Main.js

Main.js is where we achieve all functions in the black jack game, including functions in the following :

createDeck():
This function creates the whole deck of 52 cards where there are 4 suits: "Spades", "Hearts", "Diamonds", and "Clubs", as well as 13 values: "2", "3", "4", "5", "6", "7", "8", "9", "10", "J", "Q", "K", "A" ("J", "Q", "K" all have the same weight as "10", and "A" has a weight as "11"). The deck is an array and each card is an element of the array.

createPlayers():
This function treats each player as an element of the array. Each play is also an object with property including Name, ID, Points and Hand. And there is a robot player called Player Robot while is controlled by the computer. This function takes in one parameter presenting the number of players in the game.

createPlayersUI():
This function creates players ui in the game.html page.

shuffle():
This function switches the position of two random cards for 10,000 times to ensure the fairness of the game.

dealHands():
This function alternates handing cards to each player and each player has 2 cards at the beginning.

startblackjack():
This function start the game by calling functions including createDeck(), createPlayers( ), createPlayersUI( ), shuffle( ), dealHands( ). In our version of game, we set the number of human player as 1, so the parameter for the createPlayers( ) function is 1.

updateDeck():
This function updates the number of cards still in the deck in the game.html page.

renderCard():
This function takes in two parameters, the current cards of the player and the player, to update this information to the game.html page.

getCardUI():
This function create the UI design for each card, which include the value and the suit, on the game.html page.

`getPoints():`
This function returns the number of points that a player has in hand.

`updatePoints():`
This function updates the total points of all players to the game.html page.

`hitMe():`
This function pop a card from the deck to the current player and call the check()
function to see if current player new points are over 21.

`robotrun():`
This function is called when it is the turn for the Player Robot and the total point of the
Player Robot is less than 16.

`stay():`
By calling this function, the turn of the game is moved on to next player. If the next
player is the Player Robot, then this function calls robotrun() function.

`end():`
This function ends the game and determines the winner.

`check():`
This function checks if the total points of the player is bigger than 21.