

FINAL Project Report

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Project Name

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SECTION 1: REPORT SUMMARY

The original goal of this project was to develop a naval strategy game that prioritized movement, combat, and interactions between NPCs. We gradually changed the scope of our original work, focusing more on the complexity of the backend through a sophisticated grid-system with battle-ship mechanics. This unfortunately led to a lack of visual appeal in our final product, but provided a great game engine and furthermore a valuable lesson in software development.

SECTION 2: PROCESS DOCUMENTATION

2.1. SPRINT 1 OVERVIEW

2.1.1 Sprint Overview:

Dates: Start - Nov 20, 2023, End - Nov 27, 2023.

Goal: Set up the codebase/development environment and start the essential classes.

Participants: Nazar, Ramy, and Abdullah

Ramy and Nazar setup all the classes based off of the UML diagram and Abdullah started implementing the NPC class.

Tasks Completed: Ships and NPC

2.1.2 Stories Selected for this Sprint:

Grid (Owner: Nazar)

Ships (Owner: Ramy)

NPC (Owner: Abdullah)

2.1.3 Team Capacity:

We expect to be able to complete the components of the Grid, Ships, and NPC by November 27th.

2.1.4 Participants:

Nazar: Grid implementation.

Ramy: Ship implementation.

Abdullah: NPC implementation.

2.1.5 Tasks Completed:

The ship stats, and NPC implementation was completed. Grid is still in progress.

2.2. SPRINT 1 PRODUCT BACKLOG

Grid (In progress)

Ship (Complete)

NPC (Complete)

2.3. SPRINT 1 CODE REVIEWS

Story Reviewed	Name of Reviewer	Pull Request Link
[DEV-3]: Grid	Nazar	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/61e626f5d7f0baaa5104ce43a8eb228034328520
[DEV-1]: NPC	Abdullah	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/b9b9870edc2026ed738bb8e1f9b0e126f74bff34
[DEV-2]: Ship	Ramy	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/ef0b0dea0884b07b4522599415bc4ec2680fcfa5

2.4 SPRINT 1 RETROSPECTIVE

- Participants: Ramy, Abdullah, Nazar
- Unfinished Tasks: Grid implementation
- Positive Practices: Efficient
- Revised Practices: Better communication
- Discontinued Practices: [None mentioned]
- Worst experience: Team was not always on the same page

2.1. SPRINT 2 OVERVIEW

2.1.1 Sprint 2 Overview:

Dates: Start - Nov 28, 2023, End - Dec 04, 2023.

Goal: Finalize the backend and get JavaFX working.

Participants: Ramy, Nazar, Abdullah

Ramy finishing up JavaFX display, Nazar working on the backend and Abdullah working the TextToSpeech

Tasks Completed: Backend and TextToSpeech.

2.1.2 Stories Selected for this Sprint:

GameController (Owner: Nazar)

GameLoader(Owner: Nazar)

Battle (Owner: Nazar)

Movement (Owner: Nazar)

FX-Game-Visuals(Owner: Ramy)

TextToSpeech (Owner: Abdullah)

2.1.3 Team Capacity:

We expect to be able to complete the Backend development and TextToSpeech along with the fx by December 4th.

2.1.4 Participants:

Abdullah: TextToSpeech implemented

Nazar: Battle implemented.

Nazar: Movement implemented.

Nazar: GameLoader implemented.

Nazar: GameController implemented.

Ramy: FX-Game-Visuals implemented

2.1.5 Tasks Completed:

The TextToSpeech, Battle, Movement, GameLoader, and GameController were all implemented.

2.2. SPRINT 1 PRODUCT BACKLOG

Game Loader (Completed)

TextToSpeech (Completed)

Battle (Completed)
Movement (Completed)
GameController (Completed)
FXImplementation (In progress)

2.3. SPRINT 1 CODE REVIEWS

Story Reviewed	Name of Reviewer	Pull Request Link
[DEV-11]: GameLoader	Nazar	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/4f0ee5c1a2c73673e909173d6ed581c9a28c3b6c
[DEV-4] Movement	Nazar	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/43f0de5704f0db822e1630c0d8dd156c6f7b63f5
[DEV-10] GameController	Nazar	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/4f0ee5c1a2c73673e909173d6ed581c9a28c3b6c
[DEV-7] Battle	Nazar	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/4c41e2f9bc750f85e8857bf22dd61dc0198069d8
[DEV-8]: FX-Implementation	Ramy	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/e00214d18d80a9c72e1bf85c308882a667133bc6
[DEV-1]: TTS	Abdullah	https://mcsscm.utm.utoronto.ca/csc207_20239/group_17/-/commit/1587f0516608133509bec0864bd747b600a8eafb

2.4 SPRINT 1 RETROSPECTIVE

- Participants: Ramy, Abdullah, Nazar
- Unfinished Tasks: JavaFX
- Positive Practices: Efficient
- Revised Practices: Better communication
- Discontinued Practices: [None mentioned]
- Worst experience: Team was not always on the same page

SECTION 3: SUMMARY

Our project was successful in developing a strong backend for a grid based adventure game, with a complex tile and movement system, and intricate ship features. We somewhat changed our initial focus, giving these features' development priority over others. Implementing the battle mechanics proved challenging, so in the second sprint, stronger planning was needed. However, a stronger emphasis should have been put on JavaFX integration with the implemented backend, as JavaFX could not be finished due to the complexity of what was developed.