

# Project Summary

## csci205\_final\_project

### Project Details

#### Members

- Ellyn Ngo
- Hannah Tran
- Holiness Kerandi
- Rahul Sibal

### Project Retrospective

#### What was your initial goal?

Our initial goal was to create a comprehensive, creative, practical and entertaining game that best suited the programming ability of all group members.

#### What did you achieve?

We achieved just that, producing a highly creative product while spending a great amount of effort collaborating and learning to be better software engineers.

#### What went well in the project?

Our work went well and was greatly efficient. All the tasks were addressed immediately and everyone was eager to put in their work.

#### What could be improved?

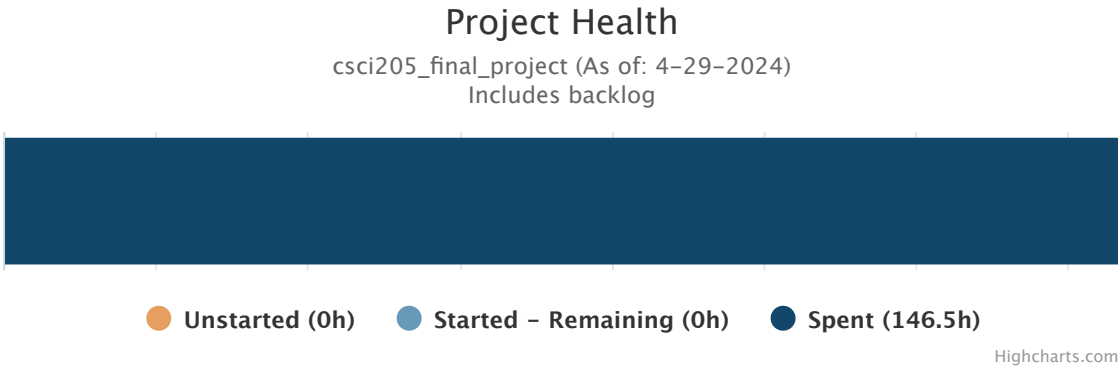
Probably our collaborative coding skills and our git skills. This is a very steep learning curve for all of us, and though I think this could be improved, we have done our best so far.

## What would you change if you did the project again?

Knowing what we know now, I think we would iron out the git problems first. It took away so much valuable time from actually coding and improving the product, and that is very regrettable.

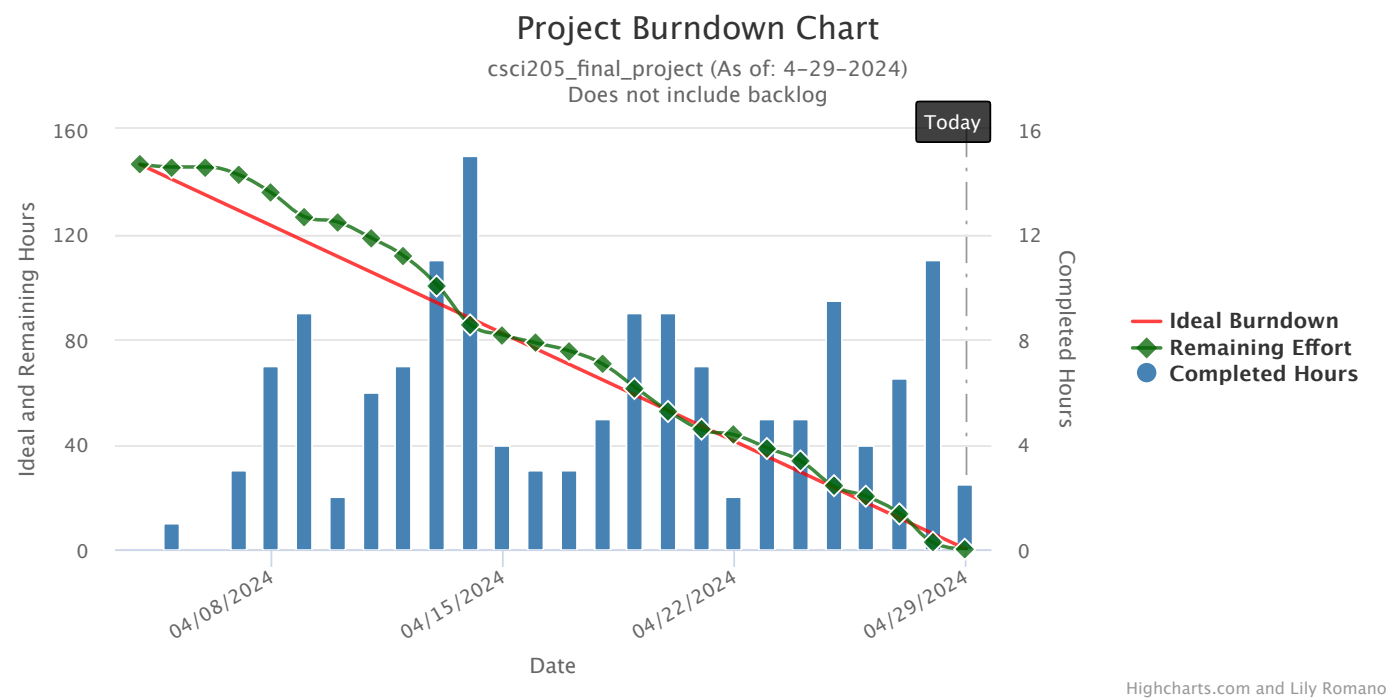
## Charts

### Health Bar



It was certainly time well spent. Everything in the final product was addressed appropriately and with great consciousness of the assignee. I am greatly satisfied with what we had done as a group regarding finishing up work efficiently and effectively.

### Burndown Chart

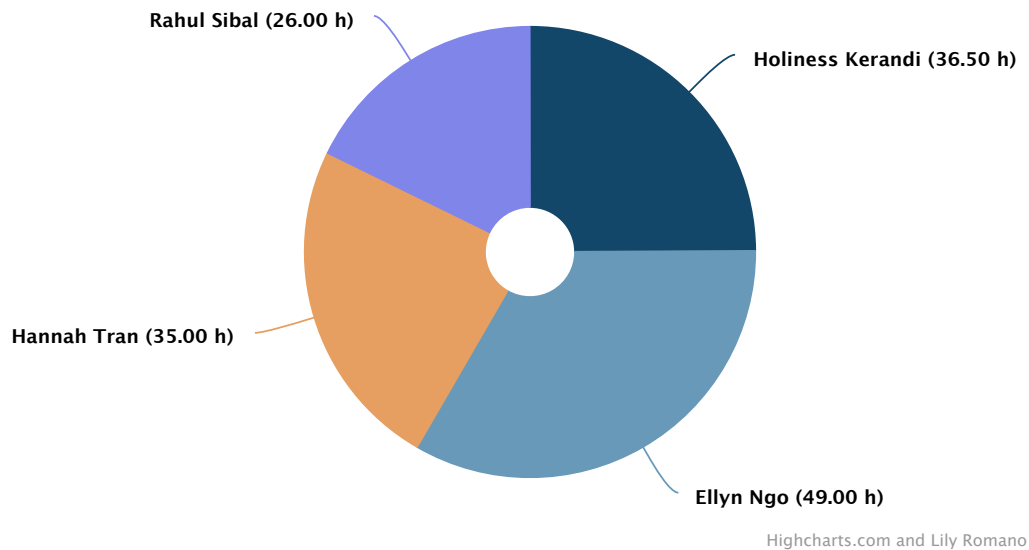


This is one of the few areas one could argue could have some improvements, but I would like to argue otherwise. As college students that have multiple classes going on during the weekday, it is greatly expected for us to acknowledge the needed-to-be-done tasks during the weekday, which increases the remaining effort, and work in bulk for most of it during the weekend as it is the most logical time coverage for works. This well reflects that, and we did try our best not to make the work odious and unbearable during the sprints.

## Assignee Chart

Project Hours assigned vs. completed

csci205\_final\_project (As of: 4-29-2024)  
Does not include backlog



Both of these figures reflect the of truth our working progress. This well displays the gradient of ability, as Ellyn was the most skilful coder out of all of us, thus the bulk of technical tasks that she had done were the greatest. I on the other hand focused on the user interface and perfecting the user experience, thus my design tasks well outnumbered all other three combined. We analysed our strength well to disperse the workload, and that is reflected in the chart.

Name	User Stories	Bugs	Tech. Tasks	Design Tasks	Spikes	Doc.
Ellyn Ngo	0	10	35	1	1	2
Hannah Tran	0	1	6	23	0	5
Holiness Kerandi	0	8	20.5	0	0	8
Rahul Sibal	0	3	16	3	0	4

Sprints

Sprint 1

Dates: 4-4-2024 to 4-10-2024

**Review: What went well in the sprint?**

We had figured out most of the logistics for most of the games and understood the necessitated mechanism for the game. The UML diagrams have been figured out and the basic code for instantiating the game has been implemented

**What could be improved?**

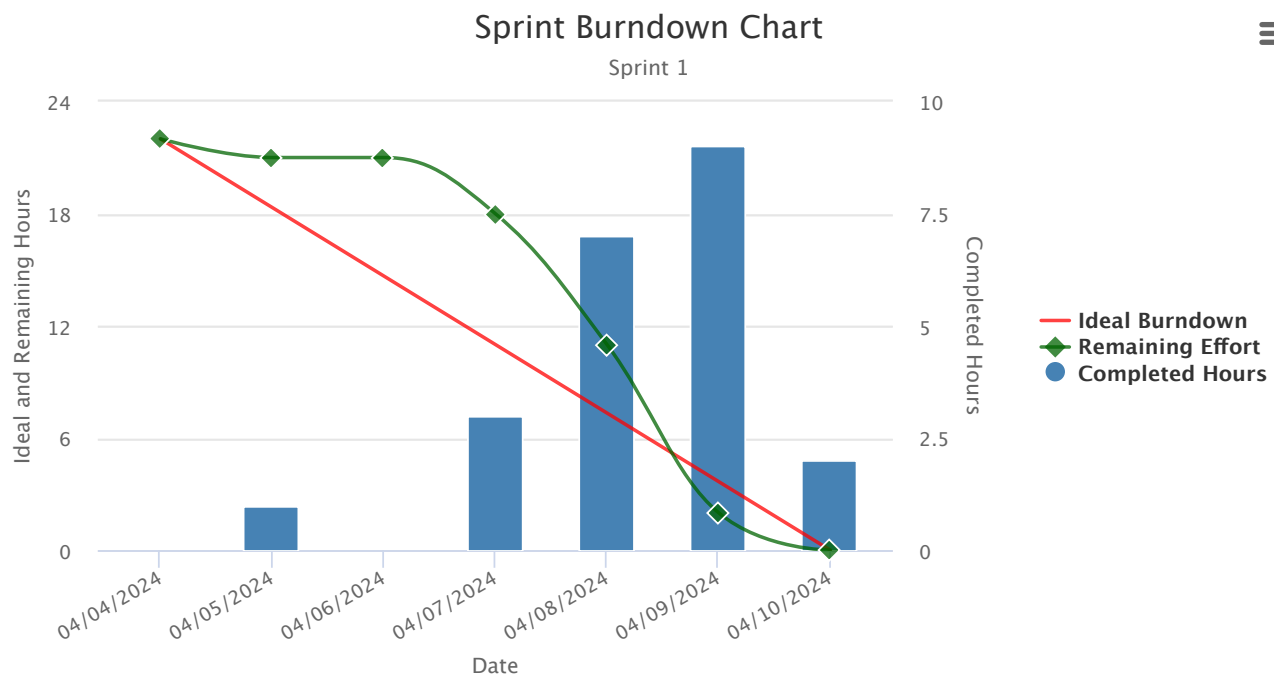
Communication between individuals in the group and setting a fixed meeting time for everybody. Onboarding with Git and AIECode could also be improved.

**Are you on track? What is your plan if not?**

I think I am pretty much on track with all my goals and necessary work for the project.

**What will you improve on in the next sprint?**

I would increase my efficiency and my communication with individuals. Clear communication is wholeheartedly important and though i think I understood that, I has not done it properly.

**Sprint 2**

Dates:

4-10-2024 to 4-15-2024

Goal:

In this sprint, I am hoping that we will be able to finish the basic skeleton of the game.

Review:

What went well in the sprint?

We have collaborated much better during this sprint than that of the last time. Work was quickly addressed and implemented. Meetings were conducted efficiently with clearer communications amongst the parties.

What could be improved?

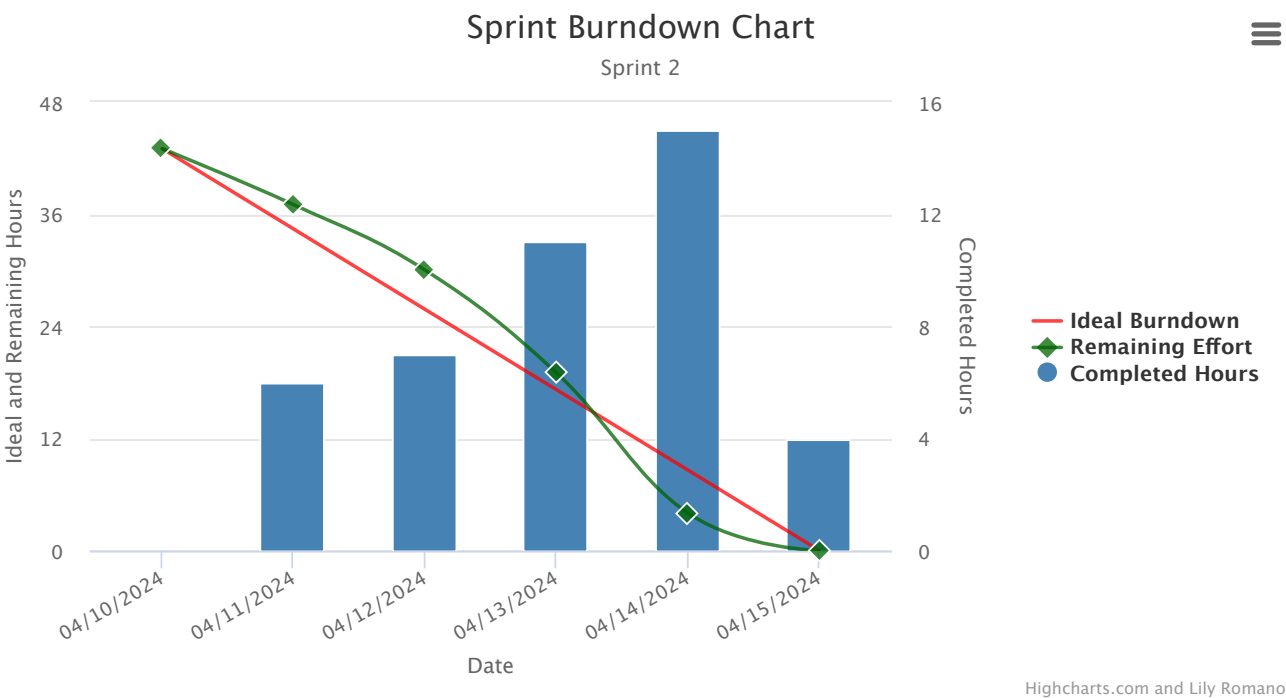
Logic implementation and Git work could be improved much better. Communications amongst people still need improvements.

Are you on track? What is your plan if not?

We are mostly on track with our goals

What will you improve on in the next sprint?

We would hope that most of our work would start to function along a clock and at the end of the sprint start implementing the levels



# Sprint 3

Dates:

4-15-2024 to 4-22-2024

Goal:

Goals is to finish the general function of one singular level to prepare for the last part of implementing other levels, proper documentations and UI implementations

Review:

What went well in the sprint?

Our communication got so much better. The code progression had a lot of breakthroughs in mechanics, visuals and user experience.

What could be improved?

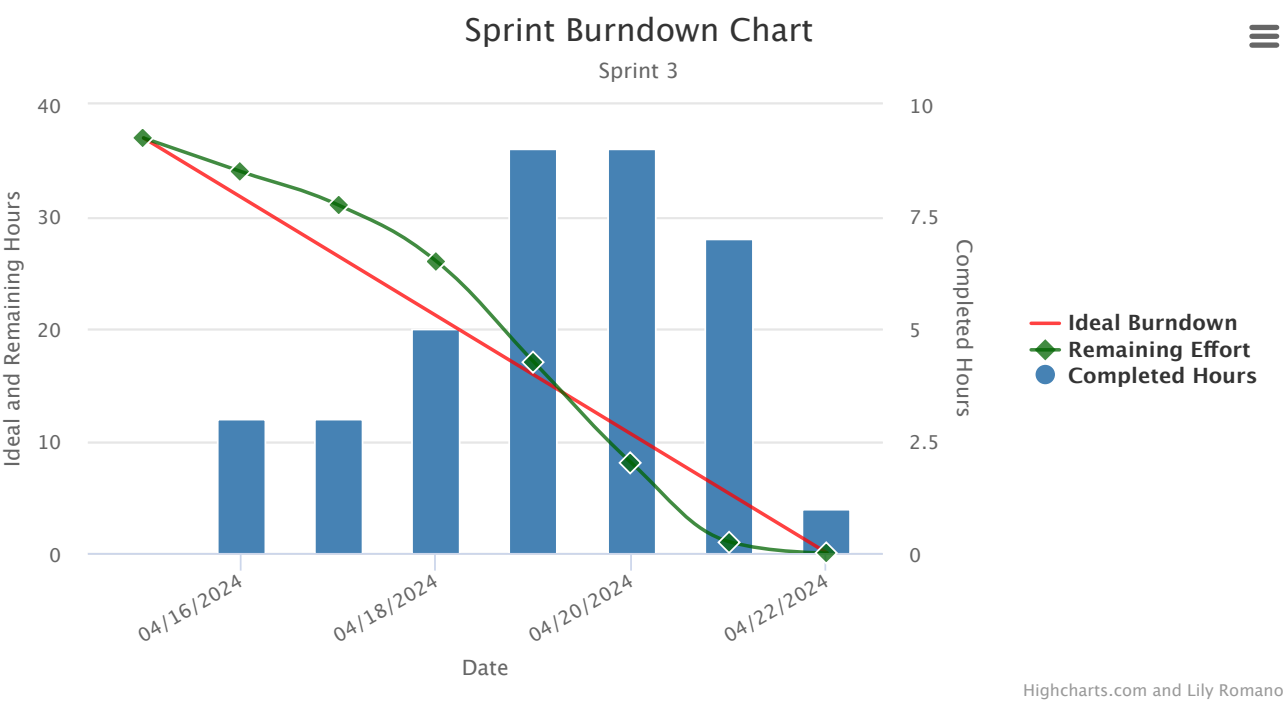
Honestly, I think not much. We have been greatly productive last week, and all the work is to the point and worked out well

Are you on track? What is your plan if not?

I do think our plans are very on track. All the remaining works are either bugs, visual or procedural parts.

What will you improve on in the next sprint?

I think we would spend lots more time trying to perfect everything



## Sprint 4

Dates:

4-22-2024 to 4-29-2024

Goal:

Finish the game in every aspect possible. Test the game well, and finish all the necessary documents.

Review:

What went well in the sprint?

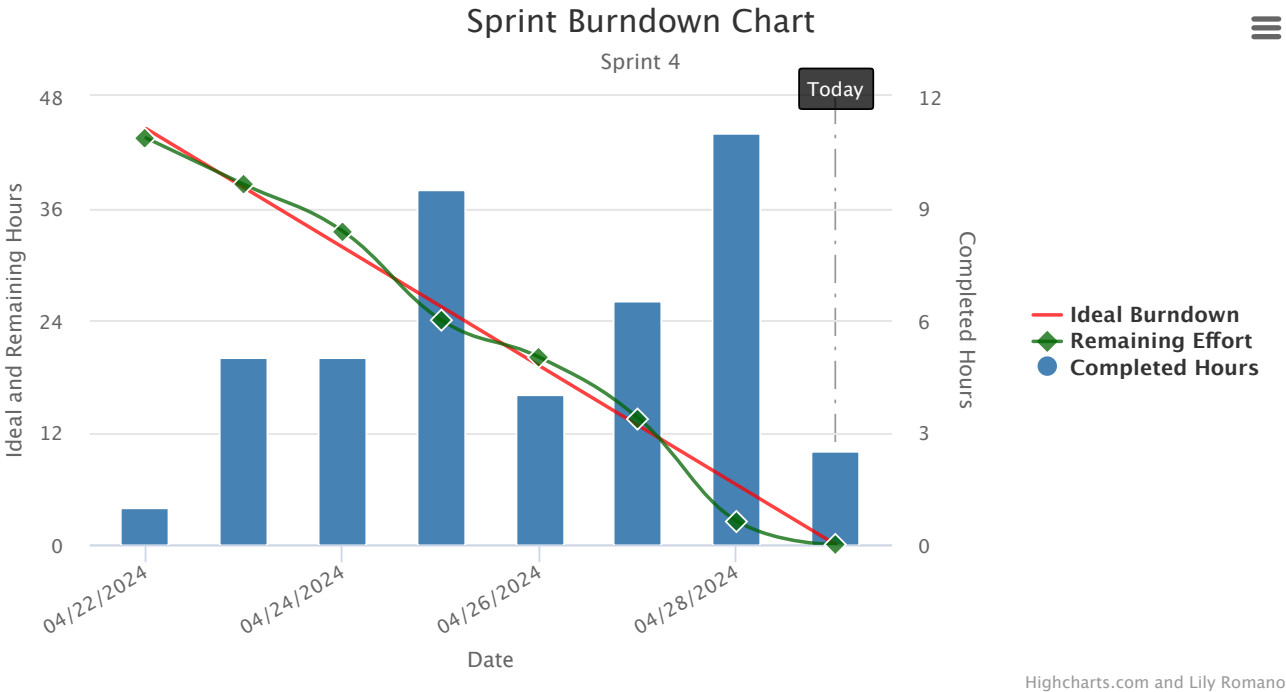
We finished all the work, and our product has been of great satisfaction so far

What could be improved?

I think that we did our best for this sprint, and I find myself having no complaint

If you were to continue the project, what would you improve on in the next sprint?

I think if there is one, we hope that we could be even more experimental with our work to challenge our ability further.



## Personas





## Madison Denys

### Quote

I play video games recreationally and I am not too enthusiastic

### Narrative

Having 3 children, was a social worker, and needed some means of peaceful recreation in her free time to relax and unwind, relieving stress. She loves games with calming visuals and theatrics, and repetitive tasks.



## Katya Petrova

### Quote

Я люблю изучать английский

### Narrative

Middle school student. First language is Russian, only familiar with the Cyrillic alphabet. Trying to learn English and be familiar with English/Latin alphabet typing. Prefer simple and visually explicit interface so that they would not be hindered from game play by language barrier.



## Phoebe Bates

### Quote

It is all fun and games

### Narrative

College student. Casual game player for amusement. Love fast-paced game play, skill acquiring and thrilling visuals.



## Lana Del Rey

### Quote

"You always keep on learning in your life"

### Narrative

Singer and artist. Does not have much exposure to technology in her life prior but wanted to actively (use PicsArt to make her album cover), try to learn to adapt herself to modern technology, which requires typing on a computer. Love calming, accessible features and simple user interface, simple and explicit instruction and navigation.



John Hatlen

Quote

Conquest is life. Winning is prophecy

Narrative

Professional gamer/streamer. Competitive and loves to assert dominance over other players, and wants to compete against other people all the time. Looking for skill-based matchmaking and efficient gameplay to result in the best outcome.

Table of Work

Showing 1 to 39 of 39 entries

Search:

Title	Type	Est.	Spent
Closed (13)		44 h, 30 m	44 h, 30 m
Sprint 4 (13)		44 h, 30 m	44 h, 30 m
Bug with increasing level of difficulty	Bug	2 h	2 h
Credit Landing Area	Design Need	1 h	1 h

Design bugs	Bug	1 h	1 h
docs/DesignManual.pdf	Documentation	5 h	5 h
docs/UserManual.pdf	Documentation	3 h	3 h
Fix visualization health bar	Design Need	3 h	3 h
Game Over Screen	Bug	3 h	3 h
Implement "Pause" and "Stop" button	Technical Task	4 h	4 h
README.md	Documentation	2 h	2 h
Reconfigure designs elements	Design Need	3 h	3 h
Trying to Fix the InvalidModule Bug	Bug	9 h	9 h
Unit Test	Technical Task	5 h, 30 m	5 h, 30 m
Updating UML diagrams	Documentation	3 h	3 h
Opened (26)		102 h	102 h
Sprint 1 (7)		22 h	22 h
Class Diagrams	Documentation	4 h	4 h
Class/Objects	Design Need	2 h	2 h
Colour palette/ Theme/ Typefaces	Design Need	2 h	2 h
Create CRC Cards	Documentation	2 h	2 h
Dictionary	Technical Task	5 h	5 h
Initializing the MVC model and get a basic view of ghosts	Technical Task	5 h	5 h
Instantiating background	Technical Task	2 h	2 h
Sprint 2 (7)		43 h	43 h
Adding 3 new Label Boxes and have skeleton code for them	Technical Task	2 h	2 h
Designing background	Design Need	7 h	7 h
Designing Ghost	Design Need	2 h	2 h
Event Loop/Loop Structure	Technical Task	13 h	13 h

GUI for Animated Game	Technical Task	4 h	4 h
Tie the Typing mechanism into the View	Technical Task	5 h	5 h
Typing mechanism	Technical Task	10 h	10 h
Sprint 3 (12)		37 h	37 h
Background receding/splitting	Bug	2 h	2 h
Buttons, boxes, interactive feature designing	Design Need	3 h	3 h
Counting the remaining lives of the Main char	Technical Task	4 h	4 h
Fix the location of four ghosts and make them move to main char	Technical Task	2 h	2 h
Increase Level of Difficulty for each round	Technical Task	5 h	5 h
Increase the level of difficulty for the game	Spike	1 h	1 h
Make the ghosts disappear when they reach the center	Technical Task	7 h	7 h
Press Enter multiple times cause the game to crash	Bug	2 h	2 h
Renew target mechanics	Technical Task	2 h	2 h
Replacing the current ghost (only a dot) with an actual figure	Technical Task	2 h	2 h
Replicated words/ words not being destroyed after being typed	Bug	3 h	3 h
Welcome menu design	Design Need	4 h	4 h

## Daily Scrum

### Sprint 2:

4/10:

- We successfully created the basic interface of the game, with a welcome banner on top, 4 ghosts, and the main character in the middle
- We're still trying to figure out how to put the ghosts into 4 borders
- The biggest challenges might be how to figure out the game logics and algorithms

4/11:

- Today we have distributed task to everyone to work on each section of the game, we successfully import the dictionary and analyze it based on number of words.
- We're still working on the animation of the ghosts
- We're still feeling hazy about how to implement the typing logics.

4/12: (Client Meeting)

- We get some suggestions from Prof. Stough today on the game loop and a typing logic advice (keyRelease). We also have fixed the location of the Ghosts on the screen and also putting on text field for user to type in.
- We're starting to figuring out the typing mechanism. Also today we tried out the "Code With Me" feature in IntelliJ.
- One big challenge is figuring out how to best accommodate with everybody's schedule. Some of us seem to have lots of exams this week and couldn't work much on the project.

4/13 Sat:

- Today we worked mainly in KeyFrenzyController and we HAVE FIGURED OUT THE TYPING MECHANISM!!! YAYYYY the ghosts will now disappear when the user types in correctly :))
- We will still work on the game loop. It doesn't repeat the game at all as of right now.

4/15 Mon:

- We have a client meeting with Prof. Stough today and he suggested modifying the typing mechanism so that each time the user types in the word correctly, it should make the ghost disappear right away without using "Enter" or "Space."

4/17 Wed:

- Today is another client meeting. We didn't show much progress in the last two days because of classwork for other classes. But we believe we know what to do with the game loop and can make more significant changes in the next days.
- One thing we did change on the interface tho is clean up the classes relating to the main character. It's quite redundant and we can still carry out the game normally without it.

4/18 Thur:

- In lab today we only have 2 people showing up at the 3pm lab even though we agreed upon this time slot. So sad but yeh we did make some significant changes to both the game logic and interface as well. The ghosts now move normally!! The interface also

changes a lot and it looks much more promising now.

- One thing we are challenged with right now is that there are several bugs in our code relating to key pressed, words dictionary, etc but we already assigned each other to work on it.

4/19 Fri:

- We worked on the movement more and refined this part more. In addition we also added the lives counter to show when if the user doesn't type the words in time then the ghosts will disappear and the lives go down

4/22 Mon:

We had Sprint 3 review today in class, lives are working well and game over screen comes if the user loses. Score increments correctly and levels increments based on the score reached. We are working on the Unit tests now, along with implementing the Pause and Stop buttons.

4/24 Wed:

- Today we starting working on cleaning the code and writing the manual for all the requirements. At this point our project still has several bugs that are quite concerning but they all don't really affect the overall game so we guess we shouldn't focus too much on it.

4/25 Lab:

- Today we were able to refactor some of the code and finalize some of the docs requirements. We decided to not move forward with some of the features until we finish other parts of the projects.

4/29 Mon:

- Today we fixed a huge bug with the Main class that was called in gradle file. This bug has wasted our whole weekend, preventing us from progress with the coding part because it simply did not run properly. I'm glad that we were able to finish it before the deadline. Other than that, we also finalized all other requirements in the details and might start working on the video on May 3. Phew!