

## **Assignment #4 – Developing an Android Shopping App**

**Due Date: 12 Jul 2018, 11:59pm**

**Purpose:** The purpose of this lab assignment is to:

- Develop Android Apps using Data and Storage API

**References:** Textbook, ppt slides and Android tutorials (<http://developer.android.com/guide/topics/data/data-storage.html>,  
<http://developer.android.com/guide/topics/data/data-storage.html#db>)  
This material provides the necessary information that you need to complete the exercises.

Be sure to read the following general instructions carefully:

- This assignment **may be completed in pairs** following **pair programming** rules: <http://www.extremeprogramming.org/rules/pair.html>.
- You (pair) will have to **demonstrate your solution in a scheduled lab session** and upload the solution on e-Centennial through the **drop box** link.

### **Description and instructions**

You are developing an "**Online Shopping**" android app with a data storage facility to handle the following functionalities:

- i. Main activity with two login options one for customers and other one for order processing "Representative" (Order Rep)
- ii. Customers and Order Rep usernames will be stored in Shared Preferences after successful login.
- iii. Create another activity that allows customers to place an order. (this action can add a customer information into "Customers" table and an order information into "Orders" table)
- iv. Customers can display or view the order information once they placed an order successfully.
- v. Order Rep can view all the customer's orders and also can edit Item and Order tables.
- vi. Customers can change the order details for a certain period of time after placing an order. (For example: change the item / product or cancel the order etc.)
- vii. Order Rep can update the status value "In-Process" into "Delivered".
- viii. Provide a friendly and easy to navigate UI with the use images and image button

Create a SQLite database with following tables (Customer, OrderRep, Item and Order) and fields using SQLite classes (see the week-5 StudentDBTest example). You are free to add any missing appropriate fields in the following tables.

<b>Customer</b>	<b>OrderRep</b>	<b>Item</b>	<b>Order</b>
customerId userName password firstName lastName address postalCode	employeeId userName password firstName lastName	itemId itemName price category	orderId itemId customerId amount DeliveryDate status

**Assessment Rubrics:**

<b>Functionalities:</b> All working, proper naming of activities, variables, and methods. Provide comments. Provide explanation when asked during the demonstration of the app.	60% (Demonstration and Peer review form - 10%)
<b>SQLite Database design</b> and implementation with tables, fields and values.	20%
<b>UI friendliness</b> (proper layout, controls, styles, themes, images)	10%
Use of appropriate <b>resource files</b> and <b>Innovative features</b>	10%
<b>Total</b>	<b>100%</b>

**Android Apps - project Naming rules:**

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

**COMP304-003\_Assignment4**

**Submission rules:**

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

**Student1Name\_ Student2Name\_AssignmentNumber.zip**

Example: **John\_Smith\_Assignment4.zip**

**Both students** (pair) must submit the solution .zip files into drop box.

**Academic honesty (Plagiarism and cheating)**

All students must follow the academic honesty policies regarding Plagiarism and cheating on assignments, Quizzes or Tests. Centennial college's Academic Policy will be strictly enforced. To support academic honesty at Centennial College, all academic work submitted by students may be reviewed for authenticity and originality, with utilizing software tools.

For more details, please visit the Academic Honesty site on

<https://www.centennialcollege.ca/mycentennial/your-support/academic-support/student-academic-advising/academic-honesty/>