

Andrea Ezeobiejesi

10/06/2018

CS 482

Software Engineering

Assignment 1: Updated Design

I used a Model-View-Controller structure for the underlying design of my SimpleBlackJack App. I had 7 classes: Card, Deck, Dealer, Player, SimpleBlackJackGame, Controller, and MainActivity. The Card class represents a single card out of the two decks of playing cards. The Deck class extends the ArrayList class and represents a single deck of cards. Deck has a method that loops through card objects, setting the appropriate fields. The Dealer class represents the CPU and the Player class represents the user who is playing the game. Both the dealer and the player have a list of 5 cards, all of which are randomly selected from the deck. The SimpleBlackJackGame is the primary class in the model -it enforces the rules of BlackJack for the purposes of the app. This class selects cards from the deck, checks the scores of the dealer and player, and determines when the game has been won. The Controller class is the controller in the Model-View-Controller hierarchy and functions as an interface between the graphical user interface and the model. The Controller evaluates the player's interaction with the View (represented by the XML layout files), relays this information to the Model, and gets a response from the Model to relay back to the user through the View. The MainActivity class is the default class created by Android for when the app starts up. It has a background picture and a button that allows the user to start a new game. **Please see the updated UML Diagram below:**

