Lab Report – Week 6 – *Graphical User Interface Assignment*

Issam Ahmed

CSCI 112 900 Summer 2019

Assignment Analysis and Design

In this assignment, the goal was to create a graphical interface for the Cell Phone Object class. The GUI would provide the user input fields for all the properties of the Cell Phone Object. Once the fields are filled by the user, the data is then stored into a CVS file named CellPhones.csv. This is done by using event listeners on the Enter button. A Clear button is also added to clear existing fields so that the user can enter new fields for the next Cell Phone properties.

The main method calls the Cell Phone JFrame and sets the title, location, close function and visibility. The Cell Phone JFrame uses a GridBagLayout to display all the required labels, text fields and buttons for the interface. It also includes the two event listeners and handler methods for the buttons. The Enter event listener uses previously created Object classes to export the data to a CSV file using the Cell Phones objects toString method. An error message JOptionPane is included in the Enter Button, for any user input error.

Assignment Code

The assignment code was submitted as a zip file.

Assignment Testing

For graphical interface of this assignment, a lot of testing was done. It was mostly a trial and error method to recreate the wire frame onto a JFrame. During this test, the interface had no functionality and was an empty shell. Once the desired interface was obtained, the functionality was added and tested. First, I tested to see if the fields were taking the correct data, by creating a cell phone object and then using the toString function in the console. This showed errors when a bad input was used in the number fields. This was then fixed by adding an error pop up and letting the user renter the data. Then I tested to see if the data was exported to a CSV file manually. The clear button was a simple test to see if the fields were cleared out.

Assignment Evaluation

This assignment was challenging since we had to move from a simple console interface to a graphical interface. I found this challenging since the methods and constraints were complex. I have used HTML and CSS for websites before, and they were much easier to use. The difficult part was not to put the required labels and fields in the JFrame but aligning them to be visually appealing. However, since this is my first time implementing these, I am hoping practice will help.

The actual functionality was much easier than creating the GUI. However, this is since I have done this in previous assignments and recreating it was a simple task. It was however very appealing to move from the usual console into GUI, which is much more common in the real world. One way I would try to improve this is by adding a table that shows stored data from the CSV file and shows recently added data. I included a simple status line in my JFrame for this purpose, just to give the user information of what happened. As challenging as this assignment was, at the end it was a good experience.