

Lab Exercise 4: GUI and Event Handling

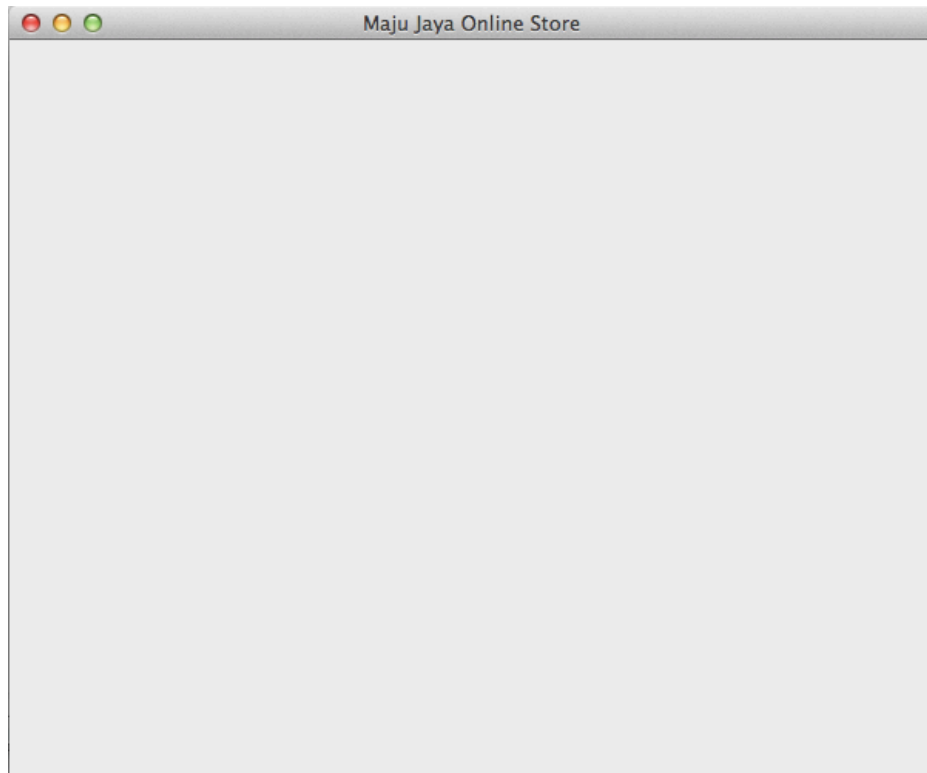
B

Problem Description

Previously you had developed an Online Shop System for Syarikat Maju Jaya Sdn. Bhd. Although the system works perfectly as required, the system users had complained that the system's user interface is very dull and boring. So, now the client wants you to upgrade the system's user interface and make it attractive and more user-friendly.

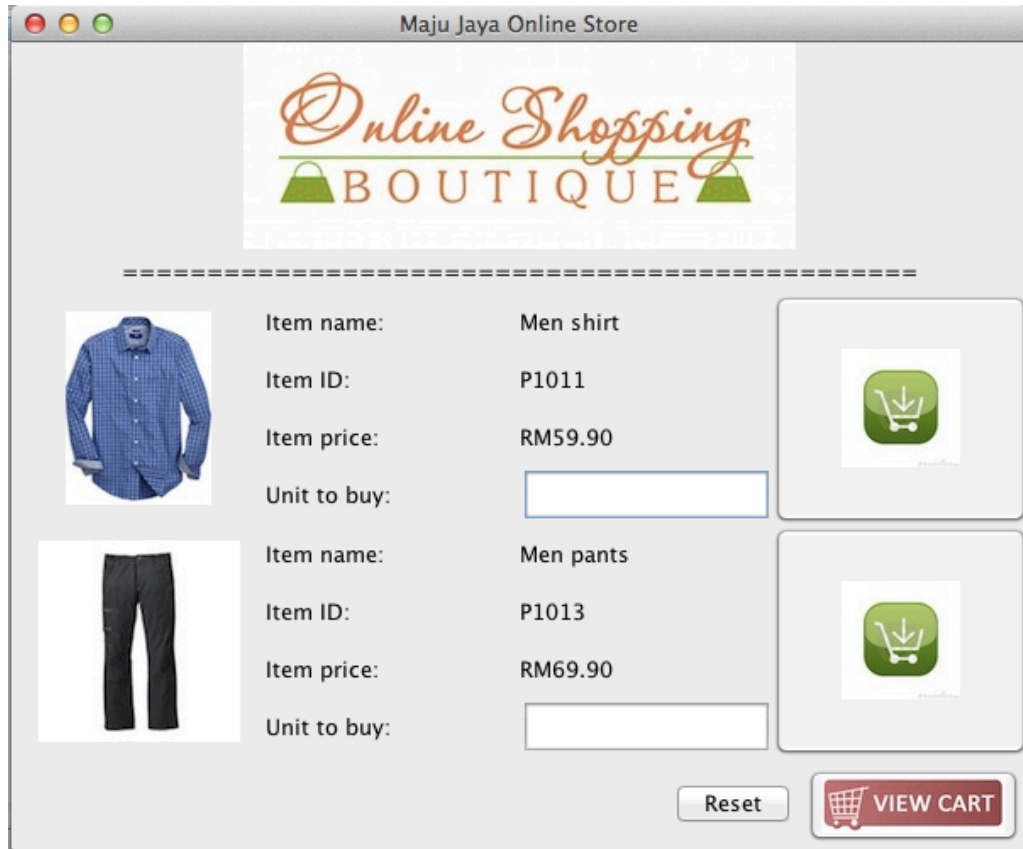
Stage 1

1. Create a Java project named `Lab4-B-Stage1-Frame`.
2. Define a class named `MainScreen` that will produce the following GUI.



Stage 2

1. Create a Java project named Lab4-B-Stage2-GUI.
2. Copy class MainScreen from your Stage 1, and modify the class so that it will produce the following GUI.



Note:

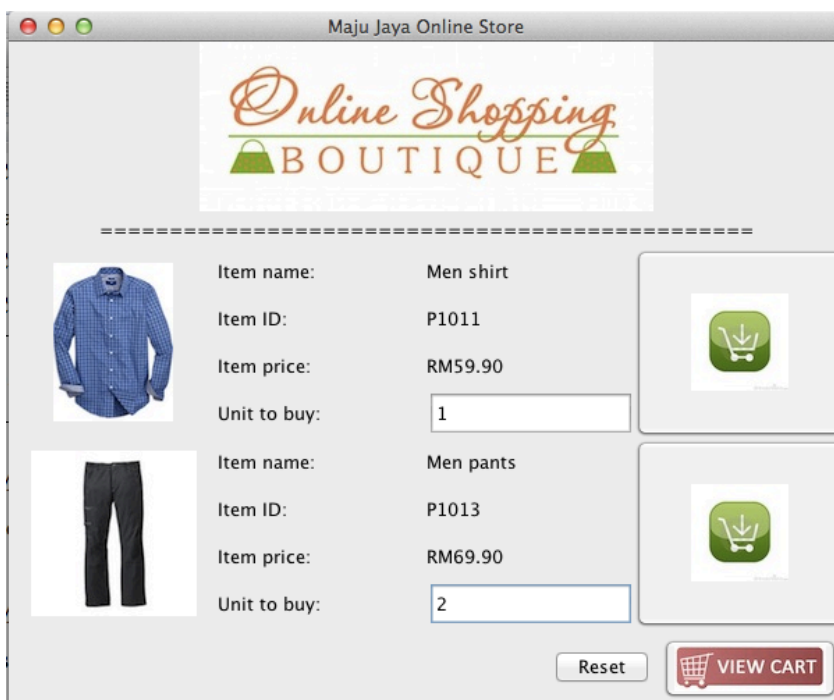
- You may refer to Java eclipse project “Lab4-B-Example1” in folder “examples” to see how to display images.
- The files of the images in the above GUI are in folder “image”.
- At this stage you do not have to implement event handling – so, nothing happens when any of the buttons (i.e. “Add to Cart”, “Reset” or “View Cart”) is clicked.

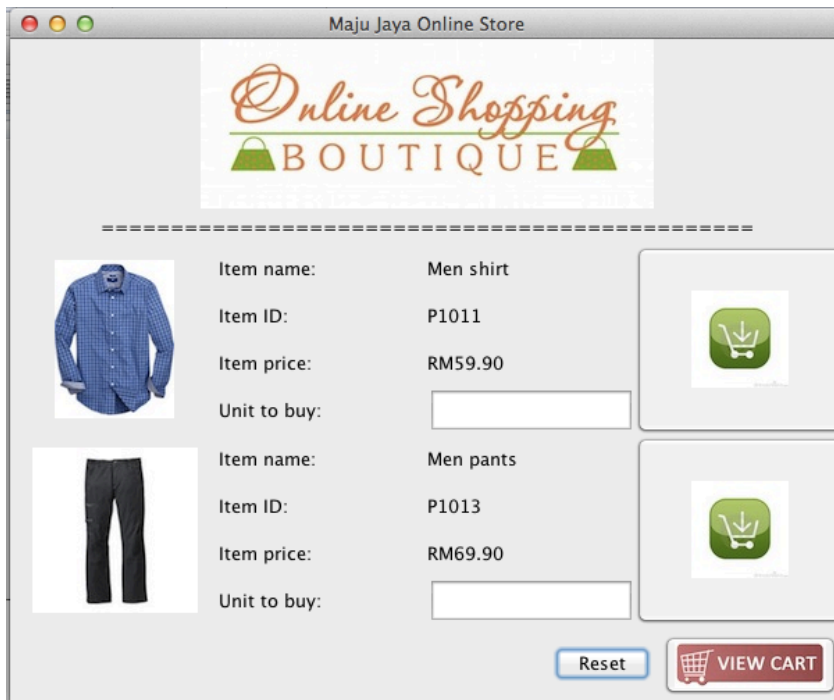
Stage 3

1. Create a Java project named Lab4-B-Stage3-Event.
2. Copy class CartScreen, Item and ShoppingCart from folder “stage3” into your Java project.
3. Copy class MainScreen from your Stage 2.
4. Copy-and-paste the following line of code into class MainScreen as instance variable.

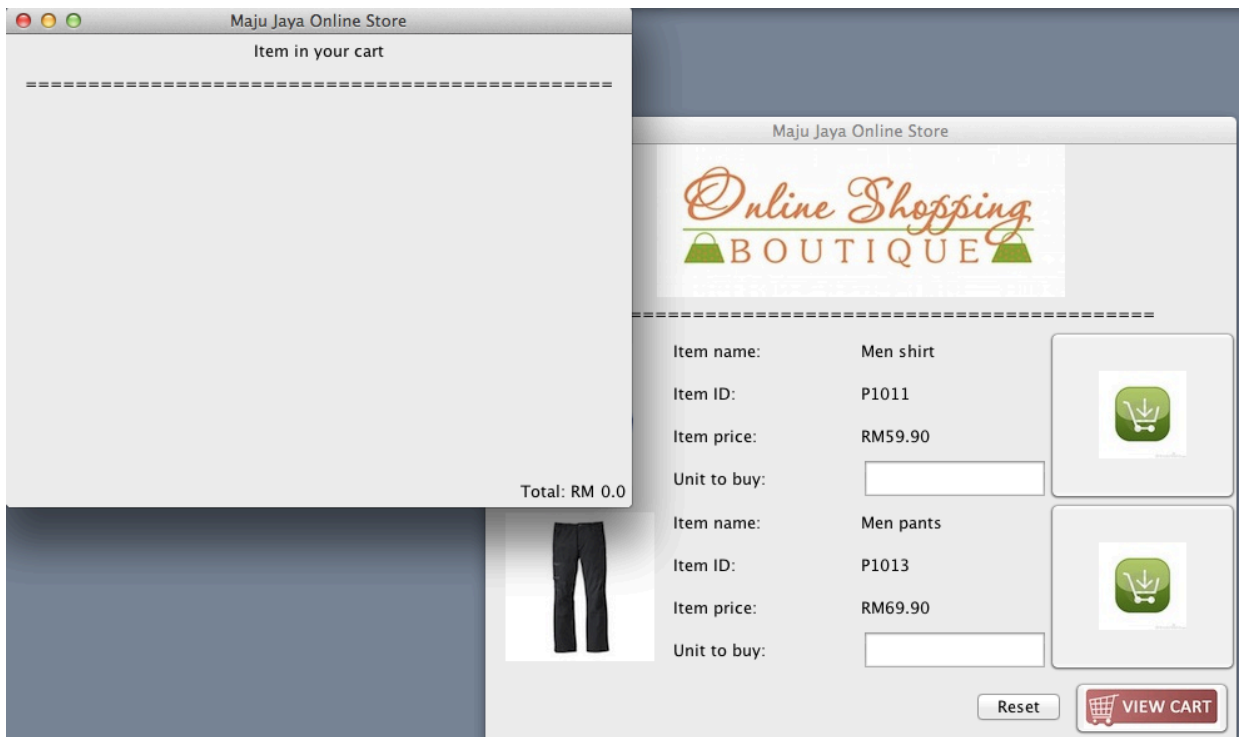
```
private ShoppingCart cart = new ShoppingCart();
```

5. Modify class MainScreen so that when the “Reset” button is clicked, all item’s unit text fields will be cleared, for example as shown below.





6. Modify class `MainScreen` so that when the “View Cart” button is clicked, `CartScreen` will appear, as shown below. You may refer to Java eclipse project “Lab4-Example2” in folder “examples” to see how to make a new screen appears, while passing an object to the new screen.



7. Modify class `MainScreen` so that when an item's unit is entered and its add-to-cart button is clicked, the item will be added into the shopping cart. To do this you MUST use class `Item` and method `addItem` in class `ShoppingCart`.

