

Summary



Cohort 3 Group 6 - Carbon Goose

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Our team began by familiarising ourselves with the inherited deliverables and code. Clear documentation made it easier for us to identify complicated parts of the code, avoid misinterpretations and enhance debugging. Our plans were based on consistently reviewing the provided assessment 1 deliverables.

The initial team utilized Agile with Scrum as their engineering framework. We transitioned to using IBM's Rational Unified Process(RUP). This methodology better suited the fixed and stable requirements of our project and supported a plan-driven development approach. The collaboration tools used for task management, collaboration and code development includes Google Drive/Docs, PlantUML, GitHub, IntelliJ IDE, Java 17, LibGDX and Discord. The tools we used remained consistent, but we focused more on RUP-driven modeling with UML diagrams, reflecting the shift in methodology. Key milestones included updating risk mitigation and documentation early, allocating tasks over the break to maintain progress and completing user evaluations and unit tests before revision week.

We reviewed architecture style, architecture tradeoffs, algorithms, data structures and diagrams designed by the initial team. Our updated architecture builds on the foundation laid by the initial team while addressing key requirements and improving alignment with implementation goals. The architecture will adopt an approach, using both MVC and ECS. This approach remains central to ensure modularity. However, our team introduced refinements to meet functional and non-functional requirements, including satisfaction calculation, event management, and grid-based simulation.

The documented User requirements, functional system requirements and the non-functional system requirements were helpful for tracking progress. The priority system("shall"/"should"/"may") and accuracy of them were also helpful in the process of further planning and scheduling. We employed a colour-coding system to indicate the status of each requirement.

For the risk assessment, our team refined the process by incorporating lessons from the first assessment performed by the initial team. High-priority risks were identified, analyzed, and mitigated through action plans with assigned responsibilities to ensure accountability. Risks were frequently reassessed, and the risk register was updated regularly to adapt to project needs.

Our team successfully adapted and expanded upon the work of the initial team by building on their foundation while implementing changes to suit our goals. By transitioning to RUP, refining the architecture, and improving risk management, we ensured that the project requirements were addressed efficiently and effectively. Each stage of the process was carefully monitored, enabling steady progress and a structured approach to project development.