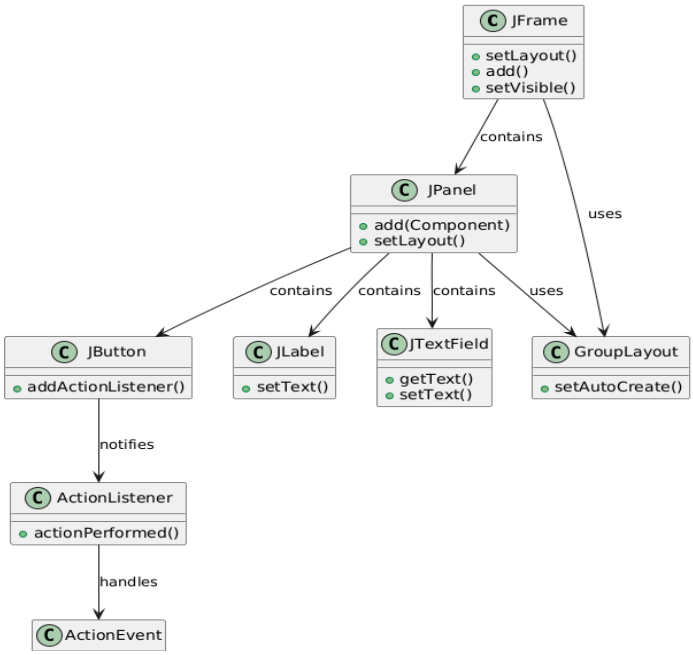
Faculty of Engineering and Applied Science
SOFE 3650U Software Design and Architecture
Assignment 2

Group #: 15
Ayomikun Adeniji Student ID: 100937024
Isaiah Godinez Student ID: 100919640
Matthew Okana Student ID: 100904308

1. Do some investigation into the Swing framework and write a short paragraph describing the purpose of the Swing framework. Submit a class diagram of the components of Swing

We did some investigating into the swing framework and found out that the swing framework is a GUI (graphical user interface) toolkit for java. It provides a lot of prebuilt components like buttons, text, fields and labels. We also found out that it uses an MVC pattern where it separates the model, view and input allowing the app to be program data independent.

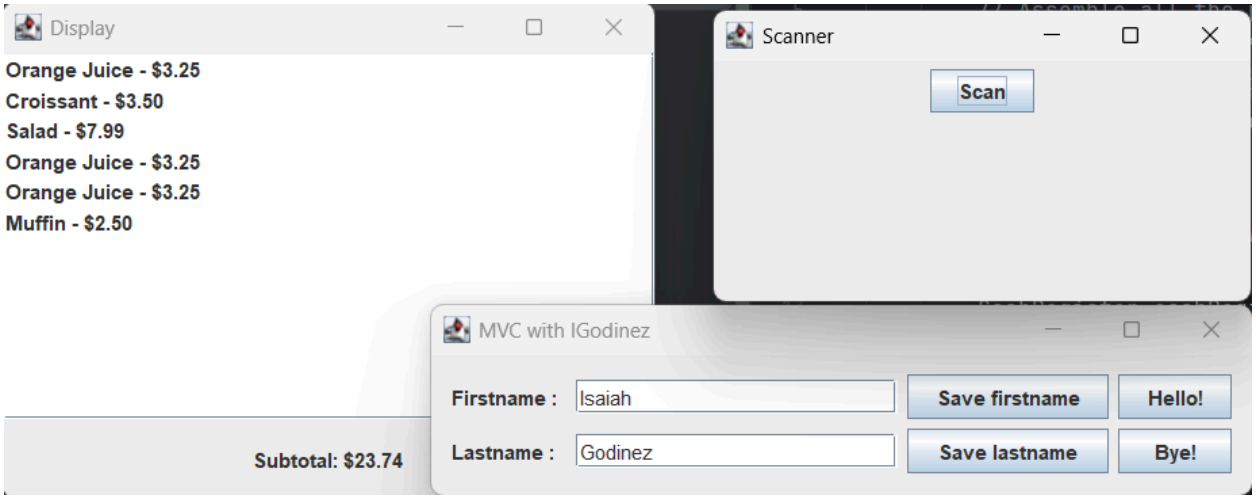
Class diagram of the components of Swing:



2. Look through the example code in the GitHub repository and explain how this example implements the MVC pattern. How does it differ from the conventional MVC pattern described in the lectures?

The example code in the Github repository implements a simple version of the MVC pattern where the model stores only the data through basic gets and sets, the view shows the basic swing components and layouts and where the controller connects them together by handling user input through action events. This differs from the MVC pattern we see in the lectures because it does not use an observer approach between the view and the model like we see in the lecture examples. This makes the github pattern less modular and more tightly coupled without any interfaces and module patterns.

3. In the repository there is another Java file that is named Scanner. This Class emulates the scanning of a product by generating a UPC code. If you press on the Scan button you will see that it prints out the “12345” code to the console. For this assignment, modify the Scanner so that each time the Scan button is pressed, it randomly selects a UPC code from a file containing product information with the following format.



4. Create a sequence diagram of your design for the scenario presented on question 3 representing a single press of the scan button.