College of Engineering, Construction and Living Sciences
Bachelor of Information Technology
ID608001: Intermediate Application Development Concepts
Level 6, Credits 15

Project

Assessment Overview

In this **individual** assessment, you will provide documentation that addresses several aspects of the design and development process. In addition, you present

Learning Outcomes

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

1. Apply design patterns and programming principles using software development best practices.
2. Design and implement full-stack applications using industry relevant programming languages.

Assessments

Assessment	Weighting	Due Date	Learning Outcome
Practical	20%	21-06-2024 (Friday at 4.59 PM)	1
Project	80%	21-06-2024 (Friday at 4.59 PM)	1 and 2

Conditions of Assessment

You will complete 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, 21 June 2024** at **4.59 PM**.

Pass Criteria

This assessment is criterion-referenced (CRA) with a cumulative pass mark of **50%** over all assessments in **ID608001: Intermediate Application Development Concepts**.

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(s) 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 | Te Pūkenga** policies. Learners can view policies on the **Otago Polytechnic | Te Pūkenga** website located at https://www.op.ac.nz/about-us/governance-and-management/policies.

Submission

You **must** submit all files via **GitHub Classroom**. Here is the URL to the repository you will use for your submission – https://classroom.github.com/a/P-HAHGPz. Late submissions will incur a **10% penalty per day**, rolling over at **5:00 PM**.

Extensions

Familiarise yourself with the assessment due date. Extensions will **only** be granted if you are unable to complete the assessment by the due date because of **unforeseen circumstances outside your control**. The length of the extension granted will depend on the circumstances and **must** be negotiated with the course lecturer before the assessment due date. A medical certificate or support letter may be needed. Extensions will not be granted for poor time management or pressure of other assessments.

Resits

Resits and reassessments **are not** applicable in **ID608001: Intermediate Application Development Concepts**.

Instructions

Documentation - Learning Outcome 1 (50%)

In a **Microsoft Word** document called **documentation**, explain the following:

- Design Patterns
  - Explain the design patterns used in both applications.
  - For each design pattern, provide a code snippet that demonstrates how it is implemented.
  - Explain the advantages and disadvantages of the chosen design patterns.
- Programming Principles
  - Explain the programming principles used in both applications.
  - For each programming principle, provide a code snippet that demonstrates how it is implemented.
  - Explain how the programming principles contribute to code maintainability and readability.

Presentation - Learning Outcome 1 (50%)

- Present both applications via a video recording. In addition, you need to answer the following:
  - What tools and technologies did you utilise to streamline your design and development workflow?
  - What challenges did you encounter during the design and development process and how did you overcome them?
  - What strategies did you employ to maintain code quality and best practices?
  - How did you handle testing and debugging of both applications?
- The presentation must not exceed **30 minutes** in length.
- Upload your presentation to **OneDrive**. Include a link to your presentation in your repository's **README.md** file.