Project Overview

A 21 game is designed using the python codes. The player can only use maximum 100 shots at a time. 21 game is also known as blackjack, it means the total sum of the first 2 cards of the player is 21.

A card from 2 to 10 of every type has got the value of the respective number, the face cards have the value of 10, and Aces are valued as 1 or 11 that depends upon the user.

The dealer gives two card to each player and then if the player wants more card he will say hit then dealer will give him more cards until the player says stand or no more cards.

If the sum of the player card is over 21 the player is busted out.

Then the game goes to the next chance

Playing Cards

A standard deck of playing cards has four suits (Hearts, Diamonds, Spades and Clubs) and thirteen values (2 through 10, Jack, Queen, King and Ace) which makes a total of 52 cards per deck. Jacks, Queens and Kings all have a value of 10. Aces have a value of either 11 or 1 as needed to reach 21 without busting.

The Game

Step 1: Imports and Global Variables

Import the random module, to shuffle the deck before dealing.

Declare variables to store suits, ranks and values.

Declare a Boolean value to be used to control while loops to control the flow of the game.

Step 2: Created a Card class

Step 3: Created a Deck class

Step 4: Created a hand class

Step 5: Created a Shots class

Step 6: Created a function for taking bets

Since we’re asking the user for an integer value, this would be a good place to use try/except. Remember to check that a Player's bet can be covered by their available chips.

Step 7: Created a function for taking hits

Step 8: Created a function prompting the Player to Hit or Stand

Step 9: Created a function to display cards

Step 10: Creates a function to handle to end of game scenarios

Step 11: Successful implementation of the game

By entering required values

Welcome to the 21 game! Get as close to 21 as you can without going over!

Dealer hits until she reaches 17. Aces count as 1 or 11.

How many shots would you like to bet? 5

Would you like to Hit or Stand? Enter 'h' or 's' h

Would you like to play another hand? Enter 'y' or 'n' n

Thanks for playing!