

# Assignment 1

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# Objectives

1

Become familiar with Constraint layout and design for several screen sizes.

2

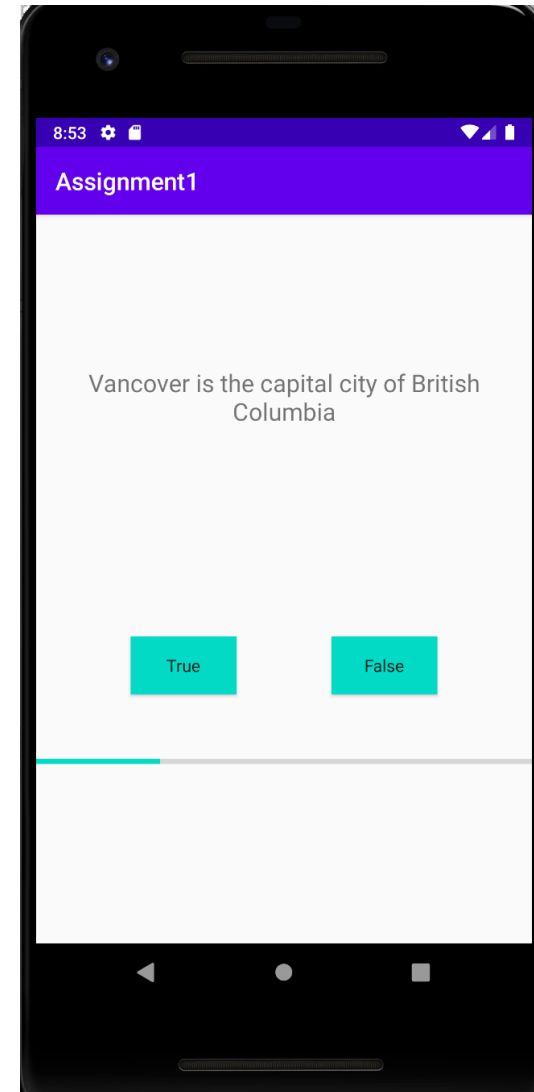
Work with different xml resources (color, strings,...)

3

Cover more advance Java topic including Classes, Objects, Collections and Arrays.

# Assignment 1

- Assignment 1 application is a Quiz app where the user could answer several true/false questions and receive his/her result at the end.
- The application shows a Toast when the user answers any question to tell if the answer is correct or incorrect.
- The application has a progress bar to indicate the quiz progress.



# Build a Quiz application layout



In assignment 1 you have to build an Android application for a Quiz with single layout.



Design the app layout using constraint layout with appropriate constraints and without any hardcoded values.



In your layout you have text view for the question text, two buttons for true and false and a progress bar.



Build portrait and landscape layouts for this app.

# Build a Quiz application data and logic



Build your own question bank with minimum 5 true/false questions.



Create appropriate classes for the application.



Separate data classes from Activity class (to make the app easy to manipulate and add new question).

# How does the quiz work?



The user should answer the question one by one.



A Toast pops up to tell if the answer is correct or incorrect.



The final score represents to the user (in an alert dialog) by answering the last question.



While answering the questions, a progress bar indicates the quiz progress.

# Finish or Repeat the Quiz



When the user finish the quiz, an alert dialog opened and showed the final score.



The alert dialog has two buttons, Repeat and Cancel.



When the user repeat the quiz, the quiz's questions must be shuffled (Java Collection function) and a new quiz started with randomized questions.



The UI and any necessary variables must be resetted to start a new quiz.

# Assignment video



Watch this video for Assignment implementation: <https://ca-lti.bbcollab.com/recording/3042e9494b2d471fa1a3a4036647da82>



You have to create different question bank and You could have different colors and styles.



# Test your work before submitting



Test your app using the following online emulator: <https://appetize.io> Nexus 7 device, Android 7.1 landscape and portrait modes.



If I can't run your APK on the online emulator or on BlueStacks emulator, you will receive 0 for the Assignment.



Any two similar projects will be marked 0 for both.



If you submit your assignment more than three days late, I will deduct one mark per day (including weekends and holidays)

# Submit assignment 1

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You have to submit your assignment's main folder (app->scr->main) as zip file.

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You have to submit your assignment APK file, Build menu-> Build Bundles/APK-> Build APK.

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You have to submit some screenshots for your working application, with landscape and portrait layouts.