

Programme

## Master of Software Engineering (Level 9) 180 Credits

Course

MSE907: Industry-based Capstone Research Project (60 Credits)

Assessment 2

# Work in Progress Report (WIP)

Weighting within the course:

40%

#### Assessment Tasks to Learning Outcome and GPOs mapping

| Tasks  | Learning Outcomes | GPOs |
|--------|-------------------|------|
| Task 1 | LO1               | GPO1 |
| Task 2 | LO2               | GPO2 |
| Task 3 | LO3               | GPO4 |
| Task 4 | LO4               | GPO3 |

#### Objective

The objective of this Work in Progress report is to demonstrate the ongoing progress on your software engineering project. This report will detail the current state of research, refine the project proposal, and present a preliminary analysis of the project's ethical and cultural implications.

#### **Assessment Instructions**

- This assessment is an open book activity, you can use your own course and review notes as well as offline or online resources, such as textbooks or online journals.
- You can always ask your tutor if you need further explanation or if the instructions are not clear.
- By completing and submitting an assessment you are authenticating that you are the original creator and/or author of all the submitted work and that it does not violate plagiarism or copyright law. All written work such as essays, reflections, reports must be in your own words. Please refer to the Academic Misconduct and Authenticity of Assessment Evidence statement in your Student Handbook for more information.
- Please ensure the completion of the assessment by the required due date.
- Grades and feedback will be returned within 15 days of the submission date.

#### **Learning Outcomes**

**LO1:** Critically analyse literature to find gaps in the chosen field of interest.

**LO2:** Evaluate appropriate research methods and techniques to design and implement a solution for identified gaps in the chosen software engineering industry project.

**LO3:** Present a research informed report that analyses and assesses the importance and potential applications of software engineering principles in the chosen project

**LO4**: Identify and explain ethical and cultural issues associated with the software engineering industry project.

#### Graduate Profile Outcomes (GPOs) covered.

**GPO1:** Develop advanced software engineering knowledge and skills and apply these to solve emerging or existing problems.

**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.

**GPO4:** Critically analyse, assess and solve software-related problems using project management tools and techniques, creative thinking and enterprise skills.

#### **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)        |
| Α     | 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)         |
| В     | 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)         |
| С     | 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:

- Submit your written WIP report in docx or pdf format. The submission must have your name and ID number clearly printed.
- Submission should be typed, double-spaced, and adhere to a standard citation format if external sources are referenced.
  - 1.WIP Report
  - 2. Turnitin Similarity Report
  - 3.Application code

#### Additional Information:

- You are encouraged to discuss your research plan with your supervisor to ensure alignment with your chosen project and industry needs.
- Consider including any relevant diagrams, tables, or figures to enhance your plan's clarity.
- All references should be properly cited in a consistent style guide. (e.g., APA).
- Proofread your report carefully before submission to ensure it is free of errors in grammar, spelling, and formatting.
- Maintain a professional tone and adhere to academic writing conventions.

#### Task Description:

Develop a Work in Progress (WIP) report detailing the ongoing progress of your software engineering project. This report should build upon the findings from Assessment One and provide an update on the research, proposed methodology, and a preliminary analysis of the project's ethical and cultural implications.

#### **Assessment Tasks**

#### Task 1:

LO1: Critically analyse literature to find gaps in the chosen field of interest.

- **Progress Update:** Summarise any additional research conducted since Assessment One. Briefly highlight any new insights or adjustments to your initial understanding of the chosen field and identified gap(s).
- Critical Analysis: Deepen your analysis of the existing literature. Identify and discuss specific limitations, inconsistencies, or areas lacking sufficient research. Explain how these factors contribute to the gap you aim to address.

#### Task 2:

**LO2:** Evaluate appropriate research methods and techniques to design and implement a solution for identified gaps in the chosen software engineering industry project.

- **Refined Research Questions:** Based on your ongoing research, refine your initial research questions to ensure they precisely target the identified gap(s).
- **Justification and Impact:** Reiterate the significance of your project. Explain how addressing this gap can potentially benefit the software engineering field or industry. Use specific examples to support your claims.
- **Methodology Selection:** Discuss your chosen research methodology in detail. Explain why this approach aligns best with your project goals and how it will help you gather the necessary data. (e.g., Surveys for user experience studies, experiments for testing solutions, etc.)

#### Task 3:

**LO3:** Present a research informed report that analyses and assesses the importance and potential applications of software engineering principles in the chosen project

• **Software Engineering Principles Integration:** Analyse how specific software engineering principles (e.g., object-oriented programming, agile development) will be applied within your project. Explain how these principles contribute to the successful implementation of your proposed solution.

#### Task 4:

**LO4**: Identify and explain ethical and cultural issues associated with the software engineering industry project.

- **Potential Ethical Issues:** Identify potential ethical issues associated with your project. Consider aspects like data privacy, user consent, and potential biases within the chosen methodology.
- *Cultural Considerations:* Discuss potential cultural implications of your project. Consider how your solution might need to adapt to different cultural contexts or user demographics.

### Marking Rubric

| Criterion &   |         | Α  | В  | С   | D  | E   |
|---|---------|--|--|---|--|---|
| Weighting   |         | (80-100) %   | (65-79) %  | (50-64) %   | (40-49) %  | (0-39) %  |
| LO1: Literature Review & Gap Analysis (Continued)               | 25 %    | Demonstrated significant progress in research beyond Assessment One. Provided insightful analysis of new findings and adjustments to the understanding of the gap. Conducted a critical evaluation of existing literature, identifying limitations, inconsistencies, and areas lacking sufficient research. Explained how these factors contributed to the identified gap. | Showed some progress in research beyond Assessment One. Briefly highlighted new insights or adjustments to the initial gap understanding. Analysed existing literature, identifying limitations or inconsistencies. Explained how these factors related to the chosen gap  | Made limited progress in research beyond Assessment One. Mentioned new findings or adjustments but lacked depth. Conducted a superficial analysis of existing literature. May have identified limitations but lacked connection to the chosen gap.  | Made minimal or no progress in research beyond Assessment One. Failed to demonstrate a deeper understanding of the chosen field or gap. Conducted limited or no analysis of existing literature.   | Conducted no new research. Failed to demonstrate understanding of the chosen field or gap. Did not analyse existing literature.   |
| LO2: Project<br>Proposal &<br>Research<br>Design<br>(Continued) | 25<br>% | Refined research questions with precision, ensuring they targeted the identified gap(s). Clearly articulated the project's significance and potential impact with specific examples. Provided a detailed and well-justified explanation of the chosen research methodology, explaining its alignment with project goals and data collection methods.                       | Refined research questions to address the gap(s), but may have lacked complete precision. Explained the project's significance and potential impact but may have lacked specific examples. Provided a clear explanation of the chosen research methodology and its alignment with project goals, but justification for data collection methods may have been underdeveloped. | Research questions were somewhat refined but may not have fully addressed the gap(s). Explained the project's significance and potential impact but lacked clarity or strong examples. Briefly explained the chosen research methodology and its alignment with project goals. Justification for data collection methods may have been missing. | Research questions were poorly refined or did not adequately target the gap(s). Lacked a clear explanation of the project's significance or potential impact. Failed to explain the chosen research methodology or its alignment with project goals. | Research questions were not refined or did not address the chosen gap. Failed to explain the project's significance or potential impact. No explanation of the chosen research methodology. |

| LO3: Research- Informed Report (Preliminary Analysis)                       | 25 %     | Provided a strong analysis of how specific software engineering principles were applied within the project. Clearly explained how these principles contributed to the successful implementation of the proposed solution.   | Analyzed how software engineering principles were applied within the project. Explained how these principles contributed to the proposed solution but may have lacked detail.   | Briefly mentioned how software engineering principles were applied. Lacked a clear explanation of how these principles contributed to the proposed solution.         | Failed to mention or analyze how software engineering principles were applied.                 | Made no mention of software engineering principles or their application to the project. |
|---|----------|---|---|--|--|---|
| LO4: Ethical<br>and Cultural<br>Considerations<br>(Preliminary<br>Analysis) | 25 %     | Identified potential ethical issues associated with the project (data privacy, user consent, bias) with a well- developed discussion. Discussed potential cultural implications considering user demographics and cultural contexts. Proposed potential adaptations for the solution. | Identified potential ethical issues associated with the project (data privacy, user consent, bias). Discussed potential cultural implications considering user demographics or cultural contexts but may have lacked depth. | Briefly mentioned potential ethical issues associated with the project. Mentioned potential cultural implications but lacked analysis or suggestions for adaptation. | Failed to identify potential ethical issues. Failed to discuss potential cultural implications | Made no mention of ethical or cultural considerations.                                  |
| Total   | 100<br>% |   |   |  |  |   |

**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.