

MOBILE APPLICATION DEVELOPMENT COMP 304-003

ASSIGNMENT 2

09-Feb-2019

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

- Use Android UI controls to develop an interactive mobile application
- Use an appropriate layout to design UI.
- Use of resource files to enhance the App.

Rules: *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 and upload the solution on e-Centennial through the assignment link (Drop box).

Android Application Naming rules: *You must name your Android Studio application according to the following rule:*

YourName_COMP304_003_AssignmentNumber.

Example: johnsmith_COMP304_003_Assign2

1. Description and Instructions:

A movie theater approached you to develop an Android application which allows the audience to buy a ticket using their smart phone and consider the following instructions. The main screen will display a theater logo (it may be a real - cineplex or imaginary theater) and a button labelled "Buy Your Ticket".

The second screen allows the audience to choose the movie list (Glass, Bumblebee, Escape Room, Replicas and The Mule). Use a menu to implement this list. The next screen prompts the audience to click on the preferred showtime (12:50pm, 2:15pm, 4:45pm, 6:50pm and 8:50pm). Use radio button controls to show the preferred showtime.

After selecting a show time, the patron will be prompted to select the types of ticket (adult and children) using check boxes and use edit text or spinner to give number of tickets (quantity) for each category.

The checkout screen prompts the patron to provide the personal and credit card information. Use Edit Text controls and other UI elements to allow the user to enter the personal information: first name, last name, email, and credit card details. The rest of the fields will be different for each student. For example, you may create fields phone number, user name, password etc. Create 2-3 fields named as mentioned above. Provide validation for these entries by setting xml attributes and / or java code validations.

Use TextView objects to create the label components for your UI. Allow the user to use "Back" key to go back to the previous screen. Display the ticket information on the check-out screen when the user clicks on a button titled "Confirm Your Ticket". This will show the ticket details as follows in the next screen.

Name: John Smith

Movie Name: Bumblebee

Show time: 12:50pm

No of Tickets: Adult -2 and Children -2

Use styles and themes to create a nice look and feel of your app. Use drawable objects or png images to show the logo for the theater, and movies etc.

2. Assessment Rubrics

Criteria	Not Satisfactory 0-1	Satisfactory 2	Very Good 3	Excellent 4
Understanding specification and Code analysis	The code produces incorrect results due to poor understanding.	The code produces correct results but does not display them correctly due to incomplete analysis.	The code works and meets most of the other specifications. Very good code analysis.	The code works and meets all the specifications and well thought out code analysis.
Layout Design and Resources file.	Poor design and no resources files used.	Good design with fair use of resources file.	Very good design with appropriate use of resources file like string.xml.	Excellent design with excellent use of resources files.
Coding Standards	No name, student number, Poor use of white space, Poor use of variables.	Includes name, and student number, White space makes program fairly easy to read. Good use of variables.	Includes name, and student number, Good use of white space. Very good use of variables.	Includes name, and student number, Excellent use of white space. Excellent use of variables.
Code debugging and Demonstration / Screen shots	Unable to debug and run program due to the syntax and logical errors and no testing is done.	Able to run program but have few logic errors and some testing is done.	Able to debug and run program correctly without any logic errors and Thorough testing is completed	Able to run program without logical errors. Thorough and comprehensive testing is completed
Program Delivery	The assignment is completed (50-70%) and submitted within three days late with in correct format (.zip file format)	The assignment is completed (70-80%) and submitted within two days late with correct format (.zip file format)	The assignment is completed (80-90%) and submitted within a 24 hours late with correct format (.zip file format)	The assignment is fully completed (100%) and submitted on time with correct format (.zip file format)
Grade	0-5	10	15	20

3. References

- ★ *Textbook, ppt slides, lab examples and Android tutorials. This material provides the necessary information that you need to complete the exercises.*

4. Submission and Demonstration

- ★ *Students should follow the instructions on submission:*

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

YourName_COMP304_AssignmentNumber.zip

Example: **JohnSmith_COMP304_Assign2.zip**.

All students should demonstrate their solutions in a scheduled lab.

5. Academic Integrity

- ★ *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/>