**Lab Assignment #2**

Due Date: **Sunday of Week 5**, 11.59pm4.

Purpose: The purpose of this lab assignment is to:

1. Use Android UI controls to develop an interactive mobile application

References: Textbook, ppt slides and Android tutorials (http://developer.android.com/guide/topics/ui/index.html). This material provides the necessary information that you need to complete the exercises.

Be sure to read the following general instructions carefully:

- This assignment must be completed **individually** by all the students.

- You will have to **demonstrate your solution in a scheduled lab session in virtual classroom** and upload the solution on eCentennial through the assignment link. See Lab 1 documentation on **naming** your Android Studio modules.

**Exercise 1**

*LeaseOrRentHome Inc*. helps its clients to find the best option for a home. Your team is assigned to develop an Android application based on the following specifications:

The **main screen** will display the company logo and a button “**Enter**”.

The **second screen** allows the potential customer to choose the **home types**:

* apartment
* detached home
* semi-detached home
* condominium apartment
* town house

Use **an options Menu control** to implement the selection of home types. Display a friendly screen with available **homes** whenever the user selects a home type from the menu. For example, if the user selects apartment home type, the next screen will display the available apartments (address, price, and image). Use **check boxes** to select the apartments that you want to visit (virtually or physically).

The user may use the **menu control** to choose another home type, and so on.

The check-out screen displays the selected homes and corresponding **addresses**, and **prices**. Use a radio group for listing selected homes. The user can now chose the home (assuming has visited all selected homes). The next screen prompts the user with **payment option** (cash, credit card, debit card). Use a group of **radio buttons** to select the payment method.

The **last screen** asks the user to enter **credit/debit card information** if the user chooses either of these payment methods.

Use *EditText* controls and other UI elements to allow the user to enter **customer’ information:** *full**name*, *credit/debit card number*. The rest of the fields will be **different for each student**. For example, you may create fields for *favorite sport*, *favorite team*, *favorite food*, etc. Create 2-3 fields named as mentioned above. Provide **validation** for these entries using the proper attributes/methods/constructor for each UI control.

Use *TextView* objects to display information as needed. Use **styles** and **themes** to create a nice look and feel of your app. Use **drawable** objects to display the logo for the company, home types, homes, etc.

Use **Application preferences** for storing user selections as the user navigates through the various screens of the application.

**(10 marks)**

**Evaluation:**

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| --- | --- |
| **Activities**:  Main activity, Home types menu, activities (one for each home type), check-out activity, payment activity, final order information activity (all working, proper naming of activities, variables, and methods. Provide comments).  Provide an explanation when asked during the demonstration of the app. | 50% |
| **Event Handling** (proper event handlers) | 25% |
| **UI friendliness** (proper layout, controls, styles, and themes) | 15% |
| **Declaring resources** in proper resource files | 5% |
| **Innovative features** | 5% |
| **Total** | **100%** |