Blackjack 21Game Documentation

Rough Notes

- Make a class for player and computer

- This class will contain

- A random number generator for each card

- Ask player if they want another card

- If card is an ace ask what value they want to give it

Output Sketch

Welcome to BlackJack 21

Your first card is a "Jack"

Your second card is a "Ace"

Computer's first card is a "5"

Computer's second card is a "Jack"

What value would you like to give your Ace: 11

You Win

Class

**Game Class**

Card - this method will generate a random number from 1 - 13 in which 1 will be treated as an ace and 11, 12, 13 will be treated as Jack, King, Queen respectively, and they will be assigned their points

Over21 - this method checks to see if either the player or the computer's cards values are greater than 21, in which if they are they instantly lose

AceValue - this method records what value wants to be given to the ace card if received

Tally - method adds up the value of all cards for player

Check - this methods checks to see which player is closer to 21, whomever is closer or at 21 wins

Algorithm

- Go to method to generate two cards for user

- Go to method to generate two cards for Computer

- Ask user if they want another card

- Computer checks if it needs another card

- If User has an ace input is taken and it goes to method to record value given to ace

- A method adds the value of the cards

- A method checks to if either is above 21

- Method checks who is closer to 21 and returns a string stating the winner

Test Cases

Player has Ace and Jack

Computer has Jack and Two

Player’s Total is 21

Computer’s Total is 12

Player Wins

Player has Two and Five and King

Computer has Jack and Seven

Player’s Total is 17

Computer’s Total is 17

Draw

Player has Three and Eight

Computer has King and Nine and Ace

Player’s Total is 11

Computer’s Total is 20

Computer Wins