

SE3080 - Software Project Management

Year 3 – Semester 1

2025

Assignment Title	Assignment 1: Mid-Project Agile Review
Learning outcomes covered	<p>LO1: Identify project initiating activities such as project selection, proposal preparation, and project justification.</p> <p>LO2: Manage project meeting scope, time, cost, quality and resource constraints via effective communication management and risk identification.</p> <p>LO3: Illustrate the ability to use tools related to project management, code quality inspection, software testing, and version controlling.</p> <p>LO4: Illustrate the ability to apply project management skills to designing and implementation of a software project.</p>
Assignment Mode	Continuous Assessment Project
Maximum Marks	20
Contribution to the Final Grade	20
Date published	6 th August, 2025
Deadline for submissions	31 st August, 2025
Mode of Submission	Report and Group Presentation

Objective

This assignment is the first part of the continuous assessment project, and it assesses your ability to apply Agile practices (especially Scrum) in the early phases of a group software project. You are expected to initiate, plan, and manage your project using Scrum roles, events, and artifacts with proper collaboration and communication.

Guidelines for Project Selection & Execution

You are required to select a team-based software project that can be developed using the **Scrum framework** over the course of 5 iterations (Sprint 0 + 4 Sprints). Assignment 1 will focus on Sprint 0, Sprint 1 and Sprint 2. Your project must address a **real-world problem or use case** and should allow continuous delivery of working features. Project name should be submitted at the start of the project (a separate form will be published for same). You may follow the guidelines below.

Real-World Relevance	<ul style="list-style-type: none">Choose a project that solves a real problem faced by individuals, businesses, communities, or industries.It does not need to be entirely original, but it should have a clear use case and context.There should be a client for this project. It could not be necessarily a real client who would buy/own your software product. But you need to identify someone who can play the customer role and participate in your sprint reviews.
Agile Suitability	<ul style="list-style-type: none">The project must be suitable for iterative and incremental development using Scrum.

	<ul style="list-style-type: none">You should be able to break it down into user stories and deliver small functional increments in each sprint.
Scope Manageability	<ul style="list-style-type: none">The project must be appropriately scoped to be completed within 4 Sprints (~8 weeks of active development).Avoid projects that require extensive infrastructure, physical hardware, or large-scale deployment within this timeline.
Team Collaboration	<ul style="list-style-type: none">The project should require active participation of all team members—ideally supporting clear division of tasks (e.g., frontend/backend, testing, UI/UX, database).Team members can change their roles (product owner, scrum master, development team) to experience real-world agile roles, ceremonies and artifacts.
Demo-Ready Increments	<ul style="list-style-type: none">Ensure the project allows you to build and demonstrate functional software features at the end of each sprint.You should be able to produce working software even if it is partially complete.
Technological Flexibility	<ul style="list-style-type: none">You are free to use any technology stack (e.g., web, mobile, cloud, desktop), if it supports Agile-friendly development and delivery.

Expected Deliverables

- Each team must submit a report (6-8 pages) covering the following deliverables:
 1. **Project Selection and Justification** - Project selection as per the given guidelines with clear and comprehensive justification
 2. **Project Charter (Product Vision)** – Including scope, objectives, constraints, stakeholder roles.
 3. **Initial Product Backlog** – Prioritized epics, user stories tasks, with estimates.
 4. **Sprint Backlogs and Plans for Sprint 1 & 2** – Sprint goals, task assignments, burndown charts.
 5. **Defined Scrum Roles** – Documentation of role assignments and responsibilities.
 6. **Evidence of Scrum Events** – Summaries/logs of sprint planning meetings, daily stand-ups, reviews, and retrospectives.
 7. **Working Increment Demo** – Live session showing implemented features.
- Each team must do a presentation covering the above deliverables to a panel (15 minutes)

Instructions and Submission Guidelines

- This is a **group assignment** (4 members per group).
- Refer to the lecture materials and other resources on Software Project Management in Agile Environments and best practices.
- Plagiarism will not be tolerated; ensure you submit original work.
- Late submissions will result in deduction of marks.
- **Report Format:** PDF Document.

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- **Naming:** Rename the document with the group ID
- The names and registration numbers of all the members in the group should be included in the cover page of the report.
- **Length:** 6-8 pages.
- **Diagrams:** Include relevant visuals (flowcharts, graphs, etc.).

Assessment Rubric

Criteria	Weight	Learning Outcome(s)	Excellent	Good	Satisfactory	Poor/Incomplete
1. Project Selection and Justification	5	LO1	5: Project selection based on the given guidelines with clear and comprehensive justification	4: Mostly complete with minor gaps	3: Basic justification with missing elements	0-2: Weak or no justification evident
2. Agile Project Initiation & Planning	20	LO1, LO2	18–20: Complete and coherent project charter (product vision / lean canvas) highlighting scope, objectives, stakeholders, and constraints. Planning sprints: 0 to 4	14–17: Mostly clear with minor issues	10–13: Basic scope and planning or some missing components	0–9: Minimal or no planning evident
3. Product Backlog & Sprint Execution	20	LO2, LO4	18–20: Well-prioritized stories, clear Sprint goals and burn-down tracking for each sprint	14–17: Mostly effective with minor issues	10–13: Weak stories or partially implemented sprint	0–9: Backlog missing or no execution evidence
4. Scrum Roles & Events	25	LO2, LO4	18-20: Clearly defined roles; consistent and well-documented Scrum practices	14-17: Mostly consistent with minor gaps	10-13: Roles unclear or irregular events	0–9: Scrum poorly implemented or not followed

5. Team Collaboration & Communication	15	LO2, LO3	14-15: Excellent coordination with PM tools (Jira, Trello, etc.) and clear group presentation	11-13: Moderate tool use and collaboration	8-10: Limited collaboration or sporadic usage	0-7: No collaboration evidence; poor communication
6. Quality of Increment & Demo	10	LO3, LO4	9-10: Functional, high-quality demo closely aligned with backlog	7-8: Mostly working demo with minor issues	5-6: Incomplete or buggy demo	0-4: No increment or unusable output
7. Submission of Report	5	LO1-LO4	5: Clear and complete with all required deliverables	4: Mostly complete with minor gaps	3: Basic submission, some parts missing	0-2: Minimal or no report submitted