

FINAL Project Report

Created 2023.11.06

Project Name

Danyal

Arhum

Takia

Zayd

Project Demo:

https://drive.google.com/file/d/1faqBPgMr4ySHva6tcDbD3JN14_c2FksN/view?usp=sharing

SECTION 1: REPORT SUMMARY

The scope of this project was to make an adventure game where the player can move around in and have rooms that contain items and enemies the player can interact with. Items would have extra functionality that may help the player during gameplay. We also wanted accessibility features to make the game available to many more people.

SECTION 2: PROCESS DOCUMENTATION

GROUP 21 - 2.1 SPRINT 1 OVERVIEW (NOV 10-NOV 17)

2.1.1 Sprint Overview:

Our goal for this sprint is to implement the speech-to-text feature, start screen, Surrounding room help item and Enhanced GUI.

2.1.2 Stories Selected for this Sprint:

List the user stories selected for the sprints and the owners of these stories. Make note of any updates or changes to user stories that are made during this sprint.

Group Member	User Story Selected
Danyal	Speech-to-Text
Arhum	Surrounding room help item
Takia	Start Screen
Zayd	Enhanced GUI

2.1.3 Team Capacity:

We are expected to complete User Stories (Speech-to-Text, Start screen, Surrounding room help item, Enhanced GUI) by November 17.

2.1.4 Participants:

Here, provide a list of team members, by name, and the tasks and responsibilities they were assigned during the sprint. Note both coding responsibilities and any other responsibilities as well (i.e. documentation related, management related).

Group Member:	Task/Responsibilities:
Danyal	Implement Speech-to-Text, Installing and Setting up Google API,
Arhum	Implement surrounding room help item, Document the retrospective meeting
Takia	Implement the Start Screen
Zayd	Implement map visual and character on screen, controls to move character

2.1.5 Tasks Completed:

What was actually finished during this sprint?

Tasks Completed:
Set-up Javafx on all laptops

2.2. SPRINT 1 PRODUCT BACKLOG

Group Member:	User Stories (to be completed):
Arhum	surrounding room help item user story
Arhum	Guide Item user story

Arhum	Lives User Story
Danyal	Accessibility Information
Danyal	Settings Window
Danyal	Contrast, Hue, Brightness, Saturation (Accessibility Settings)
Zayd	Tutorial
Zayd	Subtitles/Captions
Zayd	Difficulty
Takia	Start Screen
Takia	Registration Page
Takia	Scoring System
Takia	Puzzles/Games

2.3. SPRINT 1 CODE REVIEWS

No merges during this sprint. Figuring out set-up with everyone's code and how it would interact.

2.4 SPRINT 1 RETROSPECTIVE

When a sprint is completed, hold a retrospective meeting and ask one team member to take notes. Place a short record of each retrospective meeting in this section! The details should include:

- Participants: Arhum, Danyal, Zayd, Takia
- All user stories are still incomplete, still creating first user stories
- Practice of texting and communication with setup of code was beneficial to start work
- Practice of sticking to schedule of sprints will be enforced moving forward
- No bad practices were present with the team this sprint
- Worse experience has been setting up java fx before using any code

GROUP 21 - 3.1 SPRINT 2 OVERVIEW (NOV 17-NOV 24)

3.1.1 Sprint Overview:

Our goal for this sprint is to implement the speech-to-text feature, start screen and registration page, Surrounding room help item, enhanced GUI and Difficulty.

3.1.2 Stories Selected for this Sprint:

List the user stories selected for the sprints and the owners of these stories. Make note of any updates or changes to user stories that are made during this sprint.

Group Member	User Story Selected
Danyal	Speech-to-Text Continued...
Arhum	Surrounding room help item
Takia	Start Screen and Registration page
Zayd	Enhanced GUI and Difficulty

3.1.3 Team Capacity:

We are expected to complete User Stories (Speech-to-Text, Surrounding room help item, Start Screen and Registration page, Enhanced GUI and Difficulty) by November 24

3.1.4 Participants:

Here, provide a list of team members, by name, and the tasks and responsibilities they were assigned during the sprint. Note both coding responsibilities and any other responsibilities as well (i.e. documentation related, management related).

Group Member:	Task/Responsibilities:
Danyal	Implement Settings Window, Check

	Merge Requests
Arhum	Surrounding room objection potion, creating the item, finding a sprite to represent it, finishing behavior with item, finding how to create pull requests for code review
Takia	Implement the start screen and player registration page, document the retrospective meeting
Zayd	Implement trolls with varying difficulties with fighting mechanics so the player can fight them

3.1.5 Tasks Completed:

What was actually finished during this sprint?

Tasks Completed:
GUI, controls and maps
Registration Page
Speech To Text

3.2. SPRINT 2 PRODUCT BACKLOG

Group Member:	User Stories (to be completed):
Arhum	surrounding room help item user story
Arhum	Lives User Story
Danyal	Accessibility Information
Danyal	Settings Window
Danyal	Contrast, Hue, Brightness,

	Saturation (Accessibility Settings)
Zayd	Tutorial
Zayd	Subtitles/Captions
Takia	Start Screen
Takia	Scoring System and ScoreBoard

3.3. SPRINT 2 CODE REVIEWS

This week, three user stories were implemented, and the changes were pushed to their respective branches. The members presented their work during the meetings. However, since we were still determining how to merge the code, no pull requests were made.

3.4 SPRINT 2 RETROSPECTIVE

- The participants in the meeting: Arhum, Danyal, Zayd, Takia ;
- Unfinished Tasks: Surrounding room help item ;
- Pushing the changes to the branch and then merge the branch to the dev instead of merging to the main branch was beneficial to the project ;
- Practice of making the name of the branch same as the implemented features will be enforced moving forward;
- No bad practices were present with the team this sprint

Your team's best/worst experience during this sprint

- Best experience was one team member helping the others dealing with gitlab.
- Worst experience was how to deal with merge and pull requests

GROUP 21 - 4.1. SPRINT 3 OVERVIEW (NOV 24-DEC 1)

4.1.1 Sprint Overview:

Our goal for this sprint is to implement the Settings Window & Contrast, Hue, Brightness, Saturation (Accessibility Settings), Start screen, Surrounding room help item, Tutorial.

4.1.2 Stories Selected for this Sprint:

List the user stories selected for the sprints and the owners of these stories. Make note of any updates or changes to user stories that are made during this sprint.

Group Member	User Story Selected
Danyal	Settings Window & Contrast, Hue, Brightness, Saturation (Accessibility Settings)
Arhum	Surrounding Room Objects Potion
Takia	Start Screen
Zayd	Tutorial

4.1.3 Team Capacity:

We are expected to complete User Stories (Settings Window (including Contrast, Hue, Brightness, Saturation), Potion, Starting Page and Tutorial) by December 1st.

4.1.4 Participants:

Group Member:	Task/Responsibilities:
Danyal	Implement Settings Window & Contrast, Hue, Brightness,

	Saturation (Accessibility Settings)
Arhum	Implement surrounding room help item
Takia	Finish the Start Screen
Zayd	Implement a tutorial

4.1.5 Tasks Completed:

Tasks Completed:
Surrounding Room Objects Potion
Difficulty
Tutorial
Start Screen

4.2. SPRINT 3 PRODUCT BACKLOG

Group Member:	User Stories (to be completed):
Zayd	Captions
Takia	Scoring System and ScoreBoard
Arhum	Hearts
Danyal	Accessibility Information

4.3. SPRINT 3 CODE REVIEWS

Story Reviewed	Name of Reviewer	Pull Request Link
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[Arhum]: Surrounding Room Objects Potion	Danyal	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/1
[Zayd]: Updated GUI, Difficulty	Arhum	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/3
[Danyal]: Speech-to-Text	Takia	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/7
[Takia]: Start Screen and Registration Page	Zayd	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/6

4.4 SPRINT 3 RETROSPECTIVE

When a sprint is completed, hold a retrospective meeting and ask one team member to take notes. Place a short record of each retrospective meeting in this section! The details should include:

- Participants: Arhum, Danyal, Takia, Zayd
- unfinished tasks: Scoring System and ScoreBoard, Hearts, Settings Page, Captions
- A summary of practices that went well this sprint and should be continued: We communicated on discord on updates of features, and bugs that arose because of other user stories. We also stuck to the timeline when it came to user story completion. Finally we asked team members if pushing or git commands were unfamiliar.
- A summary of any bad practices that will not be repeated moving forward: Trying to merge to the dev branch multiple times without talking to teammates won't be repeated.

Your team's best/worst experience during this sprint

- Best experience was merging the code and GUI and core mechanics were heavily changed, meaning a large amount of progress has been made.
- Worst experience was when a teammate pushed a change and a large amount of new bugs appeared.

GROUP 21 - 5.1. SPRINT 4 OVERVIEW (DEC 1-DEC 5)

5.1.1 Sprint Overview:

Our goal for this sprint is to implement the accessibility settings, the hearts/lives, the scoreboard and scoring system and captions.

5.1.2 Stories Selected for this Sprint:

List the user stories selected for the sprints and the owners of these stories. Make note of any updates or changes to user stories that are made during this sprint.

Group Member	User Story Selected
Danyal	Accessibility Information
Arhum	Hearts
Takia	Scoring System and ScoreBoard
Zayd	Captions

5.1.3 Team Capacity:

We are expected to complete User Stories (Accessibility, Hearts, Scoreboard, Captions) by December 5th.

5.1.4 Participants:

Here, provide a list of team members, by name, and the tasks and responsibilities they were assigned during the sprint. Note both coding responsibilities and any other responsibilities as well (i.e. documentation related, management related).

Group Member:	Task/Responsibilities:
Danyal	Implement accessibility information

Arhum	Implement hearts user story, bug fixes, fix potion to include trolls
Takia	Implement the Scoring system and Scoreboard
Zayd	Bug fixes and appearance, document the retrospective meeting

5.1.5 Tasks Completed:

What was actually finished during this sprint?

Tasks Completed:
Captions
Bug fixes / merge conflicts
Heart/Lives
Scoring System and ScoreBoard
Accessibility Settings

5.2. SPRINT 4 PRODUCT BACKLOG

Completed all user stories and tasks.

5.3. SPRINT 4 CODE REVIEWS

Story Reviewed	Name of Reviewer	Pull Request Link
[Arhum]: Hearts	Zayd	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/11
[Takia]: Scoring System and Scoreboard	Danyal	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/12

[Zayd]: Audio and Tutorial	Arhum	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/10
[Danyal]: Settings	Takia	https://mcsscm.utm.utoronto.ca/csc207_20239/group_21/-/merge_requests/13

5.4 SPRINT 4 RETROSPECTIVE

When a sprint is completed, hold a retrospective meeting and ask one team member to take notes. Place a short record of each retrospective meeting in this section! The details should include:

- Arhum, Takia, Danyal, Zayd
- No unfinished tasks
- We were communicating frequently about changes in code and bugs, only merged once for each user story and scheduled group meetings.

Your team's best/worst experience during this sprint

- Best experience was putting all the code together and it ran properly
- Worst experience was making the demo video

SECTION 3: SUMMARY

In this final section, briefly summarize both your project **accomplishments** and its **limitations**.

The accomplishments in this project were:

- Incorporating a Start Screen that has instructions, tutorial, settings and the main game option.
- Integrating the tutorial that allows the players to play a demo game.
- Implementing the settings label that displays all the accessibility information of the game.
- Appending the Registration page that allows player to register with their name
- Creating a new UI where the character can move around the screen using the keyboard.
- We added attacks where the player can fight enemies using either hands or a gun. Enemies were added which moved around the map and can shoot.
- Depending on if a bullet hits the player, the health of the player and the overall score will go down which is shown as hearts and the score label.
- Objects can be picked off the floor and into the player's inventory, and depending on the object, it can do extra functionality. A gun was added as another way a player can fight enemies and a potion was added to show the items and trolls in all different directions.
- New rooms were added that had different items and different trolls depending on the story
- A story where the character can play through and explore to complete the game.

The limitations in this project were:

- Did not create another type of object that would guide the player to the correct path.
- Adjusting Text Size user story was not made due to time constraints.
- Not being able to go back to start page from other parts of the game such as the name registration or the main game unless you died or finished the game

Design Changes:

- Changed the design pattern for the potion user story from the decorator pattern to the extension object pattern.
- This is because that pattern fits the plan for the code better, and it ends up having a smoother interaction with the rest of the code.
- Very little errors were created with other peoples use stories as this pattern allowed this feature to be isolated.