

# Timeline and deliverables for Team Project Part 1

## Submission Details

Final Submission: **Wednesday 18<sup>th</sup> February 2026, 23:59**

You are expected to submit a report, presentation, working project code (Engine), 8-10 minute video for the presentation, details below.

Each Group is to submit a zip file to their lab group's xSITE Dropbox ('Team Project Part 1'). Please follow the naming convention carefully when submitting your project and structuring your folders.

### Zip File Name:

- [LabGroup\_TeamNumber\_ProjectPart1Final]

### Zip File Folder Structure and Content:

- Report (your report and any supporting documents)
- Presentation (slides for your 10-minute presentation)
- Project (all project and code files for your part 1 project) including Abstract Engine Code and Simulation
- Txt file with presentation video link, any other links which may be useful to assessment of your work

**One Submission Only per team.** If you wish to resubmit before the deadline, only the latest submission will be graded and all other submissions will be ignored.

## Abstract Engine

### Implementation

- The implementation should showcase significant application of Object-oriented programming concepts (classes, inheritance, polymorphism, etc.)
- Further exhibit the must haves along with additional features /use cases and functionalities.
- Your code should employ good quality and programming.
- No context specific code to a specific logic should be present.

### Simulation

- The abstract engine simulation should showcase the usage of the must haves using a general example.
- It should initialize and end without an error.
- It should showcase easy scaling and extension to any simulation logic.

## Final Report

Final report should not be more than **15 pages** and contain the following:

- Overall system design for the abstract engine
  - Overview/Purpose of the different managers
  - Discussion of how the must haves have been implemented
- Complete UML diagram for the Abstract Engine
- Object oriented principles adopted in the system and justification
- Reflection on limitations with the Engine Design
- Clear and concise description of each team member's contribution.

- NOTE: EVERY team member must contribute to the implementation
- Things that you want to highlight, for example unique and innovative features in your abstract engine

## Presentation and Video

You will not be required to present your project physically, but are expected to create a **concise 8-10 minute video** which meets the below expectations:

Deck of slides: 10 – 12 slides

The deck of slides should:

- Highlight the key aspects of the abstract engine (consider in terms of scalability, reusability, and design)
- Exhibit abstract engine implementation, showcasing the implementation of the must haves.
- Demo the abstract engine while discussing the above
- Be comprehensive and self-explanatory
- Summarize your report