

# College of Engineering, Construction and Living Sciences Bachelor of Information Technology

IN721: Design and Development of Applications for Mobile Devices Level 7, Credits 15

### Practical 02: Activities & Intents

#### Assessment Table

Assessment Activity	Weighting	Learning Outcomes	Assessment Grading Scheme	Completion Requirements
Practicals	25%	1, 3, 4	CRA	Cumulative
Language Translator	20%	1, 3, 4	CRA	Cumulative
Wishlist	25%	1, 3, 4	CRA	Cumulative
Exam	30%	2, 3, 4	CRA	Cumulative

#### Conditions of Assessment

This assessment will need to be completed by Friday, 12 June 2020.

#### Pass Criteria

This assessment is criterion-referenced with a cumulative pass mark of 50%.

#### **Submission Details**

You must submit your program files via **GitHub Classroom**. Here is the link to the repository you will be using for your submission – https://classroom.github.com/a/ifyWTPlw. For ease of marking, please submit the marking sheet with your name & student id number via **Microsoft Teams** under the **Assignments** tab.

### Authenticity

All parts of your submitted assessment must be completely your work and any references must be cited appropriately.

### Policy on Submissions, Extensions, Resubmissions & Resits

The school's process concerning **Submissions**, **Extensions**, **Resubmissions** and **Resits** complies with Otago Polytechnic policies. Students can view policies on the Otago Polytechnic website located at https://www.op.ac.nz/about-us/governance-and-management/policies.

#### Extensions

Please familiarise yourself with the assessment due dates. If you need an extension, please contact your lecturer before the due date. If you require more than a week's extension, a medical certificate or support letter from your manager may be needed.

#### Resubmissions

Students may be requested to resubmit an assessment following a rework of part/s of the original assessment. Resubmissions are completed within a short time frame (usually no more than 5 working days) and usually must be completed within the timing of the course to which the assessment relates. Resubmissions will be available to students who have made a genuine attempt at the first assessment opportunity. The maximum grade awarded for resubmission will be C-.

### **Learning Outcomes**

At the successful completion of this course, students will be able to:

- 1. Implement complete, non-trivial, industry-standard mobile applications following sound architectural and code-quality standards.
- 2. Explain relevant principles of human perception and cognition and their importance to software design.
- 3. Identify relevant use cases for a mobile computing scenario and incorporate them into an effective user experience design.
- 4. Follow industry standard software engineering practice in the design of mobile applications.

#### Assessment Overview

In this practical, you will complete a series of tasks covering today's lecture. This practical is worth 1% of the final mark for the Design and Development of Applications for Mobile Devices.

#### Task 1

- In this task, you are going to extend the user-interface created in the last practical by adding two more widgets to activity\_main.xml:
  - A divider that is constrained 16dp from the bottom of the Enrol button & 16dp from the start & end of the screen's edge
  - A button with the text Google Search that is constrained 16dp from the bottom of the divider & 16dp from the start & end of the screen's edge

#### Task 2

- Create two new activities called **LoginActivity.kt** & **InstrumentActivity.kt**. Two layout XML files called **activity\_login.xml** & **activity\_instrument.xml** will automatically be generated & ready to be used
- In each of the layout XML files, add a text view widget play around with the constraints & various attributes...the more you do, the more comfortable you will become. The text view widget will be used to display the data passed from MainActivity.kt

#### Task 3

- In MainActivity.kt, you will be reusing the two inner classes (ClickMeButtonOnClickListener & EnrolButtonOnClickListener) created in the last practical. In this task, add one new inner class & name it SearchButtonOnClickListener
- Implement the following explicit intents:
  - In the ClickMeButtonOnClickListener, pass the value from the email & password edit text to the LoginActivity.kt
  - In the EnrolButtonOnClickListener, pass the value from the radio button group & spinner to the InstrumentActivity.kt
- Implement the following implicit intent:
  - In the SearchButtonOnClickListener, start an activity which sends the user to https://www.facebook.com

#### Task 4

• In LoginActivity.kt & InstrumentActivity.kt, add an override fun onBackPressed() which sends the user back to MainActivity.kt

## **Expected Output**

- In this **practicals** directory, I have included a **expected-output** directory containing videos for each practical. I prefer to use videos instead of images
- This course is about being a creative. Don't feel like you have to always replicate my expected output...I just want make sure you complete the core functionality of each task

# Submission

- ullet Create a new branch named 02-checkpoint within your practicals GitHub repository
- Create a new pull request and assign Grayson-Orr to review your submission
- $\bullet\,$  Deadline: Friday, 12 June at 5pm

Note: Please don't merge your own pull request.