Project Report
Created 2023.11.20

Walter's World

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GitLab Repository:
https://mcsscm.utm.utoronto.ca/csc207_20239/group_27

Video Link:
https://youtu.be/eXWDIJoAY8I

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SECTION 1: REPORT SUMMARY

The project aimed to build upon our existing AdventureGame. We also aimed to make it accessible to users of different abilities and playstyles. At first, we had grand ideas such as creating a system of achievements and adding rewards for defeating trolls. While we are proud to say that many of our initial ideas were implemented, reality did hit at one point. The scope of the game changed slightly, and we added in what we could in the end – omitting only the ideas to add cosmetics and artifacts. Nevertheless, we stayed true to our initial plan and are happy with the result.

SECTION 2: PROCESS DOCUMENTATION

2.1. SPRINT 1

2.1.1 Sprint 1 Overview
Start date: November 7
End date: November 14
Our goal for this sprint is to create the foundation of the game. We will be setting up the four design patterns fleshed out in the Design Document by re-implementing the Player and Troll classes, and setting up the Achievements and Settings menu.

2.1.2 Stories Selected
User Story 1.1 - Completionist
User Story 1.12 - Population
User Story 1.15 - Diversity
User Story 1.16 - Settings Menu

2.1.3 Team Capacity
We expect to complete the components of the Settings Menu by November 21st.

2.1.4 Participants
Franco – Completionist
Carson – Population
Usha – Diversity
Aaron – Settings Menu

2.1.5 Tasks Completed
Most of user story 1.1
Created template for builder
Finished but not tested 1.15 using Strategy design pattern

2.1.6 Product Backlog
1.1 - Completionist
1.2 - Beginner-friendly
1.3 - Character Stats
1.4 - Additional Trolls
1.5 - Visual
1.6 - Replayability/Player Choice
1.7 - Rewards
1.8 - Exploit Protection
1.9 - Secret Rooms
1.12 - Population
1.13 - Personalize
1.14 - Text-to-Speech
1.16 - Settings Menu

2.1.7 Code Reviews
N/a

2.1.8 Retrospective
Participants: Usha, Aaron, Franco, Carson
Unfinished tasks: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.12, 1.13, 1.14, 1.16
Practices that went well: JetBrains Codewithme for when one member is stuck
New / Revised Practices: Adding Javadoc comments, they help with code legibility and we'll have to do it in the end
Worst Experience: Realizing the scope of some of our more grandiose plans. For 1.15, it was realising that perhaps our initial user stories were not as adaptable to our existing code/ideas for the final product (i.e. we discovered that the strategy design pattern did not work as well because it did not match the requirements of the player types.)
Best Experience: Brainstorming new ideas and ways to expand upon the existing AdventureGame! Also, being able to ask for feedback from each other on our ideas.

2.2. SPRINT 2

2.2.1 Sprint 2 Overview
Start date: November 14
End date: November 21

After realising that the design patterns might take some trial and error, our goal for this sprint is to to continue working on the remainder of the work required for last sprint's user stories. It also is to strengthen / test our code to ensure it doesn't break, as the user stories from last sprint were the foundation of the game.

2.2.2 Stories Selected
User Story 1.1 - Completionist
User Story 1.6 - Replayability/Player Choice**
User Story 1.12 - Population
User Story 1.15 - Diversity
User Story 1.16 - Settings Menu
** Please also note that due to Gitlab issues, DEV-1.3 is DEV-1.6 (unsuccessful renaming/creating a new branch)

2.2.3 Team Capacity
We expect to complete the components of the Settings Menu by November 27th.

2.2.4 Participants
Franco - Completionist
Usha - Replayability/Player Choice, Diversity
Aaron – Settings Menu
Carson - Population

2.2.5 Tasks Completed
Each member made reasonable progress on their respective user story.
1.12
1.15 After testing, it was discovered that the Strategy design pattern did not work so Player and Player types were re-implemented using Decorator.

2.2.6 Product Backlog
1.1, 1.6, 1.16

2.2.7 Code Reviews

Story Reviewed	Name of Reviewer	Pull Request Link

[DEV-1.1]: Completionist	Carson	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/2
[Dev-1.4]: AdditionalTrolls	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/3#note_444
[DEV-1.15] Diversity	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/4

2.2.8 Retrospective

Participants: Usha, Aaron, Franco, Carson

Unfinished tasks: 1.1, 1.6, 1.16

Practices that went well: We began to understand the limitations and the scope of what we could do, and developed more realistic expectations

New / Revised Practices: We began meeting outside of class

Worst Experience: Dealing with JavaFX

Best Experience: Seeing some of our hard work start to unfold.

2.3. SPRINT 3

2.3.1 Sprint 3 Overview
Start: Nov 21
End: Nov 28
Our goal for this sprint is to continue making progress on our past tasks, such as the Achievements, PlayerSelection screen, and Settings Menu. Additionally, we will begin work on new tasks, such as rewards and additional trolls.

2.3.2 Stories Selected
User Story 1.1 - Completionist
User Story 1.3 - Character Stats**
User Story 1.4 - Additional Trolls
User Story 1.5 - Visual
User Story 1.6 - Replayability/Player Choice**
User Story 1.7 - Rewards
User Story 1.8 - Exploit Protection
User Story 1.9 - Secret Rooms
User Story 1.14 - Text-to-Speech*
User Story 1.16 - Settings Menu
*Please note that by accident we grouped the branches DEV1.12 and 1.14 together as just DEV-1.12.
** Please also note that due to Gitlab issues, DEV-1.3 is DEV-1.6 (unsuccessful renaming/creating a new branch)

2.3.3 Team Capacity
We expect to finish these and all our tasks latest by the due date, December 5th.

2.3.4 Participants
Franco – Completionist, Secret Rooms
Carson – Additional Trolls, Rewards, Exploit Protection, Text-to-Speech
Usha – Character Stats, Replayability/Player Choice
Aaron – Settings Menu, Visual

2.3.5 Tasks Completed
1.1, 1.3, 1.4, 1.16

2.3.6 Product Backlog
1.3, 1.5, 1.6, 1.7, 1.8, 1.9, 1.14

2.3.7 Code Reviews

Story Reviewed	Name of Reviewer	Pull Request Link
[DEV-1.12]: Population	Aaron	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/6
[DEV-1.1]: Completionist	Carson	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/7
[DEV-1.16]: Settings Menu	Usha	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/8

2.3.8 Retrospective
Participants: Usha, Aaron, Franco, Carson

Unfinished tasks: 1.5, 1.6, 1.7, 1.8, 1.9, 1.14

Practices that went well: We developed better communication and a stronger work ethic.

New / Revised Practices: Tried pair-programming to reduce and fix bugs.

Worst Experience: Dealing with JavaFX, as well as our other courses. Also, trying to generate new images for the objects and rooms.

Best Experience: Seeing our new features pop up in the GUI.

2.4. SPRINT 4

2.4.1 Sprint 4 Overview

Start: Nov 28

End: Dec 5

Our goal for this sprint is to wrap up all our existing tasks. We will then go through and fix bugs together, ensuring that our final product runs smoothly.

2.4.2 Stories Selected

User Story 1.5 - Visual

User Story 1.6 - Replayability/Player Choice**

User Story 1.7 - Rewards

User Story 1.8 - Exploit Protection

User Story 1.9 - Secret Rooms

User Story 1.13 - Personalize

User Story 1.14 - Text-to-Speech*

*Please note that by accident we grouped the branches DEV1.12 and 1.14 together as just DEV-1.12.

** Please also note that due to Gitlab issues, DEV-1.3 is DEV-1.6 (unsuccessful renaming/creating a new branch)

2.4.3 Team Capacity

These tasks will be finished by December 5th.

2.4.4 Participants

Franco – Secret Rooms, Personalize

Aaron – Visual

Usha – Replayability/Player Choice

Carson – Character Stats, Rewards, Exploit Protection, Text-To-Speech

2.4.5 Tasks Completed

1.5, 1.6, 1.7, 1.8, 1.9, 1.14

2.4.6 Product Backlog

N/A

2.4.7 Code Reviews

Story Reviewed	Name of Reviewer	Pull Request Link

[DEV-1.14]: Text-to-speech	Usha	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/25
[DEV-1.15]: Diversity	Aaron	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/9
[DEV-1.9]: Secret Rooms	Carson	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/10
[DEV-1.6]: Replayability/Player Choice	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/11
[DEV-1.4]: Additional Trolls	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/12
[DEV-1.13] Personalize	Carson	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/13
[DEV-1.16] Settings Menu	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/14
[DEV-1.7] Rewards	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/16
[DEV-1.8] Exploit Protection	Carson	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/18
[DEV-1.7] Rewards	Aaron	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/19
[DEV-1.5] Visual	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/21
[DEV-1.1] Completionist	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/22

[DEV-1.4] Additional Trolls	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/23
[DEV-1.6] Replayability/Player Choice	Franco	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/24
[DEV-1.12] Population	Usha	https://mcsscm.utm.utoronto.ca/csc207_20239/group_27/-/merge_requests/25

* Please note that some of the merge requests were closed and merged locally, as git was down at the time of requestion.

2.4.8 Retrospective

Participants: Usha, Aaron, Franco, Carson

Unfinished tasks: N/A

Practices that went well: We came together more in our final sprint, and were really able to focus in the last moments

New / Revised Practices: Continued to work hard, had good communication. We were also working to our strengths by having each teammate help debug each other's code and suggest fixes as we could provide each other with a fresh perspective to solving issues, as well as in each of our strengths/experiences with other sprints.

Worst Experience: Dealing with GitLab, as it was slow due to high traffic.

Best Experience: The sigh of relief after having a final product done.

SECTION 3: SUMMARY

We were able to implement accessibility settings, allowing users to change the game's font, font size, and background color. We also implemented a working text to speech feature.

We added a system of achievements for determined gamers.

We created a fully functioning start menu where users can choose their player.

We added additional trolls, as well as rewards for beating them.

We added stats for the player.

We created an option to name items.

We added secret rooms, as well as non-repetitive trolls to keep the game new and interesting.

We added Non-Player characters that help the user.

Given more time, we would've been able to implement all of our user stories. We unfortunately could not include the cosmetics or artifacts features. Despite these limitations, we've still improved on the base AdventureGame and made it our own.