scan a scannable code printed on a pulltab card belonging to a set of pulltab cards of a pulltab game; and processing circuitry configured to: determine a prize-verification code encoded by the scannable code; verify, based on the prize-verification code, that the pulltab card is a winning card; determine that the winning card has not already been redeemed; and responsive to determining that the winning card has not already been redeemed, output an indication of a cash prize associated with the winning card.

2. The device of claim 1, wherein the processing circuitry is configured to verify that the pulltab card is a winning card by comparing the prize-verification code to a set of game data stored in a local memory of the prize-verification device.

3. The device of claim 2, wherein the set of game data comprises a comma-separated values (.CSV) file comprising, for each of a plurality of winning cards of the pulltab game that includes the winning card: a serial number of the pulltab game; the prize-verification code; a cash-prize denomination; and a graphical card image displayed on a front side of the winning card.

4. The device of claim 2, wherein the processing circuitry is further configured to: receive the set of game data via a removable digital storage device inserted into the prize-verification device; and store the set of game data in the local memory.

5. The device of claim 2, wherein the processing circuitry is further configured to: wirelessly receive the set of game data from a remote computing device; and store the set of game data in the local memory.

6. The device of claim 1, wherein the processing circuitry device is configured to verify that the pulltab card is a winning card by transmitting the prize-verification code to a cloud-based platform and receiving a validity indicator in response.

7. The device of claim 1, wherein the prize-verification code comprises an eleven-digit numeric code.

8. The device of claim 1, wherein the scannable code comprises a barcode.

9. The device of claim 1, wherein the scannable code comprises a quick-response (QR) code.

10. The device of claim 1, wherein the device comprises a kiosk configured to automatically dispense the cash prize in response to determining that the winning card has not already been redeemed.

11. The device of claim 1, wherein the device comprises a point-of-sale (POS) terminal.

12. The device of claim 1, wherein the device comprises a handheld mobile computing device with an integrated optical scanner.

13. A system comprising: the device of claim 1; and a computer network configured to generate the pulltab game by generating: a set of game data comprising a plurality of randomized game entries; and a set of card graphics corresponding to the set of game data, wherein the set of pulltab cards comprises the set of card graphics.

14. The system of claim 13, further comprising a printer configured to print the card graphics onto sheets of cardboard for subsequent assembly into the set of pulltab cards.

15. The system of claim 13, further comprising the set of pulltab cards including the winning card, wherein the winning card comprises: a plurality of perforated tabs; a winning game entry printed underneath one of the perforated tabs; and the prize-verification code printed underneath another one of the perforated tabs.

16. The system of claim 15, wherein the winning card further comprises a quick-resource (QR) code encoding a uniform resource locator (URL) of a webpage corresponding to a periodic prize drawing.

17. A method comprising: scanning, by a prize-verification device, a scannable code printed underneath a perforated tab on pulltab card of a pulltab game; determining, by the prize-verification device based on the scannable code, a prize-verification code encoded by the scannable code; verifying, by the prize-verification device based on the prize-verification code, that the pulltab card is a winning card; determining, by the prize-verification device based on the prize-verification code, that the pulltab card has not already been redeemed; and outputting, by the prize-verification device in response to determining that the pulltab card has not already been redeemed, an indication of a cash prize associated with the prize-verification code.

18. The method of claim 17, wherein verifying that the pulltab card is a winning card comprises comparing the prize-verification code to a set of game data stored in a local memory of the prize-verification device.

19. The method of claim 18, wherein the set of game data comprises a comma-separated values (.CSV) file comprising, for each of a plurality of winning cards of the pulltab game that includes the winning card, a set of values indicating: a serial number of the pulltab game; the prize-verification code; a prize denomination; and a graphical card image displayed on a front side of the winning card.

20. The method of claim 17, wherein verifying that the pulltab card is a winning card comprises transmitting the prize-verification code to a cloud-based computing device and receiving a validity indicator in response.