CS341 Software Engineering

Homework 3

Objectives:
1. GitHub and EGIT
2. Model View Controller Architecture
3. Debugging

Write the application described below in Java. Commit the completed source code, including all classes and documentation, to GitHub.

Part I: Git setup

For Git to work properly, you need to Configure Git and GitHub. The purpose of configuration is to let Git/GitHub know who you are so that it can link a local Git user (you) to GitHub. When working on a team, this allows people to see what you have committed and who committed each line of code. During setup, be sure to enter your name and email.

Part II: EGIT workflow

1. Create a repository.
2. Build the project for the application described on the following page. Run, debug, and test the app locally.
3. Share the completed project on Git.
4. Stage the project.
5. Commit the project. *Don't forget to write a meaningful commit message.*
6. Validate the project move and commit.
7. Submit the Git repository URL to Moodle. This will be needed to clone and grade this assignment.

The Application

The Sales List application should allow users to enter items for purchase. Each item entry includes the item name, cost, and quantity. Assume all items will cost less than $100. Calculate the total sales after adding each item to the sales list.

Use Java classes to construct the application.

SalesItem :   Model each item on the sales list. A SalesItem object should have a name, price, and quantity. Use methods to set, get, and perform calculation operations. Write a toString() method to construct the string for a complete SalesItem object that includes name, price, and quantity.

SalesSlip :   Model the list of items. Use an **ArrayList** (or Linked List) to create the **SalesItem** objects as they are added to the list. Use methods for adding a sales item, computing the total sales, etc. Write a toString() method to construct the complete list of sales items.

Main: This is the controller that constructs the application window (containing layout views), creates events, and instantiates a **SalesSlip** object.

Sales List

Item:	Sour Cream
Cost: $	1.99
Quantity	1

Add Item to the Sales List

```
Choco Waffles      $10.45       4
Ginger Cookies     $ 2.00       1
Caramel Soda       $ 2.20       1
Wheat Tortilla     $ 3.50       1
Sour Cream         $ 1.99       1
```

Total Sales: $30.88