

## **Project 2 Milestone**

### ***Abstract***

For my final project I decided to create a shopping simulation program. The user will be able to select from a list of various products and be able to simulate an almost authentic shopping experience. In order to create and simulate a better shopping experience I added the use of a user graphic interface in which the user can see the different classes of the program being implemented and displayed. Through the use of the graphic interface, the user's interaction with the system is made made easier and the process can be completed smoother. The program consists of an Item class that defines and creates each item, A Cart class that will define and contain several accessor methods, a Shop main method where the user experience will be programmed in the main, and a graphic user interface where the user can directly interact with the system in an organized window.

### ***Introduction***

Online shopping, sometimes even through an application, is very common and useful on several of today's most popular shopping sites. By using several java coding techniques and teachings I will try to re-create a rather familiar shopping experience all coded and created with java language code. In this paper I will be describing the different classes used in the program

and how each class is equipped with unique methods that each serve a vital purpose in the overall function of the system.

The final complete Shopping program system will be run through a WindowBuilder application. Here, the user will be able to scroll through a list of different specified Items. Each with a unique id number, price and item name. The Item class also contains getter methods for each instance variable. This ensures the user will be able to view each Item object's data when the user needs to. Through the use of the Cart class, the user will be able to add specified user selected items to their "shopping" cart. There will be a tab on the user graphic interface where the user can actively view their cart as they shop to ensure easy and simple application use. The Cart class contains an ArrayList of type Item objects. This cart will be displayed to the user using a toString method at checkout. At the cart page, there will be an input bar where the user will be able to enter a possible coupon code. If the user enters a valid code, the cart may be changed in accordance to the details or specified sale associated with the discount code. Also a method that will be able to calculate sales tax will be added to the main method class program.

### ***Conclusion***

Several tasks can be completed by the system through the use of its several classes and their methods. The user can efficiently simulate a shopping program through the use of the programmed graphic interface. The interface makes the user experience much easier to follow and carry out. A variety of various items will be presented to the user where they will be given a chance to add the different Items to their cart. The simplicity that the graphic interface creates will allow for a straightforward shopping experience. My program specifically is utilizing java to create a simple, easy and uncomplicated shopping program all on a graphic interface.