Phase 3: Problems Encountered

1. A problem encountered during the programming was getting the buttons on the title page to work. At first the button would not appear, however, the solution to that was to call the button and add it to the panel. Next, although you can click on the button, it would not perform its specific task (e.g. exiting from the software). The solution to that was to create action listener method so that if the button is clicked on, it does a specific action (e.g. If the button is supposed to exit, it finds out which button the user pressed, and if it equals to the exit button, it exits out of the program (e.g. System.exit(0); ).
2. Another problem encountered during the programming was drawing the background image onto the pages of the program. In order to solve this problem we used another class called *ImagePanel* that extended *JPanel*. The *ImagePanel* class carried the method *paintComponent(Graphics g)* which handled drawing a desired image onto a window.
3. One other problem, although not as large as the ones aforementioned, was when I was linking the *view\_menu()* page and *HELPPAGE* class. The issue that was faced was that when the action listener for each button was called, the appropriate action was not being taken. For example, when the user clicked on “View Menu”, the original main frame would not disappear. To solve this issue, it was discovered that the method *dispose()* could be used to terminate a JFrame component. By implementing this method into the code, the user was given a seamless and less intrusive experience when using the program.
4. Finally, another problem that was faced was when properly orientating the layout of buttons and text. Although it may seem not too difficult, the task itself was very time consuming, tedious and required much attention to detail as well. Properly aligning visual components was key in providing a pleasant user experience. Therefore, to aid in solving the issue I made use of my previous knowledge in geometry and, with the aid of a calculator, was able to layout the GUI for the main page and other pages as well with precision.