



# College of Engineering, Construction and Living Sciences Bachelor of Information Technology ID721001: Mobile Application Development

Level 7, Credits 15

# **Project**

#### Assessment Overview

In this **individual** assessment, you will develop a mobile game using **Unity** and publish it to **Google Play Store** or **Apple App Store**. Also, you will provide documentation that addresses several aspects of the mobile game development process. In addition to the mobile game and documentation, you will present the mobile game and answer follow up questions via a video recording.

# **Learning Outcomes**

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

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

#### Assessment Table

Assessment Activity	Weighting		Assessment Grading Scheme	Completion Requirements
Project	100%	1, 2, 3	CRA	Cumulative

#### Conditions of Assessment

You will complete majority of this assessment during your learner-managed time. However, there will be time during class to discuss the requirements and your progress on this assessment. This assessment will need to be completed by Friday, 10 November 2023 at 4.59 PM.

#### Pass Criteria

This assessment is criterion-referenced (CRA) with a cumulative pass mark of 50% over all assessments in ID721001: Mobile Application Development.

## Authenticity

All parts of your submitted assessment **must** be completely your work. Do your best to complete this assessment without using an **AI generative tool**. You need to demonstrate to the course lecturer that you can meet the learning outcome for this assessment.

However, if you get stuck, you can use an **AI generative tool** to help you get unstuck, permitting you to acknowledge that you have used it. In the assessment's repository **README.md** file, please include what prompt(s) you provided to the **AI generative tool** and how you used the response(s) to help you with your work. It also applies to code snippets retrieved from **StackOverflow** and **GitHub**.

Failure to do this may result in a mark of **zero** for this assessment.

## Policy on Submissions, Extensions, Resubmissions and Resits

The school's process concerning submissions, extensions, resubmissions and resits complies with **Otago Polytechnic** policies. Learners can view policies on the **Otago Polytechnic** website located at https://www.op.ac.nz/about-us/governance-and-management/policies.

#### **Submission**

You **must** submit all program files via **GitHub**. The latest program files in the **master** or **main** branch will be used to mark against the **Functionality** criterion. Please test your **master** or **main** branch application before you submit. Partial marks **will not** be given for incomplete functionality. Late submissions will incur a 10% **penalty per day**, rolling over at 5:00 **PM**.

#### Extensions

Familiarise yourself with the assessment due date. If you need an extension, contact the course 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

Learners may be requested to resubmit an assessment following a rework of part/s of the original assessment. Resubmissions are to be completed within a negotiable short time frame and usually **must** be completed within the timing of the course to which the assessment relates. Resubmissions will be available to learners who have made a genuine attempt at the first assessment opportunity and achieved a **D grade (40-49%)**. The maximum grade awarded for resubmission will be **C-**.

#### Resits

Resits and reassessments are not applicable in ID721001: Mobile Application Development.

#### Instructions

You will need to submit a mobile game and documentation that meet the following requirements:

#### Functionality - Learning Outcomes 1, 2, 3 (60%)

- The mobile game needs to run without code or file structure modification in **Unity**.
- Playable on a variety of mobile devices, i.e., devices with different screen sizes.
- Free of bugs that significantly effect the playability.
- The mobile game is published to Google Play Store or Apple App Store.
  - To published to Google Play Store or Apple App Store, you will need an account. The account's credentials will be privately given to you on Microsoft Teams. Do not disable any applications published on this account.
- Ability to download the mobile game from Google Play Store or Apple App Store on to a variety of mobile devices.

### Documentation - Learning Outcomes 2, 3 (20%)

- Provide the following information in your repository **README.md** file:
  - Link to the mobile game on Google Play Store or Apple App Store.
  - What is the mobile game's concept and genre?
  - What is the mobile game's core gameplay loop?
  - How do the players interact with the mobile game and control the characters or objects?
  - What art style is used?
  - What audio and sound effects are used?
  - If applicable, known bugs.

#### Presentation - Learning Outcomes 2, 3 (20%)

- Present the mobile game via a video recording. In addition, you need to answer the following:
  - How did you plan and prioritise features throughout the development process?
  - What tools and technologies did you utilise to streamline your development workflow?
  - How did you handle potential challenges, such as time management and motivation?
  - What strategies did you employ to maintain code quality and avoid technical debt during the development process?
  - How did you handle testing and debugging of the mobile game?

#### **Additional Information**

- **Do not** rewrite your **Git** history. It is important that the course lecturer can see how you worked on your assessment over time.
- Upload your presentation to **OneDrive**. Provide a link to your presentation in your repository **README.md** file.

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