Use Cases:

An overview of the functionality of the system in terms of actors, who are persons that play a role in one or more interactions with the system, is described below:

1. System:

The system performs the following actions to run the game.

* 1. Start – The system launches the game on start. This includes initialization of component panels in the game.
  2. Restart – It restarts the game after the game has reached its end either because the player is out of money or the deck has been fully dealt.
  3. Quit – The game is stopped and the system shuts down.
  4. Deal Cards – The system deals the first hand to the player after receiving bets. It also adds cards to the hand as per demand.
  5. Shuffle – It shuffles all the cards in the deck.
  6. Payout – It checks the dealer’s and player’s hands values and decides the winner based on standard BlackJack rules.
  7. Push – When the dealer’s and player’s hands have the exact same total, there is no winner and the bets are returned.

1. Player:

Player can perform the following actions.

* 1. Bet – He can place bets for each hand from his available money. He starts with an initial available money of $1000 and minimum bet is $10.
  2. Hit – He can add a new card to his hand. This action can be performed until he chooses to stand or gets busted (hand>21).
  3. Stand – He can opt to stand at a certain value of the hand and take no more cards ending his turn. This will initiate the Dealer’s turn.

1. Dealer:

Dealer can perform the following actions.

* 1. Hit – Dealer starts his turn and hits to add a new card to his hand as per the rules of hitting. Dealer must hit to 16.
  2. Stand – He stands at any value greater than or equal to 17 and can hit no more.
  3. Flip – The second card of the dealer’s hand is initially not disclosed. It is flipped to disclose once the dealer’s turn starts.
  4. Clear Hand – Dealer can clear the cards in his hand for a new hand/game.