COMP 2502 HCI Homework II Report

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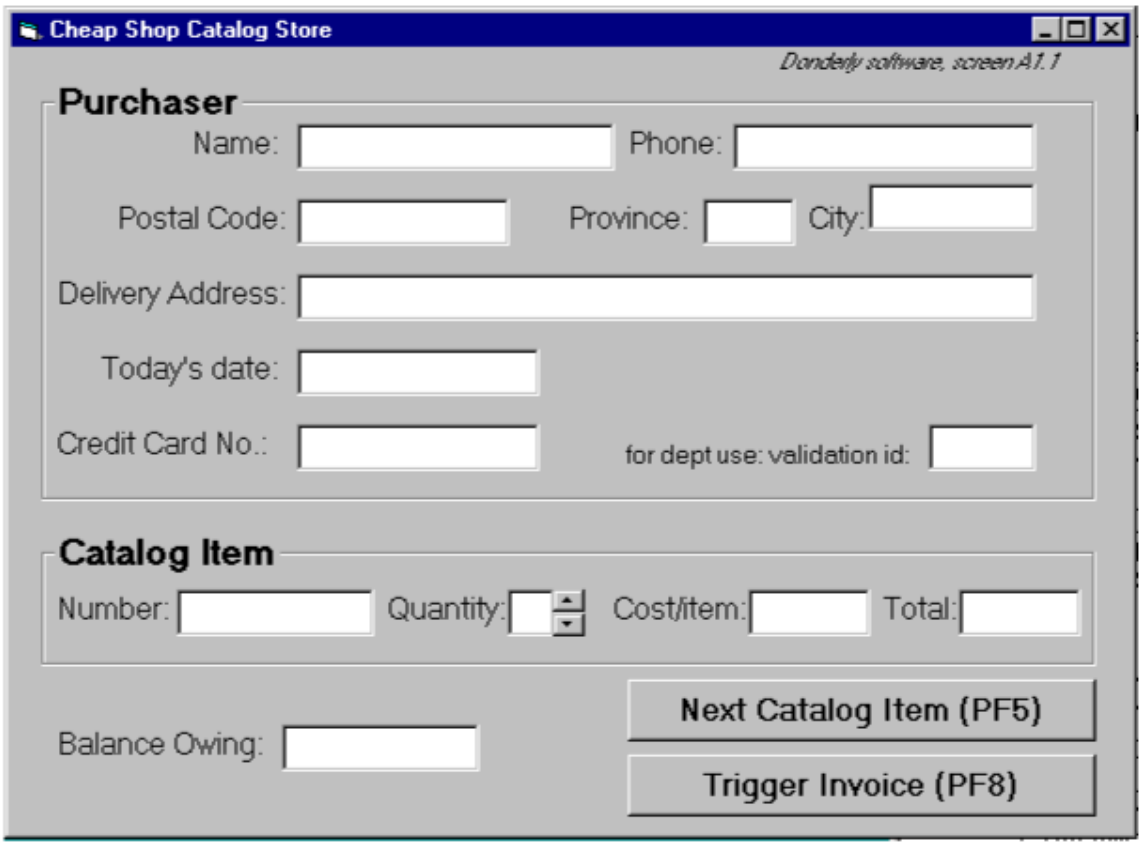
In this report, I will try to explain how I did the requested homework, in two parts: Design and implementation.

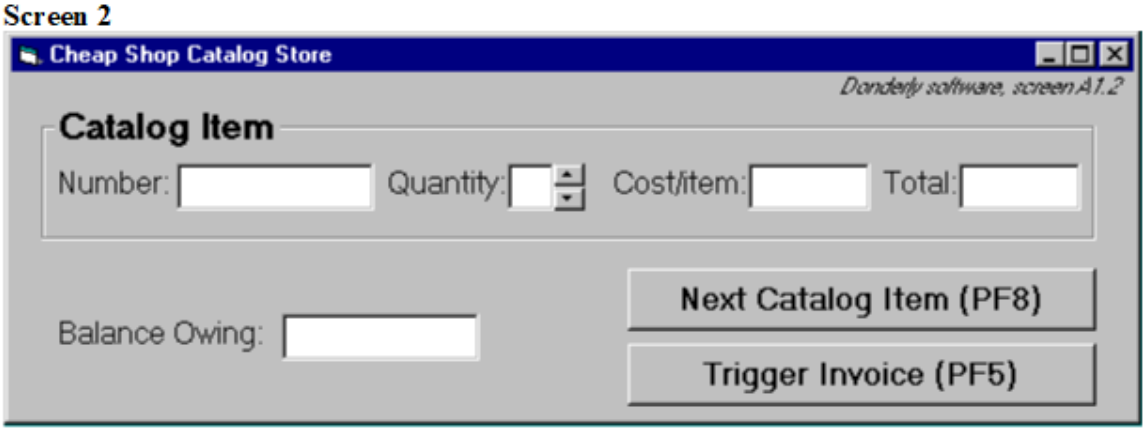
DESIGN

Everything started with me, thinking “how can I do such program?”. So I opened the Homework doc file, which tries to explain what the students have to do in this homework. In the second page, there were two screen examples.

Screen 1



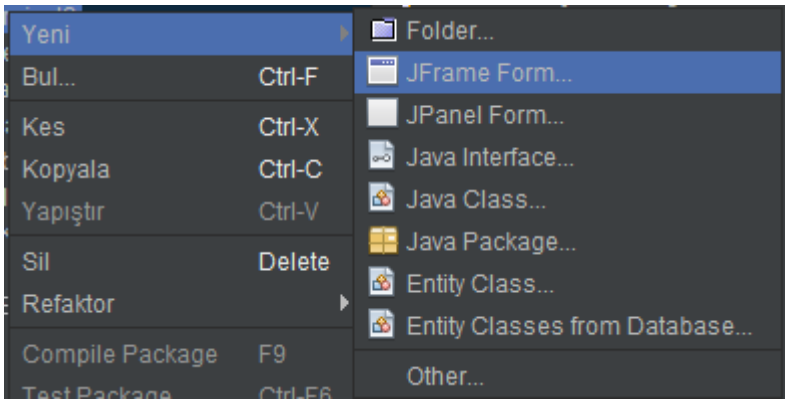
Screen 2



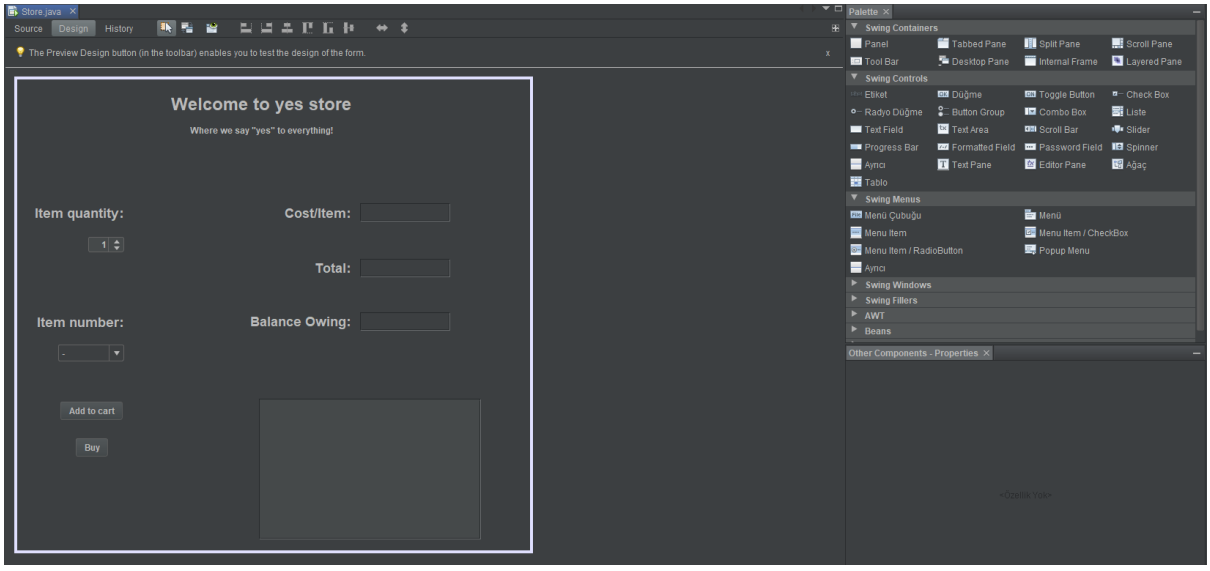
In the lecture hours, our teacher Mr. Sadık Fikret Gürgen told us the first screen is not necessary. So I do not have to do that, that is nice. So I started the designing part of the second screen which is a lot similar to the one in the homework explanation doc file. Of couse there will be some differences but the general structure is like that.

Implementation

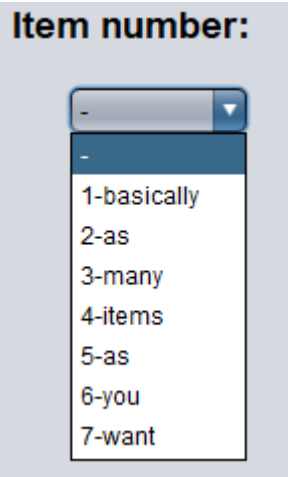
In the first homework, I did everything from scratch, every single line of code by myself. But then I realised that this is not necessary, at all. I discovered I don't have to create a class. If I create a JFrame form, my job would be more simplier, so I did it.



After that, I put some buttons, text panes, one spinner, one combo box, and one text area. Then I took the "editable" and "focusable" properties from the text panes and text area. I renames all the variables for ease coding, by right clicking them and clicking "change variable name".



First off all, I limited the Item quantity spinner, so it won't go below zero. Because you can't buy –1 items in one store. After that I added some items to buy, in the Item number combo box.



As a small funny thing, I named the items like that. Every item is a word in the sentence “Basically as many items as you want.”. Apart from the humor, one other reason of the naming the items like this, is show you I can put as many items as I want to the store, even though they would be in a combo box.

As you know, the person would want to know the prices, before they buy the item. So I wrote the code below in the combo box, so when the customer chose an item in the combo box, they will see the price int the “Cost/Item” part. (I wrote the code blow for every item.)

```
private void itemBoxActionPerformed(java.awt.event.ActionEvent evt) {

    if (itemBox.getSelectedItem().equals("1-basically")) {
        txtCostItem.setText("50");
        txtTotal.setText(Integer.toString((int) quantitySpinner.getValue() * 50));
    }
    if (itemBox.getSelectedItem().equals("2-as")) {
        txtCostItem.setText("25");
        txtTotal.setText(Integer.toString((int) quantitySpinner.getValue() * 25));
    }
```

Then I wrote the “Add to cart” button, which shows us to total price of your items. For example you added your cart 2 of the same item, you will see the price of that item doubled. Apart from that this button also shows us what we added to cart in a text area, which will be our invoice. Below you can see a glimpse of the code. Of course I wrote this code for every item. I couldn’t fit all of the code because of the low resolution of the picture.

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

    if (itemBox.getSelectedItem().equals("1-basically")) {
        total = 50 * (int) quantitySpinner.getValue();
        txtTotal.setText(Double.toString(total));
        balanceOwing += total;
        textArea.setText(textArea.getText() + "\n" + quantitySpinner.getValue() + " Product: 'basically': " + Integer.toStri
    }
```

Well, while approaching to the end, we have everthing working. Of course with a small problem. Customer has to pick the quantity first. Otherwise the “total” value sometimes won’t show proper results but It is not a big problem. The interface designed for the customer to pick the quantity first by butting the quantity spinner on top of everything.

Finally I added a “Buy” button to show proper invoice. Only thing it does is showing “balance owing” to the customer as a normal invoice would do.

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    textArea.setText(textArea.getText() + " \n-----------------------------------------------------------
            + " \nPurchase complete!\nYour total balance owing: " + Double.toString(balanceOwing)
}
```

So, for a small recap, I used a JFrame form, than I added the necessary elements and modified them. Added my items and prices of them. Solved “the small problem” by making customer pick the quantity first, and gave him a invoice.

Most important thing of all, I learned so much while making the program. And not everything from the internet. I worked like trial and error method and by this way, I learned a ton of new and usefull information.

Source

https://www.youtube.com/watch?v=VH61xyKfAbo&list=WL&index=57&t=1726s

Other than this video (which I watched like 2 minutes max) I learned everything by myself.