Analysis

Reflecting back on my informal specification I implemented all the methods/classes I thought I would require plus extra methods that I did not think I would require.

Within my GUI class I realized that I did not only need to split the main JPanel into 3 sections but split each up each of the 3 sections again allowing me to edit the different JPanels with out affecting the rest of my gui. Creating the JButtons and displaying them to the gui was a simple task but linking them to an action was slightly more difficult. I discovered that when using action listeners an actionPerformed() method must be created which links the buttons to different actions depending on what button is pressed. I also came across difficulty when trying to print my map to the gui as the method I was using to print my map was ending with a System.out.println() meaning that the map was being printed to the terminal not the gui. After research I realized to over come this problem I needed to edit my map printing method so that it would return a string to that I could print it to a JTextArea within the gui.

To get my graphic pane to work it took extensive research as I had a basic of idea how I thought I could implement the pane but this did not work initially. I discovered that to create a graphic pane for my map I had to set each element in my map array to JLabels and to then loop through each line of the map, splitting each line into characters, and using if loops to set an icon depending on what the current character was.

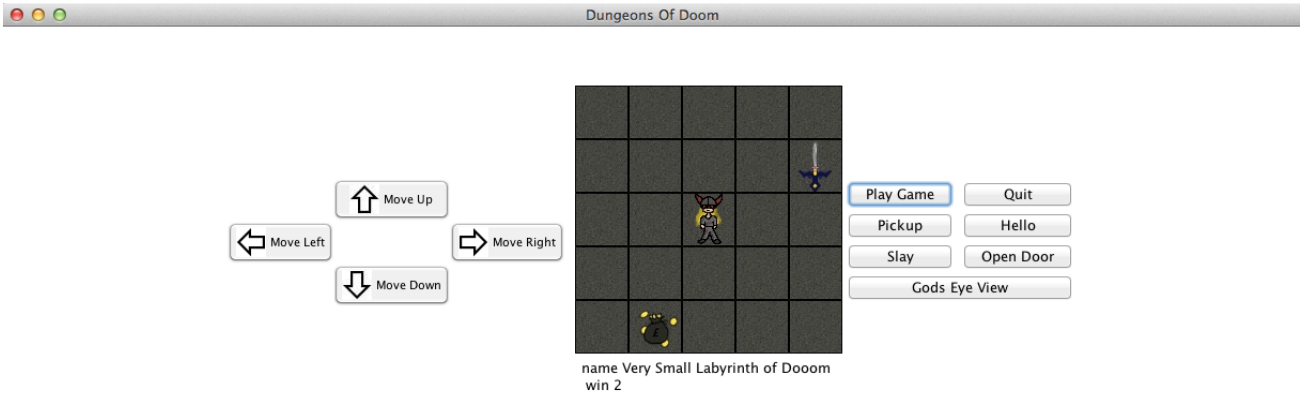
Implementing the extra interactions for the player was a fairly simple process. I decided to add the locked door and the key as I specified in the informal specification but I then decided to extend this by adding a dragon, which must be slayed by using a sword, which can be found on the map. These were simple to implement as the slayDragon() and openDoor() methods were very similar to my pre existing pickup() method so I could use the same principles for these methods.

To create my gods eye view I used the code I thought I would use which was the code I used to create my graphic pane but I struggled to figure out how to bring the gods eye view up in a new gui. I realized to do this I had to create a new class, which created its own, new, gui that contained the code to create the gods eye view map. I then extend the processCommand() method in Game Logic so that it can deal with the command 'GodsEye' . When 'GodsEye' is passed into processCommand(), via the clicking of a button in the gui, a new GodsGUI object is created which causes a new gui to open containing the gods eye view.

I believe my code to be written well but it is not written to handle exceptions extremely well, which can cause problems. If I could begin again I would make sure to make my code more robust by adding more try catch statements to catch any possible errors that could arise whilst the game is running. Due to time constraints I was not able to solve the issue that if the player walks over a door/dragon without unlocking/slaying it the player can still continue. If I was able to do this again I would make sure the player could not continue until the door/dragon had be unlocked/slayed.

Screen shots

- This is a screen shot of the main GUI



- This is a screen shot of the gods eye view