Lab Assignment 2 – Graded 8%   🔍 Discover & Learn

The purpose of this lab assignment is to:

- Use Android UI controls to develop an interactive mobile application

Be sure to read the following general instructions carefully.

This assignment must be completed individually by all the students. You will have to upload the completed assignment on eCentennial through the assignment link under Assessments.

Due Date

Due Date: Wednesday, Jun 9 at 11:59 PM ET

Assessment Information

Total Mark: 30 marks

8% of the overall grade

Exercise

Centen Pizza offers its customers to order online pizza with home delivery or store pick-up. Customers choose various types of pizzas and toppings as they wish. You are assigned to develop an android app based on the following specifications:

1. The main screen will display the restaurant logo and a button "Order".   **[2 marks**]

2. The second screen allows the potential customer to choose the pizza types: **[6 marks]**

   - **Canadian Pizza**
   - **Chicken Caesar**
   - **Hawaiian Pizza**
   - **Smokey Maple Bacon**
   - **Veggie Lover's**

Use an options **Menu control** to implement the **selection of pizza types**. Display a user-friendly screen with pizza whenever the user selects a pizza type from the menu. For example, if the user selects the Canadian Pizza, the next screen / same screen will display **the ingredients** such as pepperoni, bacon crumble, sliced mushrooms and pizza mozzarella and **pizza image**.

 Use **check boxes** to select the pizza that you want to purchase or add into shopping cart.

The customer may use the menu control to choose another pizza, and so on.

3. In the next screen, use **spinners** to select the sizes of pizza such small, medium, large and extra-large. Use a **radio group** with **thin crust** and **thick crust** radio buttons to get the style of pizza/dough in the same screen.   **[5 marks]**

4. The **checkout screen** displays the selected pizza and other information including size of a pizza, style, toppings and price.   **[2 marks]**

5. The next screen prompts the user with a **payment option** (cash, credit card, or debit card). Use a **group of radio buttons** to select the payment method. This screen asks further the user to enter credit/debit card information such as card number, and expiry date if the user chooses one of these payment methods.   **[5 marks]**

6. The next screen asks the user to enter **customer' information**: full name, delivery address including street name, city and postal code, phone number and email address. The rest of the fields will be different for each student. For example, you may create fields for favorite sport, favorite drink, favorite food, etc. or any pizza related information. **Create 2-3 fields** named as mentioned above. Provide **validation** for these entries using the **proper input controls (xml)** and attributes/methods /constructor (java) for each GUI control.   **[5 marks]**

7. The last screen shows a **confirmation message** like "Your Pizza order successfully completed" and the **summary of the order** information such as pizza type, customer name, address, etc.   **[3 marks]**

8. Use Application **preferences or intents** for storing user selections as the user navigates through the various screens of the application.   **[2 marks]**

Android Module Naming Rules

You must name your Android Studio project according to the following rule:

yourfullname_COMP304SectionNumber_Labnumber.

Example: **johnsmith_COMP304Sec002_Lab2**

Submission - Assignment Folder

Submit your projects as **zip files** that are named according to the following rule:

yourfullname_COMP304SectionNumber_Labnumber.zip

Example: **johnsmith_COMP304Sec002_Lab2.zip**

Upload your zipped assignment file using the assignment link in e-centennial: Lab Assignment 2 - Week 5 (/d2l/common/dialogs/quickLink/quickLink.d2l?ou=658923&type=dropbox&rcode=CENCOL-2912619)

Evaluation Table:

Criteria	Percentage of total mark
Functionality: Main activity, pizza types menu, activities (one for each pizza type), checkout activity, payment activity, final order information activity, other specified activities (all working, proper naming of activities, variables, and methods. Provide comments).	40%
Virtual demo or recorded Video: Provide an explanation when asked during the demonstration of the app.	10%
Event Handling: Proper event handlers for the UI controls wherever needed.	25%
User Friendliness: Proper layouts, controls, styles and themes.	10%
Declaring resources: In proper resource files such as colors, strings, fonts and dimension etc.	5%
Innovative features/ effective way of coding.	10%
Total	**100%**

References

Textbook, online course material, Lab Session examples, and Android tutorials (https://developer.android.com/training/basics/firstapp/creating-project) This material provides the necessary information that you need to complete the exercises.