FINAL Project Report
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<u>Swashbuckler's Gambit</u>

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Project Demo Link: <u>https://youtu.be/IvVdu5q_c6s</u>

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 (Ownder: 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: Efficiency
• 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 2 PRODUCT BACKLOG

Game Loader (Completed)

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

2.3. SPRINT 2 CODE REVIEWS

Story Reviewed	Name of Reviewer	Pull Request Link
[DEV-11]: GameLoader	Nazar	https://mcsscm.utm.utoronto.ca/ csc207_20239/group_17/-/com mit/4f0ee5c1a2c73673e909173 d6ed581c9a28c3b6c
[DEV-4] Movement	Nazar	https://mcsscm.utm.utoronto.ca/ csc207_20239/group_17/-/com mit/43f0de5704f0db822e1630c0 d8dd156c6f7b63f5
[DEV-10] GameController	Nazar	https://mcsscm.utm.utoronto.ca/ csc207_20239/group_17/-/com mit/4f0ee5c1a2c73673e909173 d6ed581c9a28c3b6c
[DEV-7] Battle	Nazar	https://mcsscm.utm.utoronto.ca/ csc207_20239/group_17/-/com mit/4c41e2f9bc750f85e8857bf2 2dd61dc0198069d8
[DEV-8]: FX-Implementation	Ramy	https://mcsscm.utm.utoronto.ca/ csc207_20239/group_17/-/com mit/e00214d18d80a9c72e1bf85 c308882a667133bc6
[DEV-1]: TTS	Abdullah	https://mcsscm.utm.utoronto.ca/ csc207_20239/group_17/-/com mit/1587f0516608133509bec08 64bd747b600a8eafb

2.4 SPRINT 2 RETROSPECTIVE

- Participants: Ramy, Abdullah, Nazar
- Unfinished Tasks: JavaFX
- Positive Practices: Efficiency
- 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 event 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.