Zachary Kuchar Senior Project Paper 2 2-27-19

My Senior Project has been coming along through the first three weeks. Most game functionality has been completed. These next few weeks will involve finishing up the functionality that I have yet to program, as well as implement an online mode for games that could do so.

Week four starts off with finishing up the work I am performing on the solitaire game. I start by fixing the problems involving moving multiple cards at once. The problem seemed to occur with how I was handling the condition. While trying to change what the number was by subtracting or adding a one, a two-digit number with a one at the end would be created. This would make the program act like the set of cards to be moved could not be moved. Luckily, I was able to fix this problem with a similar method that I had used before. By putting a plus sign in front of the values that I was using, I was able to put adjust the values in the manner that I wanted. The next thing that I worked on was methods of dealing with an empty row, and how to move a king. Starting off, I set up the view so that I card back face would be displayed when a row is empty. I set up the id of a card displayed in a blank row to a value of empty. When moving a kind, it checks if the id pulled in is the word empty. If it is not, then it will not allow the move to happen. Finally, I moved into setting up how to remove a row of cards and calculate how to win the game. This part of the game was a bit tricky to set up. I needed to look at each row and determine if a row contained all the necessary cards in the correct order. If the row did, I would remove those respective cards and then place a king card down in a separate row to show that we have completed a row. I had to do some finicking with some if statements and variables in order to get this to work properly. I set up different variables with if statements that functioned based off what those variables were. In the end, I managed to get the function working as I intended it to. With the game at near completion, I took some time to look into switching the app to run on Node.js. Unfortunately, this presented more trouble then I thought that it would. There were multiple files required for a Node app to be deployed to Heroku. Even while being guided through an example, I experienced problems. I had managed to successfully run the app locally, however, I was not able to upload to Heroku successfully. Eventually, I was able to figure out the problem, and then get a test app working on Heroku in Node.js. Sadly, I could not get any further work done before the week ended.

I started off Week five by learning some things about node.js apps in Heroku. The first job was to determine how to load up a webpage. This would allow the main page to be loaded when the app is first run. The next step was to learn about Websockets. The objective here was to learn how to set up websocket servers for the games to be given an online mode.