syst 17796 Deliverable 2

Blackjack Card Game

# Overview

Outlined in this document is the Class Diagram As well as a more in-depth look at what are app will do as well as some other features that we hope will be put into the game.

## Project Background and Description

When the game starts up you will be asked for your name. Once the user enters his/hers name they will be given $10,000 and must make the opening bet. Once the bet is made the Cards will be dealt; one to the player one to the dealer face down and then one to the player and another to the to the dealer this time face up. Once all the cards are dealt the player will be given the option to hit or stand. However, once the player goes over 21 before the face down card is turned over, they lose. Once they stay/stand, they dealer will reveal his hand as well as the players hand and the closets to 21 will get the win. If there is a tie it is a split pot. The player will win if he gets to $20,000. The player will lose if he loses all his money.

## Design Considerations

**(Figure 1.1)**

In figure 1.1 you can see we have multiple classes as well as a couple of objects. We have the card object as well as the CardHand class. The Card object which holds the number of cards (Deck). The CardHand holds the players cards when the cards are dealt. If you look at the object, we broke up the cards into suit and Value and later randomize them in the card object. We also made sure that there are only 4 suits as well as make sure that each suit only has a total of 13 cards (Ace-King).

The class we have added is the Winner/Losing class to determine the winner of game as well as determining the loser of the game. It calls the player object as well as the player hand. It checks the and against the Dealers hand which is in the CardHand Class, against the players hand which is also in the CardHand class. It checks which player has the highest hand as well as checking if either the player or Dealer has Blackjack. The Player object also holds the players Amount of money and also checks if they meet the win condition in the Winner Class.