

CANDLESTICK AND BAR CHARTS REPRESENTATION FOR GAMES

CROSS REFERENCES TO RELATED APPLICATIONS

5 This application is related to and claims priority from commonly owned U.S. Provisional Patent Application Serial No. 61/790,859, entitled: CandleBets, filed on March 15, 2013, the disclosure of which is incorporated by reference in its entirety herein.

10 TECHNICAL FIELD

 The present invention, in some embodiments thereof, relates to charting games, played in rounds, and, more specifically, but not exclusively, to tracking outcomes of these games.

15 BACKGROUND

 Contemporary casino games are typically only played by players against Bankers, dealers and the house. There is very little, if any side betting on the outcomes of trends when placing bets, to predict future win trends.

 Some games, such as Baccarat, can be tracked with score cards, by a standard
20 scoring system. However, the scoring system is complicated and the scorecards are difficult to read. Moreover, the complexity of the scoring system makes pattern analysis from these scorecards limited to very few players.

SUMMARY

25 According to an aspect of some embodiments of the present invention there is provided a computer-implemented method for tracking trends in card games. The method comprises: obtaining the results of a plurality of individual sessions of a card game, and the cards for the plurality of the individual sessions from a single pool of cards including a fixed amount of cards; transforming the results of each individual
30 session into a bar for a bar chart, the bar defined by a plurality of parameters associated with the values assigned to the cards in accordance with the rules of the card game; and,

adding each bar for each successive individual session to a bar chart in a consecutive order corresponding to the order of each individual session.

Optionally, the bar includes a candlestick and the bar chart includes a candlestick chart.

5 Optionally, the each individual session of the plurality of sessions includes a baccarat session.

Optionally, the each individual session of the plurality of sessions includes a blackjack session.

10 Optionally, the each individual session of the plurality of sessions includes a Hi Lo session.

Optionally, the parameters include values for Open, Close, High and Low.

Optionally, the results are for individual players and the bar charts are for each individual player for the card game.

15 Optionally, the results are for individual players and the candlestick charts are for each individual player for the card game.

Some embodiments of the present invention are directed to a computerized system for tracking trends in card games. The computerized system comprises a storage medium for storing computer components; and, a processor for executing the computer components. The computer components comprise: a first component for obtaining the results of a plurality of individual sessions of a card game, and the cards for the plurality of the individual sessions from a single pool of cards including a fixed amount of cards; a second component for transforming the results of each individual session into a bar for a bar chart, the bar defined by a plurality of parameters associated with the values assigned to the cards in accordance with the rules of the card game; and, a third component for adding each bar for each successive individual session to a bar chart in a consecutive order corresponding to the order of each individual session.

Optionally, the bar includes a candlestick and the bar chart includes a candlestick chart.

30 Optionally, the each individual session of the plurality of sessions is selected from the at least one of: a baccarat session, a blackjack session and a HiLo session.

Optionally, the parameters include values for Open, Close, High and Low.

Optionally, the results are for individual players and the bar charts are for each individual player for the card game.

Optionally, the results are for individual players and the candlestick charts are for each individual player for the card game.

5 Some embodiments of the present invention are directed to a computer usable non-transitory storage medium having a computer program embodied thereon for causing a suitable programmed system for tracking trends in card games, by performing the following steps when such program is executed on the system. The steps comprise: obtaining the results of a plurality of individual sessions of a card game, and the cards
10 for the plurality of the individual sessions from a single pool of cards including a fixed amount of cards; transforming the results of each individual session into a bar for a bar chart, the bar defined by a plurality of parameters associated with the values assigned to the cards in accordance with the rules of the card game; and, adding each bar for each successive individual session to a bar chart in a consecutive order corresponding to the
15 order of each individual session.

Optionally, the bar includes a candlestick and the bar chart includes a candlestick chart.

Optionally, the each individual session of the plurality of sessions is at least one of a baccarat session, a blackjack session and a HiLo session.

20 Optionally, the parameters include values for Open, Close, High and Low.

Optionally, the results are for individual players and the bar charts are for each individual player for the card game.

Optionally, the results are for individual players and the candlestick charts are for each individual player for the card game.

25 Some embodiments of the present invention are directed to a computer implemented method for tracking trends in games. The method comprises: obtaining the results of a plurality of individual sessions of a game; transforming the results of each individual session for each individual player of the game into a bar for a bar chart for the individual player, the bar defined by a plurality of parameters associated with the
30 values assigned to the game components in accordance with the rules of the game; and, adding each bar for each successive individual session to a bar chart for the individual player, in a consecutive order corresponding to the order of each individual session.

Optionally, the bar includes a candlestick and the bar chart includes a candlestick chart.

Optionally, the parameters include values for Open, Close, High and Low.

Optionally, the game is a card game and the game components include cards.

5 Optionally, the cards for the plurality of the individual sessions of the card game are from a single pool of cards including a fixed amount of cards.

Optionally, the each individual session of the plurality of sessions of the card game is at least one of a baccarat session, a blackjack session and a HiLo session.

Optionally, the game is roulette and the game components include characters.

10 Optionally, the characters include numbers.

Some embodiments of the present invention are directed to a computerized system for tracking trends in games. The system comprises a storage medium for storing computer components, such as modules; and, a processor for executing the computer components. The computer components, comprise: a first component for
15 obtaining the results of a plurality of individual sessions of a game; a second component for transforming the results of each individual session for each individual player of the game into a bar for a bar chart for the individual player, the bar defined by a plurality of parameters associated with the values assigned to game components in accordance with the rules of the game; and, a third component for adding each bar for each successive
20 individual session to a bar chart for the individual player, in a consecutive order corresponding to the order of each individual session.

Optionally, the bar includes a candlestick and the bar chart includes a candlestick chart.

Optionally, the parameters include values for Open, Close, High and Low.

25 Optionally, the game is a card game and the game components include cards.

Optionally, the card game includes at least one of baccarat, blackjack, and HiLo.

Optionally, the game is roulette and the game components include characters.

Optionally, the characters include numbers.

Unless otherwise defined, all technical and/or scientific terms used herein have
30 the same meaning as commonly understood by one of ordinary skill in the art to which the invention pertains. Although methods and materials similar or equivalent to those described herein can be used in the practice or testing of embodiments of the invention,

exemplary methods and/or materials are described below. In case of conflict, the patent specification, including definitions, will control. In addition, the materials, methods, and examples are illustrative only and are not intended to be necessarily limiting.

5 BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Some embodiments of the invention are herein described, by way of example only, with reference to the accompanying drawings. With specific reference now to the drawings in detail, it is stressed that the particulars shown are by way of example and for purposes of illustrative discussion of embodiments of the invention. In this regard,
10 the description taken with the drawings makes apparent to those skilled in the art how embodiments of the invention may be practiced.

In the drawings:

FIGs. 1A and 1B are diagrams of candlesticks in accordance with embodiments of the present invention;

15 FIGs. 2A and 2B are diagrams of bars in accordance with embodiments of the present invention;

FIGs. 3A and 3B are diagrams detailing candlestick formation in accordance with embodiments of the present invention;

20 FIGs. 4A and 4B are diagrams detailing candlestick formation for a banker win, in accordance with embodiments of the present invention;

FIGs. 5A and 5B are diagrams detailing candlestick formation for a player win, in accordance with embodiments of the present invention;

FIGs. 6A and 6B are diagrams detailing candlestick formation for a tie, in accordance with embodiments of the present invention 6 is a ;

25 FIGs. 7A-7F are candlestick diagrams for a sample baccarat game in accordance with embodiments of the present invention;

FIG. 8A is a diagram of an environment for a system in accordance with embodiments of the present invention;

30 FIG. 8B is a diagram of the architecture of a system in accordance with embodiments of the present invention;

FIG. 9 is flow diagram of a process in accordance with embodiments of the present invention;

FIG. 10 is a screen shot of web site or a web page which is an interactive display for a Baccarat game in accordance with embodiments of the present invention;

FIG. 11A-11C are diagrams for candlesticks for Blackjack, in accordance with embodiments of the present invention;

5 FIG. 11D is a screen display for placing bets during a Blackjack game, in accordance with embodiments of the present invention;

FIG. 12A is a screen display for placing bets during a Hi Lo game, in accordance with embodiments of the present invention;

10 FIG. 12B and 12C are diagrams for candlesticks for Hi Lo, in accordance with embodiments of the present invention;

FIG. 13A is a diagram for candlestick bodies for Roulette, in accordance with embodiments of the present invention;

FIG. 13B is a distance Matrix for the determining the bodies of FIG. 13A;

15 FIG. 13C is a diagram for candlestick wicks for Roulette, in accordance with embodiments of the present invention; and,

FIG. 13D is a distance Matrix for the determining the wicks of FIG. 13C.

DETAILED DESCRIPTION

20 Throughout this document, references to directions, such as upward, downward, upper, lower, up, down, top, bottom, left, right, horizontal, vertical, perpendicular, and the like, are made. These directional references are to typical orientations for bars and candlesticks, and the bar charts and candlestick charts formed therefrom, with respect to their orientation on the paper on which the requisite drawing figure is displayed. These directional references are exemplary only, and not limiting in any way, as they are for
25 description and explanation purposes.

The present invention, in some embodiments, is directed to systems and methods for administering and playing casino games, including managing the betting therefor, and translating the results of the sessions or rounds of the games into bar charts, such as candlestick charts, representative of trends and patterns of the games. Individual bar
30 charts are created for each individual player, based on the individual player's results for each round or session of the game played by the individual player. The bar chart includes a standard bar chart as well as a candlestick chart. The casino games may

include card games, such as Baccarat, Black Jack, and Hi Lo, and other games, including numbers games, such as roulette.

The present invention, in embodiments thereof, now allows players playing a game to make two kind of bets- a first bet on the game itself, and a second bet on the trend of the game as recorded by the bar or candlestick chart for that player.

In order to produce the charts, with candlesticks positioned therein, the positioning resulting in the aforementioned trends or patterns, the games are played in sessions or rounds, the terms “rounds” and “sessions”, including singular forms thereof, being used interchangeably herein. After a certain number of sessions, a game is considered complete and another game, or a number of sessions, begins. With card games, the cards for the sessions of the game are typically from a fixed or single pool, and only these cards are used for all of the sessions of the game.

The resultant bar charts, such a candlestick charts, in accordance with embodiments of the present invention, are easy to read and understand, as the charted trends are viewable in these bar charts as upward and downward movements. These upward and downward movements include statistical information that is not available with conventional methods for analyzing card games and other games. As a result, the game players can benefit by applying existing technical analysis methods and indicators, identify patterns on the charts, and allow the player to potentially predict a new trend, a trend reversal, and the strength of such trends in an attempt to exploit those patterns for the greatest potential profit.

Additionally, according to some embodiments of the present invention, the charts of the present invention provide an efficient representation of the game history. This allows the players, those playing and not playing the game, to make quick decisions for betting and strategy.

Before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not necessarily limited in its application to the details of construction and the arrangement of the components and/or methods set forth in the following description and/or illustrated in the drawings and/or the Examples. The invention is capable of other embodiments or of being practiced or carried out in various ways.

FIGs. 1A and 1B show exemplary candlesticks 100a (FIG. 1A), 100b (FIG. 1B), which define the candlesticks used throughout this document. Candlestick 100a is representative of a house, banker or dealer win, indicated by the gray or light colored body 102a. Candlestick 100b is representative of a player win, indicated by the black or dark colored body 102b. Each candlestick is formed based on four parameters, “High,” “Low,” “Open,” and “Close.” Wicks, specifically the upper wick 104, and the lower wick 105, extend from the respective bodies 102a, 102b. Throughout this document, the candlesticks and bars are discussed in vertical orientations, with the “downward” direction being from the parameter “High” to the parameter “Low,” and the “upward” direction vice versa. Accordingly, with house, banker or dealer win candlesticks (candles) 100a results, with the body 102a extends upward from the parameter “Open” to the parameter “Close,” while in player win candlesticks (candles) 100b, the body 102b extends downward, from the parameter “Open” to the parameter “Close.”

FIGs. 2A and 2B are bars 200a, 200b, respectively, corresponding to the house, banker or dealer win 200a, and shown in FIG. 2A, and a player win 200b, shown in FIG. 2B. The bars 200a, 200b include upper 204 and lower 205 wicks, with the “Open” parameter being a protrusion 206 to the left, and the “Close” parameter being a protrusion 207 to the right. The bodies 202a, 202b, corresponding to the bodies 102a, 102b, detailed above, are defined along the length of the bar 200a, 200b, between the protrusions 206, 207, representing the “Open” and “Closed” parameters.

The present invention will now be described as applied to specific games. While certain games are discussed, this is exemplary only, as the present invention may be employed with other casino games, other games, card games and non-card games.

BACCARAT

A. Rules

The rules of Baccarat are, for example, described in “How To Play Baccarat,” by John Grochowski, available at, <http://entertainment.howstuffworks.com/how-to-play-baccarat1.htm>, (Grochowski), which is incorporated by reference in its entirety herein. In accordance with Grochowski, in Baccarat, the object is to bet on the two- or three-card hand that totals closer to nine. Tens and face cards all are worth zero points; all other cards are worth their face value, with the ace worth one point. If a total is more

than 10, the second digit is the value of the hand. For example, a 9 and a 6, which total 15, make up a five-point hand.

Initially, two cards are dealt for each hand. The point totals determine whether either hand gets a third card. The player hand is completed first. A total of 8 or 9 is called a "natural," and the player hand gets no more cards. In fact, unless the banker has a natural 9 or ties the natural 8, no further cards are drawn, and the naturals are automatic winners. The player also stands on totals of 6 or 7. On any other total, zero through 5, player draws a third card, unless banker has a natural, in which case the bank hand wins with no further draw.

Banker rules are a bit more complex. The banker also stands on 7, 8, or 9 and draws on 0, 1, or 2, but on other hands the banker's play is dependent on the value of the player's third card. Banker hits 3 unless the player's third card is an 8; hits 4 unless the player's third card is 1, 8, 9, or 10; hits 5 only if the player's third card is 4, 5, 6, or 7; and hits 6 only if the player's third card is 6 or 7.

Player Hand: When first two cards total:

1-2-3-4-5-10	Draws a card
6-7	Stands
8-9	Natural -- Stands

Banker Hand

First two cards total:	Draws when player's third card is:	Stands when player's third card is:
3	1-2-3-4-5-6-7-9-10	8
4	2-3-4-5-6-7	1-8-9-10
5	4-5-6-7	1-2-3-8-9-10
6	6-7	1-2-3-4-5-8-9-10
7	Stands	
8-0	Natural -- Stands	
0-1-2	Always draws	

There are a few exceptions. A natural, as noted above, stops play with no further draws. If the player has one of its other two standing hands, 6 or 7, the banker stands on 6 as well as 7, 8, and 9.

Neither hand ever gets more than three cards. After the hands have been played out, the hand totaling closer to 9 wins. Winning bets are paid off at even money. Ties push, which means that neither hand, that of the banker or the player, wins nor loses.

Bets on Ties are allowed. Bettors also may wager that the two hands will finish with an equal number of points. Winning bets on ties pay off at 8-1.

B. User Interface and Chart Definitions

In Baccarat of some embodiments of the present invention, the final winning hand value of a particular session of a game is known as a Pip Value or simply a Pip. The height of the candle, is based on the wick lengths, which is a representation of the Pip Value. The wicks represent the sum total of all cards dealt for the particular session. In the case of a tie, the candle does not have a body, but rather the wicks combine, with the tie represented by a perpendicular dash through the combined wicks.

Turning to FIGs. 3A and 3B, a candle is built, representative of a single session of a Baccarat game. In FIG. 3A the Banker has won, as the sum of the three cards in his hand equals "19 Pips," which is a final value of "9 Pips," with the banker or player who has a final value of "9" or closest thereto being the winner. The player's cards add to a sum of "21 Pips," with a final value of "1 Pip." The candle 300 has a height of "40 Pips", as:

$$40 \text{ Pips} = 19 \text{ Pips (Banker Sum)} + 21 \text{ Pips (Player Sum)}.$$

As the Banker won, the body 301 is gray (light), and 9 Pips in length, these 9 Pips corresponding to the Banker's final hand value of 9 Pips. The body extends upward from the 21st Pip, for 9 Pips, as this is the first Pip of the 19 Pips attributable to the Banker.

In FIG. 3B the Player has won, as the sum of the three cards in his hand equals "17 Pips," which is a final value of "7 Pips," with the player being closest to a final value of "9." The Banker's cards add to a sum of "10 Pips," with a final value of "0 Pips." The candle 302 has a height of "27 Pips", as:

$$27 \text{ Pips} = 10 \text{ Pips (Banker Sum)} + 17 \text{ Pips (Player Sum)}.$$

As the Player won, the body 303 is black (dark), and is 7 Pips in length, these 7 Pips corresponding to the Player's final hand value of 7 Pips. The body extends downward from the 10th Pip, for 7 Pips, as this is the first Pip of the 17 Pips attributable to the Player.

5 Attention is now directed to FIGs. 4A and 4B, detailing a Banker win, FIGs. 5A and 5B, detailing a Player Win, and FIGs. 6A and 6B detailing Ties between the Banker and the Player. The following formulas provide a method for transforming a Baccarat Round (a round of play) or session the card and hand values into the parameters OPEN (O), HIGH (H), LOW (L), and CLOSE (C) necessary to form a Candlestick and/or a
10 bar, for the respective candlestick and bar charts. Each card dealt to the Banker and Player is used in establishing the parameters, e.g., O, H, L, C, for each Candlestick and/or bar.

C. Description of Variables and Examples

BS (Banker Sum) is the sum of all cards dealt to the Banker excluding any 10's
15 or face cards (Jack (J), Queen (Q), King (K)) which have no (zero) value: for example, a hand consisting of 7, 6, K is worth 13 (13 Pips), or a hand consisting of 8, 7, 9 is worth 24 (24 Pips). Hence the BS values are 13 (13 Pips) and 24 (24 Pips) respectively.

PS (Player Sum) is the sum of all cards dealt to the Player excluding any 10's or face cards (J,Q,K) which have no (zero) value: As per BS example above.

20 BHV (Banker Hand Value) is the final hand value as determined by the standard valuation of hands.

PHV (Player Hand Value) is the final hand value as determined by the standard valuation of hands.

In FIGs. 4A and 4B, where the outcome is a banker win, parameters are as follows:

25 Open (O) = previous Close (C)

High (H) = Open (O) + BS (Banker sum)

Low (L) = Open (O) – PS (Player Sum)

Close (C) = Open (O) + BHV (Banker Hand Value)

Turning to FIG. 4A, the Banker hand, which is the winning hand, hence the light
30 or gray body, extending upward from "Open" to "Close," has a final value of 5 and a total value of 25 Pips ($9 + 7 + 9 = 25$). The player hand, which is the losing hand, has a final value of 4, and a total value of 14 Pips ($K=0, 0 + 5 + 9 = 14$). Accordingly, the

height of the candlestick or bar is 25 Pips (Banker) + 14 Pips (Player, since the loser all 14 Pips will define the lower wick), which is 39 Pips total, and represents the parameter “High.” The body is 5 Pips, the winning Banker Hand Value (BHV) or Final Value for the Banker, which begins at the 14th Pip from the bottom or “Low,” the end of the Pips attributable to the player and extends upward for 5 Pips (of the 25 pips attributable to the banker, and the upper wick is extends 20 Pips from the body, i.e., 25 Pips (Banker Total Pips-total Pips of Candlestick attributable to winning Banker) – 5 Pips (Banker winning hand final value) = 20 Pips (upper wick remaining)).

Turning to FIG. 4B, the Banker hand, which is the winning hand, hence the light or gray body, extending upward from “Open” to “Close,” has a final value of 7 and a total value of 7 Pips ($K=0$, $0 + 7 = 7$). The player hand, which is the losing hand, has a final value of 1, and a total value of 21 Pips ($7 + 5 + 9 = 21$). Accordingly, the height of the candlestick or bar is 7 Pips (Banker) + 21 Pips (Player, since the loser all 21 Pips will define the lower wick), which is 28 Pips total, and represents the parameter “High.” The body is 7 Pips, the winning Banker Hand Value (BHV) or Final Value for the Banker, which begins at the 21st Pip from the bottom or “Low,” the end of the Pips attributable to the player and extends upward for 7 Pips (of the 7 pips attributable to the banker), and the upper wick extends 0 Pips from the body, i.e., 7 Pips (Banker Total Pips-total Pips of Candlestick attributable to winning Banker) – 7 Pips (Banker winning hand final value) = 0 Pips (upper wick remaining)).

In FIGs. 5A and 5B, where the outcome is a player win, parameters are as follows:

Open (O) = previous Close (C)

High (H) = Open (O) + BS (Banker sum)

Low (L) = Open (O) – PS (Player Sum)

Close (C) = Open (O) - PHV (Banker Hand Value)

Turning to FIG. 5A, the Player hand, which is the winning hand, hence the dark or black body, extending downward from “Open” to “Close,” has a final value of 9 and a total value of 9 Pips ($K=0$, $0 + 9 = 9$). The Banker hand, which is the losing hand, has a final value of 5, and a total value of 15 Pips (Ace (A)=1, $1 + 9 + 5 = 15$). Accordingly, the height of the candlestick or bar is 15 Pips (Banker, since the loser all 15 Pips will define the upper wick) + 9 Pips (Player), which is 24 Pips total, and represents the

parameter “High.” The body is 9 Pips, the winning Player Hand Value (PHV) or Final Value for the Player, which begins at the 15th Pip from the top or “High,” the end of the Pips attributable to the Banker, and extends downward from the 15th Pip for 9 Pips (of the 9 pips attributable to the player, and the lower wick extends 0 Pips from the body, i.e., 9 Pips (Player Total Pips-total Pips of Candlestick attributable to winning Player) – 9 Pips (Player winning hand final value) = 0 Pips (lower wick remaining)).

Turning to FIG. 5B, the Player hand, which is the winning hand, hence the dark or black body, extending downward from “Open” to “Close,” has a final value of 7 and a total value of 17 Pips ($2 + 9 + 6 = 17$). The Banker hand, which is the losing hand, has a final value of 0, and a total value of 10 Pips ($K=0, 3 + 7 + 0 = 10$). Accordingly, the height of the candlestick or bar is 10 Pips (Banker, since the loser all 10 Pips will define the upper wick) + 15 Pips (Player), which is 25 Pips total, and represents the parameter “High.” The body is 7 Pips, the winning Player Hand Value (PHV) or Final Value for the Player, which begins at the 10th Pip from the top or “High,” the end of the Pips attributable to the Banker, and extends downward from the 10th Pip for 7 Pips (of the 7 pips attributable to the player, and the lower wick extends 8 Pips from the body, i.e., 15 Pips (Player Total Pips-total Pips of Candlestick attributable to winning Player) – 7 Pips (Player winning hand final value) = 8 Pips (lower wick remaining)).

In FIGs. 6A and 6B, where the outcome is a tie, parameters are as follows:

Open (O) = previous Close (C)
 High (H) = Open (O) + BS (Banker sum)
 Low (L) = Open (O) – PS (Player Sum)
 Close (C) = Open (O)

Turning to FIG. 6A, there is a tie between the Banker hand and the Player hand. The tie is represented by a perpendicular line (with respect to the vertical wicks) where the “Open” and “Close,” are the same perpendicular line. The Banker hand has a final value of 7 and a total value of 17 Pips ($2 + 9 + 6 = 17$). The player hand also has a final value of 7, and a total value of 7 Pips ($K=0, 0 + 7 = 7$). Accordingly, the height of the candlestick or bar is 17 Pips (Banker) + 7 Pips (Player), which is 24 Pips total, and represents the parameter “High.” The body is 0 Pips, since the round or session is a tie, with the perpendicular line (the “Open” and “Close” between the 7th and 8th Pip from the bottom or “Low.” The upper wick of 17 Pips, attributable to the Banker, extends

upward from the perpendicular line for 17 Pips, while the lower wick of 7 Pips, attributable to the player, extends downward from the perpendicular line for 7 Pips.

Turning to FIG. 6B, there is a tie between the Banker hand and the Player hand. The tie is represented by a perpendicular line (with respect to the vertical wicks) where the “Open” and “Close,” are the same perpendicular line. The Banker hand has a final value of 0 and a total value of 20 Pips ($4 + 9 + 7 = 20$). The player hand also has a final value of 0, and a total value of 0 Pips ($K=0, 10=0, 0 + 0 + 0 = 0$). Accordingly, the height of the candlestick or bar is 20 Pips (Banker) + 0 Pips (Player), which is 20 Pips total, and represents the parameter “High.” The body is 0 Pips, since the round or session is a tie, with the perpendicular line (the “Open” and “Close”) at the 0 position or bottom or “Low.” The upper wick of 20 Pips, attributable to the Banker, extends upward from the perpendicular line, at 0 or the bottom, for 20 Pips, while the lower wick is of 0 Pips, attributable to the player, and does not exist in this candlestick or bar.

D. Example Game Played in Baccarat Rounds or Sessions

Attention is now directed to FIGs. 7A-7F, which shows a candlestick chart and how candlesticks are added for each round or session result of a game. The candlestick charts are specific for each individual player playing the game, as they are created from the player’s individual results of the particular game, which the individual player is playing, has played, or both. The game shown is for five rounds or sessions, and will result in five candlesticks being added to the candlestick chart consecutively, as each round is completed. The cards for these five rounds or sessions, defining a game, are from the same pool, with a fixed number (amount) of cards. Dealt cards are not returned to the pool.

The first candlestick of the first round or session of the game extends from the Start Marker as a base, represented by a horizontally extending START MARKER line (SM) with the actual start indicated on the START MARKER line (SM) indicated by an arrow (AA), shown in FIG. 7A.

Staying in FIG. 7A, to begin, the Player bets \$10 on BANKER-UP, and selects a five round or session game. A START MARKER (horizontal line SM) is locked at the beginning of the game, prior to the first round or session, with an arrow (AA) on the START MARKER line indicating the point in time where the game (Round 1) will start. The START MARKER line is at the lowest point of the body of the candlestick,

as the last candlestick indicated a PLAYER win. On the candlestick charts, individual candlesticks follow the candlestick for the previous round in succession. A BANKER win is indicated by a candlestick with a light or gray body and the body extends upward, from either the highest point of the body, if the previous round win was a BANKER win, or from the lowest point of the body, if the previous round win was a PLAYER win. A PLAYER win is indicated by a candlestick with a dark or black body and the body extends downward, from either the highest point of the body, if the previous round win was a BANKER win, or from the lowest point of the body, if the previous round win was a PLAYER win.

At FIG. 7B, the first round is now complete and it was a PLAYER win. Accordingly, the body of the candlestick, the candlestick created as detailed above, is dark or black, and extends downward, from the lowest point of the body of the preceding candlestick, i.e., the body of the candlestick of the previous round, since the previous candlestick was for a PLAYER win. Additionally, since this is the first round, the body extends downward from the START MARKER line (SM).

FIG. 7C shows the second round now complete. This second round was a BANKER win. Accordingly, the body of the candlestick, the candlestick created as detailed above, is light or gray, and extends upward, from the lowest point of the body of the preceding candlestick, i.e., the body of the candlestick of the previous round, since the previous candlestick represented a PLAYER win.

FIG. 7D shows the third round now complete. This third round was a PLAYER win. Accordingly, the body of the candlestick, the candlestick created as detailed above, is dark or black, and extends downward, from the highest point of the body of the preceding candlestick, i.e., the body of the candlestick of the previous round, since the previous candlestick represented a BANKER win.

FIG. 7E shows the fourth round now complete. This fourth round was a BANKER win. Accordingly, the body of the candlestick, the candlestick created as detailed above, is light or gray, and extends upward, from the lowest point of the body of the preceding candlestick, i.e., the body of the candlestick of the previous round, since the previous candlestick represented a PLAYER win.

FIG. 7F shows the fifth round now complete. This fifth round was a BANKER win. Accordingly, the body of the candlestick, the candlestick created as detailed

above, is light or gray, and extends upward, from the highest point of the body of the preceding candlestick, i.e., the body of the candlestick of the previous round, since the previous candlestick represented a BANKER win.

With the five rounds or sessions now complete, an End Game Marker is indicated by a horizontal line (EM) along the uppermost body point of the last candlestick, with the uppermost body point selected, as the candlestick representing this final round is for a BANKER win. As the End Game Marker line (EM) is above the START MARKER LINE (SM), the BANKER is UP. Accordingly, BANKER-UP bets win, PLAYER-UP bets loose.

Should the rounds or sessions have ended with a the END GAME MARKER line (EM) below the START MARKER line (SM), this would be considered PLAYER-DOWN. Also, should the rounds or sessions have ended with a the END GAME MARKER line (EM) equal to the START MARKER line (SM), this would be considered a TIE win. According to the rules, ties push.

F. System for Playing Baccarat

Reference is now made to FIG. 8A, which shows an operating environment for a central server 802, which defines a non-limiting exemplary control system, in accordance with some embodiments of the present invention. The server 802 functions to control the various games to be played by players, with player P 804 representative of multiple players. The server 802 controls the bar and candlestick charts associated with the game, and manages the betting on the respective games by the players, such as player P 804. Depending on the game being played, the server 802 operates as the Banker, Dealer, the house or other game administrator.

The player P has a client terminal, such as a computer 804', e.g., personal computer, work station, lap top, desk top, tablet or computer device, such as a mobile phone, personal digital assistant and the like, with processors suitable for running the aforementioned games, and internet browsing applications, or browsers, such as Internet Explorer® from Microsoft, Firefox®, and Chrome® from Google. This computer 804' links to a server 805. The servers 802, 805 link to a network 816, such as the Internet, or other public or wide area network (WAN) either directly or indirectly. The player P has accessed the server 802 by directing his browser to the Uniform Resource Locator (URL), for the web site and/or web page (a screen shot thereof shown in FIG. 10) for

playing this baccarat game, which is hosted by the server 802.

In this baccarat game, the player P 804 plays the game against the Banker, here, the system of the server 802 serves as the Banker. The player P 804 sees a display, with a simulated table set up and a bar chart, for example, a candlestick chart, the display
5 shown as a screen shot in FIG. 10. The display is interactive, via a mouse or other pointing device associated with the player's computer 804', on his monitor 804a. The candlestick chart of the display is for that player, i.e., player P 804, updated to the present round or session of the game being played by that player.

The server 802, is formed of modules 850, 852, 854, 856, 858, 860, 862, 864, 866, 868
10 processors 870 and storage/memory 872, as shown in FIG. 8B, to which attention is now directed. The aforementioned modules, processors and storage/memory are in electronic and data communication with each other, either directly or indirectly. While single modules 850, 852, 854, 856, 858, 860, 862, 864, 866, 868 are shown, this is representative only, as each of the modules 850, 852, 854, 856, 858, 860, 862, 864,
15 866, 868 may be a plurality of devices. The modules 850, 852, 854, 856, 858, 860, 862, 864, 866, 868 may be hardware, software, or combinations thereof. These modules 850, 852, 854, 856, 858, 860, 862, 864, 866, 868 and all other modules described herein, may also include their own processors and or storage.

The user interface module 850 controls user, i.e., player, interaction with the
20 system of the server 802 (also referred to hereinafter as the "system"). Player input is received via the user interface module 850, and this module 850 also outputs data for the players, associated with the server 802 via the players' participation in a game being controlled by the server 802.

The card/number reading module 852 reads the cards, when the game is a card
25 game, and numbers, when the game is a numbers game, such as roulette. The game presentation/display graphics module 854 supports and renders all of the graphics associated with the game to the player, which are viewable via the player's monitor 804a (FIG. 8A). The Game Administration module 856 administers and manages the game being played by the player against the Banker (the server 802) as well as the bar
30 chart displayed to the player 804. This administration and management is through, for example, stored instructions in the module 856, executed through the processors 870. game rules and policies for each game the system can play are administered and stored

in the game rules and policies module 858.

The Results and Bar Charts module 860 administers results of the games and transforms these results into bars, including candlesticks, the bars and candlesticks as detailed above, for the respective bar chart or candlestick chart. The rules and policies
5 for the bar charts, the different types of bar charts, such as candlestick charts, are administered, maintained and stored by the module 862.

A log of the players is maintained by the module 864. The betting module administers betting including, recording amounts bet, opening and closing betting periods, and establishing the times for the betting periods. Accounting module 868,
10 which performs system accounting functions including administering, determining winning amounts, and paying bets.

The processors 870 control the operation of the system of the server 802. The processors 870 are conventional processors, such as those used in servers, computers, and other computerized devices. The processors 870 may be arranged to have a central
15 processing unit (CPU), for controlling the system (of the server 802). For example, the processors may include x86 Processors from AMD and Intel, Xenon® and Pentium® processors from Intel, and other processors used for processing “big data.” Other processors, such as those of the modules, may be any of the aforementioned processors.

The storage/memory 872 is any conventional storage, including, for example,
20 that usable with “big data.” This is also the case for the storage specific to the modules. This storage/memory 870 may also store machine executable instructions associated with the operation of the modules 850, 852, 854, 856, 858, 860, 862, 864, 866, 868. Also, the storage/memory 872, although shown as a single component for representative purposes, may be multiple components, and may be outboard from the server 802, and
25 linked to the network 816.

Attention is now directed to FIG. 9, which is a flow diagram detailing a process in accordance with an embodiment of the disclosed subject matter. Reference is also made to elements shown in FIGs. 8A and 8B and described above. The processes performed in this flow diagram are performed by the system of the server 802, and are
30 typically performed automatically and in real time. While certain modules are sometimes referred to when performing a process, this mentioning is only for emphasis as other modules are also operating as well as the processors 870 and the

storage/memory 872.

The process begins at block 902, where a game, such as Baccarat, is either selected by a user, e.g., player P 804, via his computer 804' or the system of the server 802 selects a game. The selected game is then set up by the system of the server 802, at
5 block 904. The player 804 is prompted to enter the number of rounds or sessions of the now-selected game, at block 906, and an indicator is received over the network 816 for the number of rounds or sessions of the game the player desires, at block 908. The system (server 802, playing as the Banker) may over-ride this with default values, for example, five rounds or sessions for baccarat. The system would inform the player P
10 804 of this default value, via a message sent to the player P 804, over the network 816, and received by the computers 804' on the monitor 804a.

The system then prompts the player P 804, for example, via a message on the monitors 804a of his computer 804', to place his bet for the game, at block 910. The player can make two bets-on for the baccarat game itself, and one for the trend towards
15 the Banker or the Player, as indicated by the bar chart, for example, a candlestick chart. The player bet or bets are received by the system from the player P 804 over the network 816 until the time to bet closes, as managed by the system, in the betting module 866, at block 912. The system sets up a bar chart, for example, a candlestick chart for the individual player, i.e., player P 804, for the particular game via modules
20 860 and 862, with a START MARKER line (SM) and start point for the next bar, such as a candlestick, when the bar chart is a candlestick chart, at block 914. With the bar chart, for example, a candlestick chart now set up for the individual player, the candlestick chart is made accessible to that player, i.e., player P 804 via his computer 804'. The player P 804 also sees an interactive display of baccarat table with cards via
25 his monitor 804a, the display shown in FIG. 10. This interactive display remains visible to the player until the player closes his browser, there is a system time out, the game ends, as block 926, or other closing event.

The first round or session of the game is played, via modules 854, 856, 858, at block 916. This first round or session ends when the requisite actions are complete and
30 results for the round or session are obtained.

The received results for the player for the round or session are transformed into a bar for a bar chart, for example, a candlestick for a candlestick chart, in accordance with

the rules and policies of the particular bar/candlestick chart, and a bar chart/candlestick chart for the player is created or added onto, at block 918.

The process moves to block 920, where it is determined if there are additional rounds or sessions to be played of the game. Should there be additional rounds or sessions to be played, the process returns to block 916, where it resumes from that block, playing the next round or session. Otherwise, if the round or session played was the final one of the game, the process moves to block 922, where the outcome of the rounds of the game is determined. Winning bets are paid, and an accounting is made of all winning and losing bets, by the accounting module 868, at block 924. Should the outcome be a TIE win (tie), this is also subject to an accounting by the accounting module 868. The process ends at block 928.

BLACKJACK

A. Rules

Each hand will play out a hand of Blackjack based on Simple House Rules (hit all totals 16 or lower). The hand that is closest to 21 will win. If a player bets on either Player or Dealer and the outcome is a Push, the bet amount is not lost and is considered a push as in standard Blackjack. Each hand is considered to be a round or session and will be represented by a single bar, such as a candlestick. A BlackJack game will be a certain number of rounds or sessions. The cards for these rounds or sessions, defining a game, are from the same pool, with a fixed number (amount) of cards. Dealt cards are not returned to the pool.

B. Wicks and Body of Candlestick for Candlestick Chart

As shown in FIGs. 11A and 11B, the wicks and body of a candlestick are determined, based on the dealer winning with a 21 from three cards, while the player had a 17 from two cards. The wick on the topside of the candlestick relates to the player's final score, while the bottom wick refers to the dealer's final score. In FIG. 11A, for example, the top wick is 8.5 Pips, based on a player's final score of 17 from two cards, expressed as $17/2=8.5$ Pips. The bottom wick is based on the dealer's final score of 21 from three cards, expressed as $21/3=7$ Pips. For the body, as shown in FIG. 11B, in this example, the dealer is the winner. The difference between the dealer and

the player is 4, or 21 (dealer) -17 (player). The dealer drew three cards total, so the body of the candlestick is 12 Pips in height, expressed as the difference 4 multiplied by 3 dealer drawn cards or $4 \times 3 = 12$ Pips, the body length. Additionally, in Blackjack, dealer wins have a body of one color, while player wins have a body of another color.

FIG. 11C details how the body of the candlestick is determined in the case of a player win. Here, the player won with a 19 with two cards drawn, while the dealer lost with a 17 from three cards drawn. The upper wick, representative of the player, is 9.5 Pips, $19/2$, while the lower wick representative of the dealer, is 5.66 Pips, $17/3$. The body of the candlestick is in the color of the player win, and is determined by the difference between the player score and the dealer score, $19-17=2$, multiplied by 2, the total number of cards drawn by the winner player. Accordingly, the body length is 4 Pips, or $2 \times 2=4$ Pips.

The Bar chart, for example, a candlestick chart, for the individual player playing the Blackjack game is made like that for the Baccarat candlestick chart as shown in FIGs. 7A-7F and described above.

C. Play and Set Up

The system is similar to that of server 802, as shown in FIGs. 8A and 8B and described above, as is the environment in accordance with FIG. 8A, where the player P 804 plays against a dealer or the house, which is the system of server 802. The process of play is similar to that shown by the flow diagram of FIG. 9 and as described above.

HILO

A. Rules

Before any cards are dealt, players place their bets in one of three boxes, HIGH (over 8), 8, or LOW (under 8), as shown in FIG. 12A, and as would appear on the monitor of a computer of each player. Once betting is complete, one card is dealt face up. The "LOW" bet wins when the value of the card is 2, 3, 4, 5, 6, or 7. The 8 bet wins when the card value is 8. The "HIGH" bet wins when the card is a 9, 10, Jack (11), Queen (12), King (13) and Ace (14). Losing bets are forfeited to the dealer and winning bets are paid according to a pay table. If a player bets HIGH or LOW and the card dealt is an 8, this is considered a Tie and the bet amount is not lost. A pay table may be as follows. LOW and HIGH bets pay 1:1 less house commission. An 8 bet

pays 12:1 less house commission. Each dealt card is considered to be a round or session and will be represented by a single bar, such as a candlestick. A HI LO game will be a certain number of rounds or sessions. The cards for these rounds or sessions, defining a game, are from the same pool, with a fixed number (amount) of cards. Dealt cards are not returned to the pool.

B. Candlesticks For Candlestick Charts

The body of a candlestick represents the difference between the dealt card and the number 8, the middle point. As shown in FIG. 12B should a 2 card be the dealt card, the body of the candlestick is 6 Pips in height, expressed as $8 \text{ (the midpoint)} - 2 \text{ (the dealt card)} = 6 \text{ Pips}$. The body (e.g., red in color) is at the lower end of the wick, due to a low card (below 8) having been dealt. As a low card was dealt, it is a different color (e.g., red) than a high card (e.g., black), which will now be explained.

As shown in FIG. 12C should a king (14) or high card (value greater than 8) be dealt, the body of the candlestick is 6 Pips in height, expressed as $14 \text{ (value of the king)} - 8 \text{ (the midpoint)} = 6 \text{ Pips}$. The body (e.g., black in color) is at the upper end of the wick, due to a high card (above 8) having been dealt.

When an 8 card has been dealt, there is only a dash for the body, since the body is 0 Pips in height, expressed as $8 \text{ (card dealt)} - 8 \text{ (the midpoint)} = 0 \text{ Pips}$.

C. Candlestick Chart

The candlestick chart is such that black candlesticks, indicative of HIGH (high) card wins move upward, while red candlesticks, indicative of LOW (low) card wins move downward. 8 cards are represented by a dash on the candlestick chart. The candlestick chart is made for the individual player playing the HI LO like that for the Baccarat candlestick chart as shown in FIGs. 7A-7F, and described above.

D. Play and Setup

The system is similar to that of server 802, as shown in FIGs. 8A and 8B and described above, as is the environment in accordance with FIG. 8A, where the player P 804 plays the HI LO game against a dealer or the house, which is the system of server 802. The process of play is similar to that shown by the flow diagram of FIG. 9 and as described above.

ROULETTE

A. Rules And Play

The roulette wheel referenced here is a 37 slot roulette wheel, with 0 green and 1-36 in red and black. Other roulette wheels may also be used. Each ball drop is considered to be a round or session and will be represented by a single bar, such as a candlestick. A Roulette game will be a certain number of rounds or sessions, established, for example, by the players at the time the bets are placed. The house or the game administrator is the system of the server 802.

B. Body of Candlesticks

The body of a candlestick represents the distance the ball has traveled since the previous number. For example, in FIG. 13A, the distance traveled (in slots) from the previous ball drop 28 to the current ball drop at 21, based on the shortest slot distance, which is 10 slots (in accordance with the distance matrix of FIG. 13B). Accordingly, the body of the candlestick is 10 Pips. As 21 is red, the body is red, with red bodies below the wicks. Now, if the current ball drop was 17, a black number, at body of the candlestick would be 13 Pips as 17 black is 13 slots away from 28. As 17 is black, the body is black and extends above the wick.

C. Wicks Of The Candlesticks

The wicks of the candlestick are based on the example of FIG. 13C and the Wick Matrices of FIG. 13D. The ball movement of interest is from 28 black to 21 red.

A tall wick on the upper side of a candlestick body indicates a high number region pertaining to the color black (black numbers). A tall wick on the lower side of a candlestick body indicates a high number region pertaining to the color red (red numbers). For FIG. 13C, the top or upper wick is the sum of all black slots between the previous drop, 28 black, and the current drop, 21 red (excluding the previous drop slot, 28 black and including the current drop slot, 21 red) divided by the distance traveled, which is expressed as $35 + 26 + 15 + 4 = 80$. As 10 slots were traveled, 80 is divided by the 10 of the ten slots traveled, with a result of 8, for an upper wick height of 8 Pips. For the bottom or lower wick, this is the sum of all red slots between the previous drop, 28 black, and the current drop, 21 red (excluding the previous drop slot, 28 black and including the current drop slot, 21 red) divided by the distance traveled, which is

expressed as $12 + 3 + 32 + 19 + 21 = 87$. As 10 slots were traveled, 87 is divided by the 10 of the ten slots traveled, with a result of 8.7, for a lower wick height of 8.7 Pips.

D. Candlestick Chart

The resultant candlestick chart is built like the candlestick charts detailed above, for each individual player. Black winning candlesticks always moving up and red winning candlesticks always moving down. Each candlestick, created as discussed above, represents a single ball drop, which as discussed above, corresponds to a single round or session, with a certain number of these rounds or sessions constituting a game.

The present invention may be a system, a method, and/or a computer program product. The computer program product may include a computer readable storage medium (or media) having computer readable program instructions thereon for causing a processor to carry out aspects of the present invention.

The computer readable storage medium can be a tangible device that can retain and store instructions for use by an instruction execution device. The computer readable storage medium may be, for example, non-transitory, but is not limited to, an electronic storage device, a magnetic storage device, an optical storage device, an electromagnetic storage device, a semiconductor storage device, or any suitable combination of the foregoing. A non-exhaustive list of more specific examples of the computer readable storage medium includes the following: a portable computer diskette, a hard disk, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or Flash memory), a static random access memory (SRAM), a portable compact disc read-only memory (CD-ROM), a digital versatile disk (DVD), a memory stick, a floppy disk, a mechanically encoded device such as punch-cards or raised structures in a groove having instructions recorded thereon, and any suitable combination of the foregoing. A computer readable storage medium, as used herein, is not to be construed as being transitory signals per se, such as radio waves or other freely propagating electromagnetic waves, electromagnetic waves propagating through a waveguide or other transmission media (e.g., light pulses passing through a fiber-optic cable), or electrical signals transmitted through a wire.

Computer readable program instructions described herein can be downloaded to respective computing/processing devices from a computer readable storage medium or to an external computer or external storage device via a network, for example, the

Internet, a local area network, a wide area network and/or a wireless network. The network may comprise copper transmission cables, optical transmission fibers, wireless transmission, routers, firewalls, switches, gateway computers and/or edge servers. A network adapter card or network interface in each computing/processing device receives
5 computer readable program instructions from the network and forwards the computer readable program instructions for storage in a computer readable storage medium within the respective computing/processing device.

Computer readable program instructions for carrying out operations of the present invention may be assembler instructions, instruction-set-architecture (ISA)
10 instructions, machine instructions, machine dependent instructions, microcode, firmware instructions, state-setting data, or either source code or object code written in any combination of one or more programming languages, including an object oriented programming language such as Smalltalk, C++ or the like, and conventional procedural programming languages, such as the "C" programming language or similar
15 programming languages. The computer readable program instructions may execute entirely on the user's computer, partly on the user's computer, as a stand-alone software package, partly on the user's computer and partly on a remote computer or entirely on the remote computer or server. In the latter scenario, the remote computer may be connected to the user's computer through any type of network, including a local area
20 network (LAN) or a wide area network (WAN), or the connection may be made to an external computer (for example, through the Internet using an Internet Service Provider). In some embodiments, electronic circuitry including, for example, programmable logic circuitry, field-programmable gate arrays (FPGA), or programmable logic arrays (PLA) may execute the computer readable program
25 instructions by utilizing state information of the computer readable program instructions to personalize the electronic circuitry, in order to perform aspects of the present invention.

Aspects of the present invention are described herein with reference to flowchart illustrations and/or block diagrams of methods, apparatus (systems), and computer
30 program products according to embodiments of the invention. It will be understood that each block of the flowchart illustrations and/or block diagrams, and combinations of

blocks in the flowchart illustrations and/or block diagrams, can be implemented by computer readable program instructions.

These computer readable program instructions may be provided to a processor of a general purpose computer, special purpose computer, or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processor of the computer or other programmable data processing apparatus, create means for implementing the functions/acts specified in the flowchart and/or block diagram block or blocks. These computer readable program instructions may also be stored in a computer readable storage medium that can direct a computer, a programmable data processing apparatus, and/or other devices to function in a particular manner, such that the computer readable storage medium having instructions stored therein comprises an article of manufacture including instructions which implement aspects of the function/act specified in the flowchart and/or block diagram block or blocks.

The computer readable program instructions may also be loaded onto a computer, other programmable data processing apparatus, or other device to cause a series of operational steps to be performed on the computer, other programmable apparatus or other device to produce a computer implemented process, such that the instructions which execute on the computer, other programmable apparatus, or other device implement the functions/acts specified in the flowchart and/or block diagram block or blocks.

The flowchart and block diagrams in the Figures illustrate the architecture, functionality, and operation of possible implementations of systems, methods, and computer program products according to various embodiments of the present invention.

In this regard, each block in the flowchart or block diagrams may represent a module, segment, or portion of instructions, which comprises one or more executable instructions for implementing the specified logical function(s). In some alternative implementations, the functions noted in the block may occur out of the order noted in the figures. For example, two blocks shown in succession may, in fact, be executed substantially concurrently, or the blocks may sometimes be executed in the reverse order, depending upon the functionality involved. It will also be noted that each block of the block diagrams and/or flowchart illustration, and combinations of blocks in the

block diagrams and/or flowchart illustration, can be implemented by special purpose hardware-based systems that perform the specified functions or acts or carry out combinations of special purpose hardware and computer instructions.

The flowchart and block diagrams in the Figures illustrate the architecture, functionality, and operation of possible implementations of systems, methods and computer program products according to various embodiments of the present invention. In this regard, each block in the flowchart or block diagrams may represent a module, segment, or portion of code, which comprises one or more executable instructions for implementing the specified logical function(s). It should also be noted that, in some alternative implementations, the functions noted in the block may occur out of the order noted in the figures. For example, two blocks shown in succession may, in fact, be executed substantially concurrently, or the blocks may sometimes be executed in the reverse order, depending upon the functionality involved. It will also be noted that each block of the block diagrams and/or flowchart illustration, and combinations of blocks in the block diagrams and/or flowchart illustration, can be implemented by special purpose hardware-based systems that perform the specified functions or acts, or combinations of special purpose hardware and computer instructions.

The descriptions of the various embodiments of the present invention have been presented for purposes of illustration, but are not intended to be exhaustive or limited to the embodiments disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art without departing from the scope and spirit of the described embodiments. The terminology used herein was chosen to best explain the principles of the embodiments, the practical application or technical improvement over technologies found in the marketplace, or to enable others of ordinary skill in the art to understand the embodiments disclosed herein.

As used herein the term “about” refers to $\pm 10\%$.

The terms "comprises", "comprising", "includes", "including", "having" and their conjugates mean "including but not limited to". This term encompasses the terms "consisting of" and "consisting essentially of".

The phrase "consisting essentially of" means that the composition or method may include additional ingredients and/or steps, but only if the additional ingredients

and/or steps do not materially alter the basic and novel characteristics of the claimed composition or method.

As used herein, the singular form "a", "an" and "the" include plural references unless the context clearly dictates otherwise. For example, the term "a compound" or "at least one compound" may include a plurality of compounds, including mixtures thereof.

The word "exemplary" is used herein to mean "serving as an example, instance or illustration". Any embodiment described as "exemplary" is not necessarily to be construed as preferred or advantageous over other embodiments and/or to exclude the incorporation of features from other embodiments.

The word "optionally" is used herein to mean "is provided in some embodiments and not provided in other embodiments". Any particular embodiment of the invention may include a plurality of "optional" features unless such features conflict.

Throughout this application, various embodiments of this invention may be presented in a range format. It should be understood that the description in range format is merely for convenience and brevity and should not be construed as an inflexible limitation on the scope of the invention. Accordingly, the description of a range should be considered to have specifically disclosed all the possible subranges as well as individual numerical values within that range. For example, description of a range such as from 1 to 6 should be considered to have specifically disclosed subranges such as from 1 to 3, from 1 to 4, from 1 to 5, from 2 to 4, from 2 to 6, from 3 to 6 etc., as well as individual numbers within that range, for example, 1, 2, 3, 4, 5, and 6. This applies regardless of the breadth of the range.

Whenever a numerical range is indicated herein, it is meant to include any cited numeral (fractional or integral) within the indicated range. The phrases "ranging/ranges between" a first indicate number and a second indicate number and "ranging/ranges from" a first indicate number "to" a second indicate number are used herein interchangeably and are meant to include the first and second indicated numbers and all the fractional and integral numerals therebetween.

It is appreciated that certain features of the invention, which are, for clarity, described in the context of separate embodiments, may also be provided in combination in a single embodiment. Conversely, various features of the invention, which are, for

brevity, described in the context of a single embodiment, may also be provided separately or in any suitable subcombination or as suitable in any other described embodiment of the invention. Certain features described in the context of various embodiments are not to be considered essential features of those embodiments, unless
5 the embodiment is inoperative without those elements.

Although the invention has been described in conjunction with specific embodiments thereof, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, it is intended to embrace all such alternatives, modifications and variations that fall within the spirit and broad scope
10 of the appended claims.

All publications, patents and patent applications mentioned in this specification are herein incorporated in their entirety by reference into the specification, to the same extent as if each individual publication, patent or patent application was specifically and individually indicated to be incorporated herein by reference. In addition, citation or
15 identification of any reference in this application shall not be construed as an admission that such reference is available as prior art to the present invention. To the extent that section headings are used, they should not be construed as necessarily limiting.

WHAT IS CLAIMED IS:

1. A computer-implemented method for tracking trends in card games comprising:
obtaining the results of a plurality of individual sessions of a card game, and the cards for the plurality of the individual sessions from a single pool of cards including a fixed amount of cards;
transforming the results of each individual session into a bar for a bar chart, the bar defined by a plurality of parameters associated with the values assigned to the cards in accordance with the rules of the card game; and,
adding each bar for each successive individual session to a bar chart in a consecutive order corresponding to the order of each individual session.
2. The computer-implemented method of claim 1, wherein the bar includes a candlestick and the bar chart includes a candlestick chart.
3. The computer-implemented method of claim 1 or 2, wherein the each individual session of the plurality of sessions includes a baccarat session.
4. The computer-implemented method of claim 1 or 2, wherein the each individual session of the plurality of sessions includes a blackjack session.
5. The computer-implemented method of claim 1 or 2, wherein the each individual session of the plurality of sessions includes a Hi Lo session.
6. The computer-implemented method of claim 2, wherein the parameters include values for Open, Close, High and Low.
7. The computer-implemented method of claim 1, wherein the results are for individual players and the bar charts are for each individual player for the card game.
8. The computer-implemented method of claim 2, wherein the results are for individual players and the candlestick charts are for each individual player for the card game.

9. A computerized system for tracking trends in card games, comprising:
- a storage medium for storing computer components; and,
 - a processor for executing the computer components, the computer components comprising:
 - a first component for obtaining the results of a plurality of individual sessions of a card game, and the cards for the plurality of the individual sessions from a single pool of cards including a fixed amount of cards;
 - a second component for transforming the results of each individual session into a bar for a bar chart, the bar defined by a plurality of parameters associated with the values assigned to the cards in accordance with the rules of the card game; and,
 - a third component for adding each bar for each successive individual session to a bar chart in a consecutive order corresponding to the order of each individual session.
10. The computerized system of claim 9, wherein the bar includes a candlestick and the bar chart includes a candlestick chart.
11. The computerized system of claim 9 or 10, wherein the each individual session of the plurality of sessions is selected from the group consisting of a baccarat session, a blackjack session and a HiLo session.
12. The computerized system of claim 10, wherein the parameters include values for Open, Close, High and Low.
13. The computerized system of claim 9, wherein the results are for individual players and the bar charts are for each individual player for the card game.
14. The computerized system of claim 10, wherein the results are for individual players and the candlestick charts are for each individual player for the card game.

15. A computer usable non-transitory storage medium having a computer program embodied thereon for causing a suitable programmed system for tracking trends in card games, by performing the following steps when such program is executed on the system, the steps comprising:

obtaining the results of a plurality of individual sessions of a card game, and the cards for the plurality of the individual sessions from a single pool of cards including a fixed amount of cards;

transforming the results of each individual session into a bar for a bar chart, the bar defined by a plurality of parameters associated with the values assigned to the cards in accordance with the rules of the card game; and,

adding each bar for each successive individual session to a bar chart in a consecutive order corresponding to the order of each individual session.

16. The computer usable storage medium of claim 15, wherein the bar includes a candlestick and the bar chart includes a candlestick chart.

17. The computer usable storage medium of claim 15 or 16, wherein the each individual session of the plurality of sessions is selected from the group consisting of a baccarat session, a blackjack session and a HiLo session.

18. The computer usable storage medium of claim 16, wherein the parameters include values for Open, Close, High and Low.

19. The computer usable storage medium of claim 15, wherein the results are for individual players and the bar charts are for each individual player for the card game.

20. The computer usable storage medium of claim 16, wherein the results are for individual players and the candlestick charts are for each individual player for the card game.

21. A computer-implemented method for tracking trends in games comprising:
obtaining the results of a plurality of individual sessions of a game;

transforming the results of each individual session for each individual player of the game into a bar for a bar chart for the individual player, the bar defined by a plurality of parameters associated with the values assigned to the game components in accordance with the rules of the game; and,

adding each bar for each successive individual session to a bar chart for the individual player, in a consecutive order corresponding to the order of each individual session.

22. The computer-implemented method of claim 21, wherein the bar includes a candlestick and the bar chart includes a candlestick chart.

23. The computer-implemented method of claim 22, wherein the parameters include values for Open, Close, High and Low.

24. The computer-implemented method of claim 21, 22 or 23, wherein the game is a card game and the game components include cards.

25. The computer-implemented method of claim 24, wherein the cards for the plurality of the individual sessions of the card game are from a single pool of cards including a fixed amount of cards.

26. The computer-implemented method of claim 25, wherein the each individual session of the plurality of sessions of the card game is selected from the group consisting of a baccarat session, a blackjack session and a HiLo session.

27. The computer-implemented method of claim 21, 22 or 23, wherein the game is roulette and the game components include characters.

28. The computer-implemented method of claim 27, wherein the characters include numbers.

29. A computerized system for tracking trends in games, comprising:

a storage medium for storing computer components; and,
a processor for executing the computer components, the computer components comprising:

a first component for obtaining the results of a plurality of individual sessions of a game;

a second component for transforming the results of each individual session for each individual player of the game into a bar for a bar chart for the individual player, the bar defined by a plurality of parameters associated with the values assigned to game components in accordance with the rules of the game; and,

a third component for adding each bar for each successive individual session to a bar chart for the individual player, in a consecutive order corresponding to the order of each individual session.

30. The computerized system of claim 29, wherein the bar includes a candlestick and the bar chart includes a candlestick chart.

31. The computerized system of claim 30, wherein the parameters include values for Open, Close, High and Low.

32. The computerized system of claim 29, 30 or 31, wherein the game is a card game and the game components include cards.

33. The computerized system of claim 32, wherein the card game is selected from the group consisting of baccarat, blackjack, and HiLo.

34. The computerized system of claim 29, 30 or 31, wherein the game is roulette and the game components include characters.

35. The computerized system of claim 34, wherein the characters include numbers.