Design Specification for solitaire Blackjack (Console Version)

1. Print Intro to Game. Go to step (2

* Game rules
* Cap limits
* Scoring

1. Start game:

* Shuffle the main deck containing fifty-two-cards
* The deck consists of (Spades, Clubs, Hearts, Diamonds) numbered

one to thirteen (1 – 13) for each suit.

* Display the number of cards in the deck to the player

- this number changes over the course of the game

* Go to step (3)

1. Ask player if they want to play a round

* If user types “No”, game ends
* If user types “Yes” then a round is initiated by going to step (4)

1. Round:
   * Round Starts:

* Program deals to the player two random cards from the shuffled deck
* The sum of the hand (all cards in dealt hand) is the score for that hand then the score is displayed to the player
* The player can request to draw a new card, or the player can “stay” with its current hand ending the round

- provided “sum cap” isn’t exceeded when card is requested

* If a new card is requested

- the value of the new card increases the score of the hand prompting a new display of the new score to the player

* During the drawing process

- if the score at any point becomes greater than twenty-one (sum cap)

- round is automatically ends

- a score of zero is given for the round

* the cards dealt to player over after the end of each round are discarded for the remainder of the game.

When the player decides to stay in any given round and hasn’t gone over twenty-one:

* If the player stays on a hand between twelve and twenty-one (inclusive)that hand is a winning hand the sum of the hand becomes the score the player is given for that particular round

- all winnings are

* if the player “stays” on a hand that is less then twelve

- the round is lost and a score of zero is given for the round

* Each card is dealt from the same deck of cards (the main deck)
* Step 3 is repeated here

1. Game ends when the player has either run out of cards in the deck (deck value is zero) or has answered “No” any time step 3 occurs
2. When the game has ended

- the final average of all the winning hands throughout the game is displayed to the player