

# 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 08: Progress Dialog & Web View

#### 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.

We have implemented a lot of functionality over the past four practicals. Today, we will implement a progress dialog & web view.

#### Task 1

• In styles.xml, create a new style as specified in the lecture slides

#### Task 2

- Create a new layout XML file called **progress\_bar.xml**.
- Constraint layout contains a card view
- Card view contains a second constraint layout
- Second layout contains a progress bar & text view
- Create a new file called **CustomProgressBar** 
  - This file will inflate **progress\_bar.xml** & apply the custom theme style

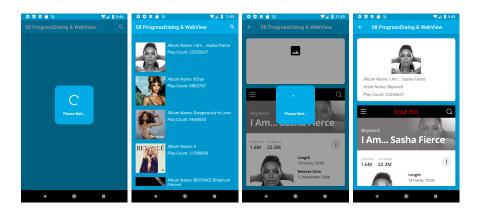
#### Task 3

- Create a new instance of CustomProgressBar in RawDataAsyncTask
- Add a new override method called onPreExecute which shows the progress dialog when downloading data
- Dismiss the progress dialog when finished downloading
- This is much the same in **DetailsActivity**. Make sure you declare your progress dialog global. You will need to access it for in the web view client

#### Task 4

- Add a web view underneath the card view in **content\_details.xml**
- You will see a grey screen. Don't worry about this
- Add the web view client object code in **DetailsActivity**. This will display the data after the web view has loaded
- Make sure you enabled JavaScript. If you don't, you won't be able majority of the web view, for example, the hamburger menu

# **Expected Output**



## Submission

- Create a new branch named 08-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.