YOOBEE
COLLEGE OF CREATIVE INNOVATION

Programme

Master of Software Engineering

Course

MSE800 Professional Software Engineering
(Level 8, 30 Credits)

Assessment 2

Object-Oriented Project

(Classification - Group)

Weighting within
course:

40%

Assessment Tasks to Learning Outcome and GPOs mapping

Tasks	Learning Outcomes	GPOs
Task 1, Task 3, Task 7	LO3, LO5	GPO2, GPO3
Task 2, Task 4	LO3, LO4	GPO2, GPO5
Task5, Task 6	LO3	GPO2
Task 8	LO3, LO4, LO5	GPO2, GPO3, GPO5

Objective:

This group project aims to simulate a real-world scenario where students will act as both developers and clients. The goal is to provide students with hands-on experience in the entire software development lifecycle.

Assessment instructions

- Ask your tutor if you need further explanation or if the instructions are not clear.

- The purpose of this assessment is to assess your knowledge. As part of your academic and professional integrity, you must work alone on this assessment. In the event Yoobee suspects collusion, this will be addressed. For more information on plagiarism, please refer to the Student Handbook.

- Submit your completed assessment online (Blackboard) in the correct space provided.

- Percentage and feedback will be returned within 15 days of the submission date.

Learning outcomes:

LO3: Implement software engineering principles to develop and evolve software systems in cutting edge industries.

LO4: Evaluate the cultural context for software engineering and the implication for industry management and leadership practice.

LO5: Develop culturally informed teamwork abilities and evaluate their application in software engineering contexts.

Graduate Profile Outcomes (GPOs) covered

GPO2: Utilise highly specialised knowledge and skills to carry out cutting-edge software engineering projects independently and collaboratively.

GPO3: Develop and apply professional and ethical standards in software engineering to meet the industry's expectations and the ability to work with integrity in compliance with organisational criteria.

GPO5: Critically evaluate current cutting-edge research in software engineering and apply it to industry practice.

Success Criteria:

You need to meet all the requirements of each of the learning outcomes and receive 50% or more to pass this assessment. You are allowed a maximum of three attempts. To meet all the requirements of each of the learning outcomes, you must achieve PASS results for each task item.

Grading:

The final grade will be determined by the score achieved in this assessment based on the following table. Should a second or third attempt be required the maximum contribution toward the overall mark for the tasks that required a second or third assessment attempt is 50%. A late submission is considered a second attempt, so the contribution will be capped at 50%.

Grade	Mark Band Range
A+	Meet all course requirements, mark range (90-100)
A	Meet all course requirements, mark range (85-89)
A-	Meet all course requirements, mark range (80-84)
B+	Meet all course requirements, mark range (75-79)
B	Meet all course requirements, mark range (70-74)
B-	Meet all course requirements, mark range (65-69)
C+	Meet all course requirements, mark range (60-64)
C	Meet all course requirements, mark range (55-59)
C-	Meet all course requirements, mark range (50-54)
D	Did not meet all course requirements, mark range (40-49)
E	Did not meet all course requirements, mark range (0-39)

Submission requirements:

Upload the following and submit it through **Blackboard** in the correct space provided.

1. A pdf file of **Project Report** outlining sprints, tasks, and roles within the team, detailed project requirements using specifications and user stories, backlog files for agile development, cost estimation including labor, tools and resources.

2. A zip folder containing all the files necessary for the running/compiling of your product.

3. A pdf file of **Reflection Report**.

Scenario:

Each team is a software development company, and they are tasked with creating a software solution project for a client. The client team will provide project requirements, and the development team will follow agile methodologies to deliver a functional product.

You will have project members from different ethnicities and cultures; therefore, you need to show how you developed socially and culturally informed teamwork abilities while working on the project. In developing the project, you need to adhere to the three principles of Te Tiriti o Waitangi (The Treaty of Waitangi) - partnership, participation, and protection. You need to show how you included the principles of the Treaty of Waitangi while running the project.

Also, your team could have an external stakeholder - a Kaiārahi (a guide/counselor/mentor), who the team always consults to take Māori perspective in the project.

The project will culminate in a presentation where the development team showcases the final product and the journey of its development.

Tasks:

1.Team Formation (LO3, LO5):

- Form development teams with diverse ethnicities and cultures.

- Where applicable, incorporate the partnership principle of Te Tiriti o Waitangi if working with Māori team members or projects impacting the Māori community.

2.Project Kickoff Meeting (LO3, LO4):

- Conduct a kickoff meeting where the client team presents project requirements.

- Consider the Māori perspective by incorporating the three principles of Te Tiriti o Waitangi alongside technical requirements. Consult your Kaiārahi for guidance.

3.Requirement Gathering Meetings (LO3 & LO5):

- Facilitate professional meetings with the client to gather detailed requirements, demonstrating culturally informed teamwork.

4.Requirement Analysis and Prioritisation (LO3, LO4)

- Analyse gathered requirements and prioritized them based on business value.

- Include local community needs and priorities if the project impacts them directly.

5.Agile Development Sprints (LO3)

- Follow agile methodologies for implementing features in short sprints.

- Utilise software for communication, meeting agendas, task allocation, etc.

- Integrate a version control system.

- Ensure sprint meetings are professional and reflect socially and culturally informed teamwork.

6.Cost Estimation (LO3):

- Estimate development costs considering labor, tools, and resources.

7.Acceptance Criteria and Testing (LO3 and LO5):

- Create acceptance criteria for each user story and perform acceptance testing.

- Ensure the project outcome is acceptable to local communities, including Māori communities. Consult your Kaiārahi for Māori-specific acceptance criteria.

8.Reflection Report (LO3, LO4, LO5)

Write a comprehensive reflection report that addresses the following:

- Technical skills learned and areas for improvement.

- Challenges faced in incorporating cultural considerations.

- Effectiveness of teamwork strategies and areas for development

- The importance of Te Tiriti o Waitangi principles in the project

Marking Rubric:

Your assessment will be evaluated based on the following criteria:

Criterion & weighting	A (80-100) %	B (65-79) %	C (50-64) %	D (40-49) %	E (0-39) %
Team Formation 10%	Formed a development team with diverse ethnicities and cultures. Successfully incorporated Te Tiriti o Waitangi partnership principles when working with Māori team members or projects impacting the Māori community.	Formed a development team, but ethnic and cultural diversity was limited. Considered Te Tiriti o Waitangi partnership principles, but implementation may have been inconsistent.	Development team lacked diversity in ethnicity or culture. Did not consider Te Tiriti o Waitangi partnership principles.	Team formation hindered by lack of diversity or cultural sensitivity. Ignored Te Tiriti o Waitangi partnership principles	Project significantly impacted due to poorly formed team or lack of consideration for Te Tiriti o Waitangi.
Project Kickoff Meeting 10%	Conducted a kickoff meeting where the client team presented project requirements. Effectively incorporated the three principles of Te Tiriti o Waitangi alongside technical requirements. Demonstrated consultation with a Kaiārahi	Conducted a kickoff meeting with client presentation. Considered Te Tiriti o Waitangi principles, but integration may have been limited. Consultation with Kaiārahi may not have been documented	Kickoff meeting held, but client presentation or Te Tiriti o Waitangi principles may have been overlooked. No consultation with Kaiārahi evident	Kickoff meeting poorly organized or lacked essential elements (client presentation, Te Tiriti o Waitangi principles, Kaiārahi consultation).	Project significantly impacted due to a poorly executed kickoff meeting.
Requirement Gathering Meetings 15%	Facilitated professional meetings with the client to gather detailed requirements, demonstrating culturally informed teamwork.	Meetings conducted to gather requirements, but professionalism or cultural considerations may have been lacking.	Meetings held, but focus on requirements gathering may have overshadowed professionalism or cultural considerations.	Meetings poorly facilitated or lacked focus on requirements, professionalism, or cultural considerations.	Project significantly impacted due to ineffective or culturally insensitive requirement gathering meetings.
Requirement Analysis and Prioritization 10%	Analyzed gathered requirements and prioritized them based on business value, including local community needs when applicable	Analyzed requirements and prioritized based on business value, but local community needs may not have been fully considered.	Analyzed and prioritized requirements, but focus on business value or local community needs may have been weak.	Analysis and prioritization of requirements were weak or absent. Local community needs were not considered.	Project significantly impacted due to poorly analyzed or prioritized requirements, neglecting local community needs.

Agile Development Sprints 15%	Successfully implemented features in short sprints using agile methodologies. Utilized software for communication, meetings, task allocation, version control, and ensured professional and culturally informed sprint meetings.	Implemented features in sprints using agile methodologies, but some aspects (communication, task allocation, version control, or cultural considerations in meetings) may have been weak.	Agile methodologies used, but implementation may have been inconsistent or lacked some crucial aspects (communication, task allocation, version control, or cultural considerations in meetings).	Agile methodologies poorly implemented or not used at all. Meetings lacked professionalism or cultural awareness.	Project significantly impacted due to poorly implemented or absent agile methodologies. Meetings were unprofessional or insensitive.
Cost Estimation 10%	Provided a well-considered estimate of development costs including labor, tools, and resources.	Cost estimate provided, but details on labor, tools, or resources may have been limited.	Cost estimate may have lacked detail or accuracy.	Cost estimate was poorly developed or absent.	Project significantly impacted due to inaccurate or missing cost estimates.
Acceptance Criteria and Testing 10%	Created clear acceptance criteria for each user story and performed thorough acceptance testing. Ensured project outcome was acceptable to local communities, including Māori communities (consultation with Kaiārahi documented).	Developed acceptance criteria and performed testing, but some aspects (clarity, thoroughness, or consideration of local communities) may have been weak. Consultation with Kaiārahi may not have been documented.	Acceptance criteria or testing may have been weak or absent. Consideration of local communities' needs may have been lacking. Consultation with Kaiārahi not documented.	Acceptance criteria and testing were poorly developed or absent. Local communities' needs were not considered. No consultation with Kaiārahi evident.	Project significantly impacted due to poorly defined acceptance criteria, inadequate testing,
Reflection report 20%	Demonstrated strong technical skills, identified areas for improvement, and outlined development plans. Proactively addressed cultural considerations, explained challenges overcome, and highlighted ongoing learning. Analyzed teamwork effectiveness, provided specific examples, and proposed strategies for improvement. Explained the importance of Te Tiriti o Waitangi principles (if applicable) and provided concrete examples of their incorporation.	Explained technical skills, application, and some areas for improvement. Acknowledged challenges in cultural considerations and expressed willingness to learn more. Described teamwork strategies and some effectiveness but lacked specifics for development. Acknowledged the importance of Te Tiriti o Waitangi principles (if applicable) with some examples.	Briefly mentioned technical skills, application, and improvement. Briefly mentioned challenges in cultural considerations. Briefly mentioned teamwork strategies and some effectiveness. Briefly mentioned Te Tiriti o Waitangi principles (if applicable).	Limited understanding of technical skills, cultural considerations, teamwork strategies, and Te Tiriti o Waitangi principles (if applicable). Lacked specifics on application, improvement, or development plans.	No mention of technical skills, cultural considerations, teamwork strategies, or Te Tiriti o Waitangi principles (if applicable).

Note: *The ranges for each grade level encompass the full 11-point grading system as outlined in the accompanying table. Please refer to the table for detailed percentage ranges associated with each letter grade.*