

# Project Summary

## csci205\_final\_project

### Project Details

#### Members

- Harmony Yeung
- Katrina Wilson
- Nahom Ayele
- Nolan Sauers

#### Project Retrospective

**What was your initial goal?**

To create a typing game that would allow the user to practice their typing skills and familiarity with other coding languages.

**What did you achieve?**

A typing game that has three languages that the user can practice typing in, with other fun settings. It checks user inputs and outputs statistics about the game play.

**What went well in the project?**

Our teamwork, creating a product on time, and working together to fix bugs and add features.

**What could be improved?**

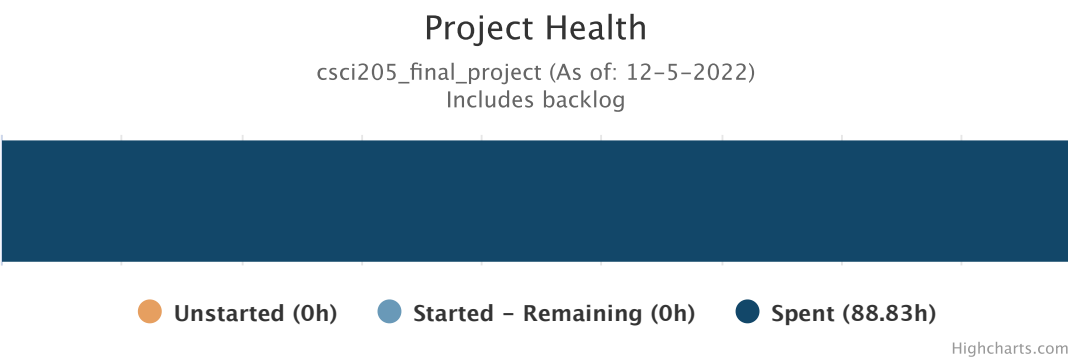
Our timer functionality could be improved, right now it is dependent on the user typing.

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

We would have spent less time trying to base everything off of existing code and go about it our own way from the beginning.

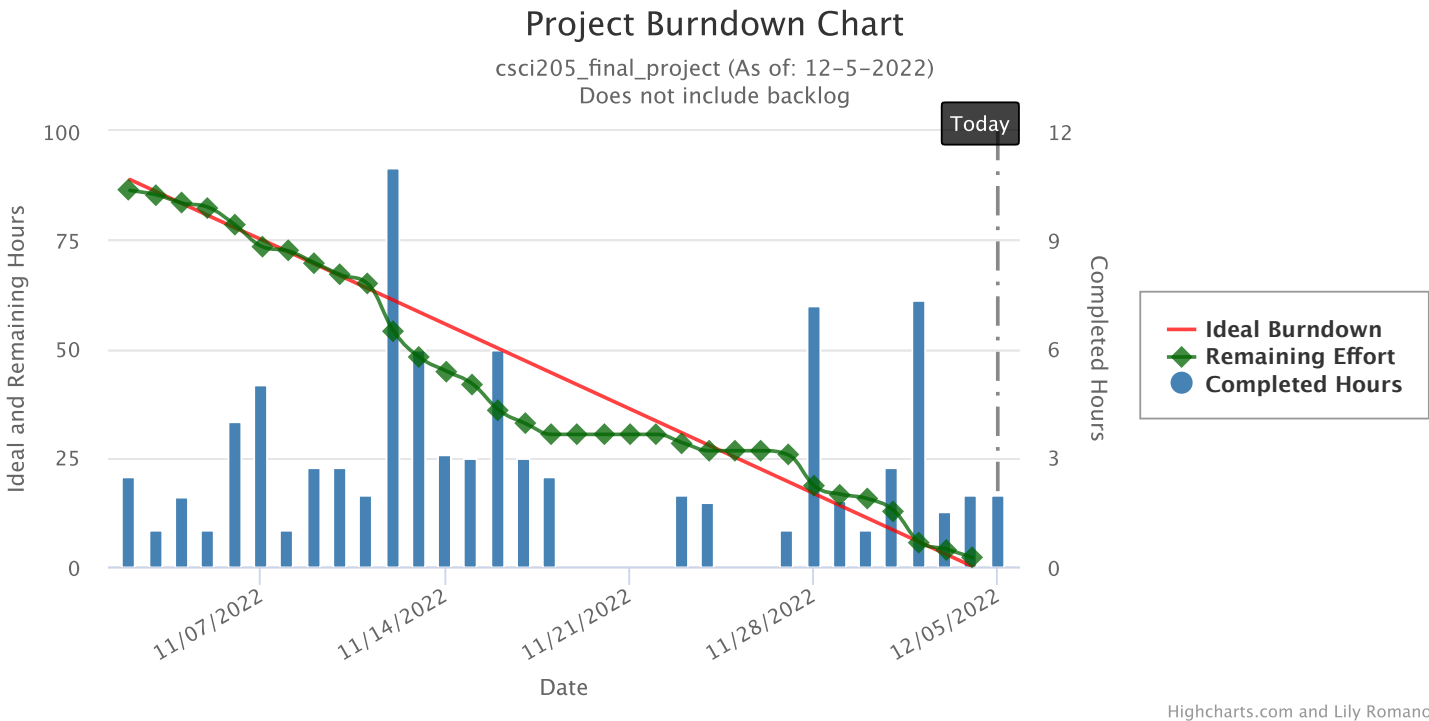
### Charts

#### Health Bar



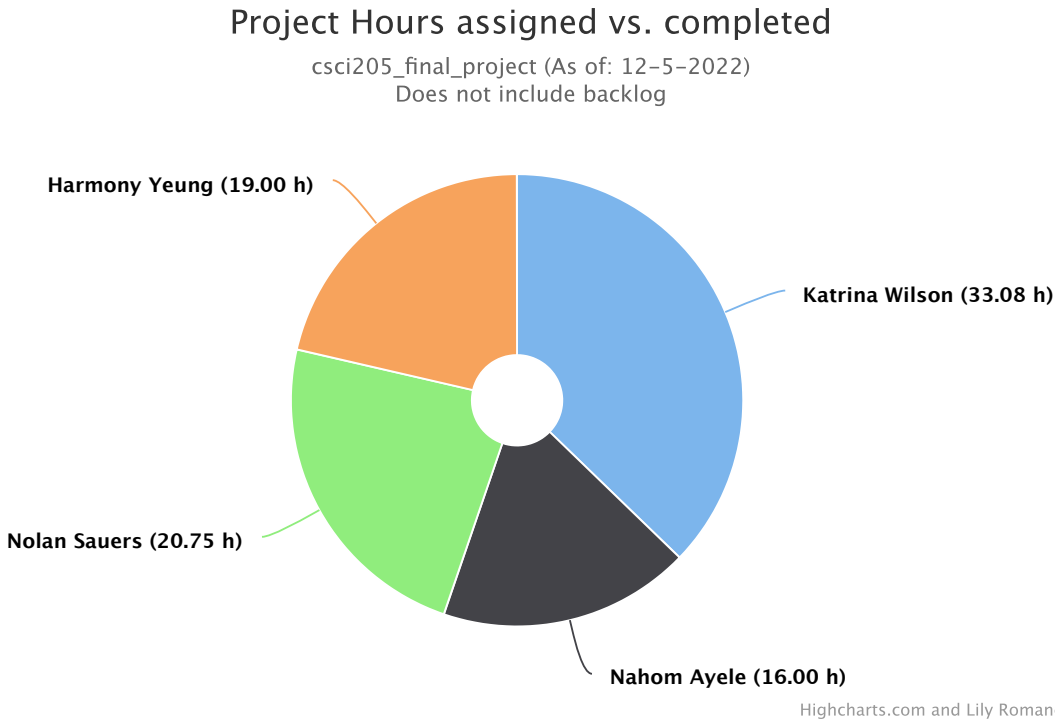
We got all of our work done and in a timely manner. Though we had a lot to do on the last Sprint, we luckily got it all done and working. It's really cool to see that we spent 88+ hours on this project, but it's probably an underestimate. We spent a lot of time working together and ideating, as well as putting in work for our AIECode profile. We got a lot done together, which all of us were surprised by, given that group project meetings tend to be a lot less productive than working alone.

Burndown Chart



We're very happy that we stayed below or slightly above the ideal burn down. It never felt like we were super behind, but it would have been nice to get more functionality early on for the original game. Instead, we had a lot of prototypes for the different aspects of our game, like the timer and the typing input.

Assignee Chart



Name	User Stories	Bugs	Tech. Tasks	Design Tasks	Spikes	Doc.
Harmony Yeung	0	0	12.5	6.5	0	0
Katrina Wilson	0	1.5	21.58	10	0	0
Nahom Ayele	0	0	10.5	5.5	0	0
Nolan Sauers	0	0.83	16.75	3.17	0	0

Sprints

Sprint 1

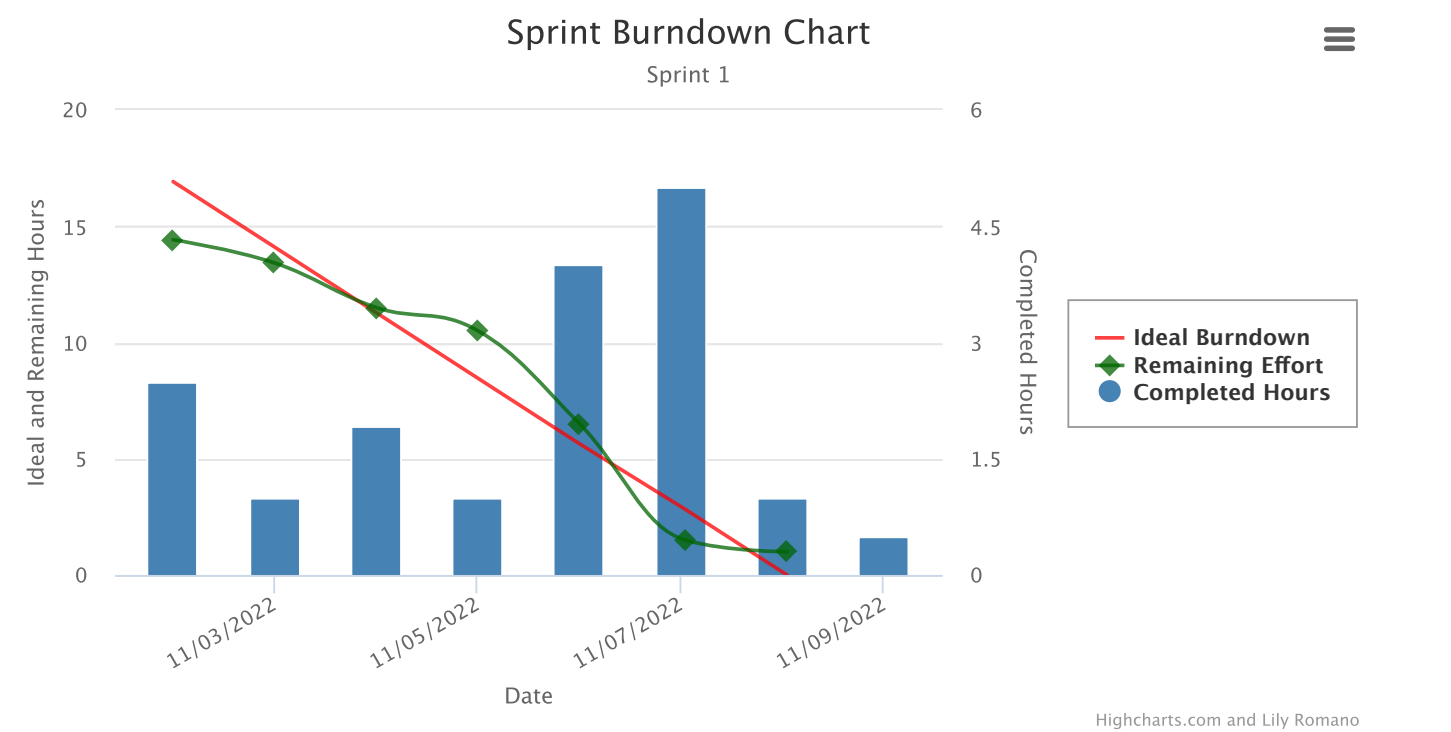
Dates:  
11-2-2022 to 11-9-2022

Review:  
**What went well in the sprint?**  
We have everything planned and we know what we want to do, and what we don't want to do. We have a good idea for the design and we've been keeping track of work well. We're merging our work a lot. We created a development branch and we each branch from that when we do our own work.

**What could be improved?**  
More efficient with how we split up work, create work that doesn't depend on something being done. Now that we have a plan in place, we can break up work by classes that will all be necessary in the final implementation.

**Are you on track? What is your plan if not?**  
Given everything that happened in the past week, we'd say we're on track. We took a lot of time trying to decipher bad code and we now just have to implement our own good code.

**What will you improve on in the next sprint?**  
Getting more work done and tested.



Sprint 2

**Dates:**

11-9-2022 to 11-16-2022

**Goal:**

We'd love to have a working screen that will handle keyboard input and output how well the user typed the sentences. We are planning on 3 screens/interfaces over all, but this week we just want the actual game interface working.

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

A lot! We have a working game! We figured out how to get rid of a useless button and we've got things figured out and we're splitting up work well. We got through the hard bit, now we can keep moving.

**What could be improved?**

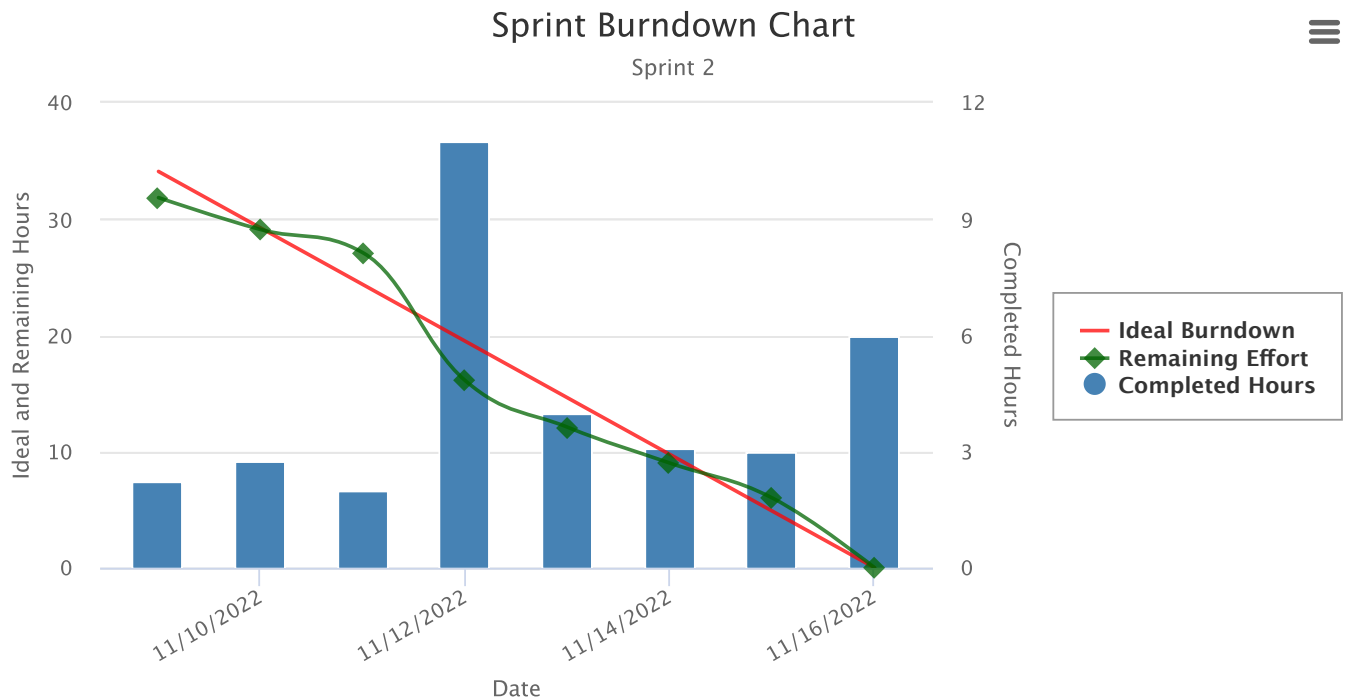
Our game needs a lot of new features and touching up. We want to add settings to the game, so we're going to implement that next.

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

Yes, we're on track. We achieved what we wanted to last week, minus a few bugs.

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

Our game interface and the actual software. Our process works really well, we haven't had an merge conflicts.

**Sprint 3****Dates:**

11-16-2022 to 11-28-2022

**Goal:**

Add more features, finish the settings, add the timer, add the stats about the game play

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

Creating Dark Mode, the game looks a lot better, and the Design Pattern is stronger. All the code has a purpose and the organization of the code is much better.

**What could be improved?**

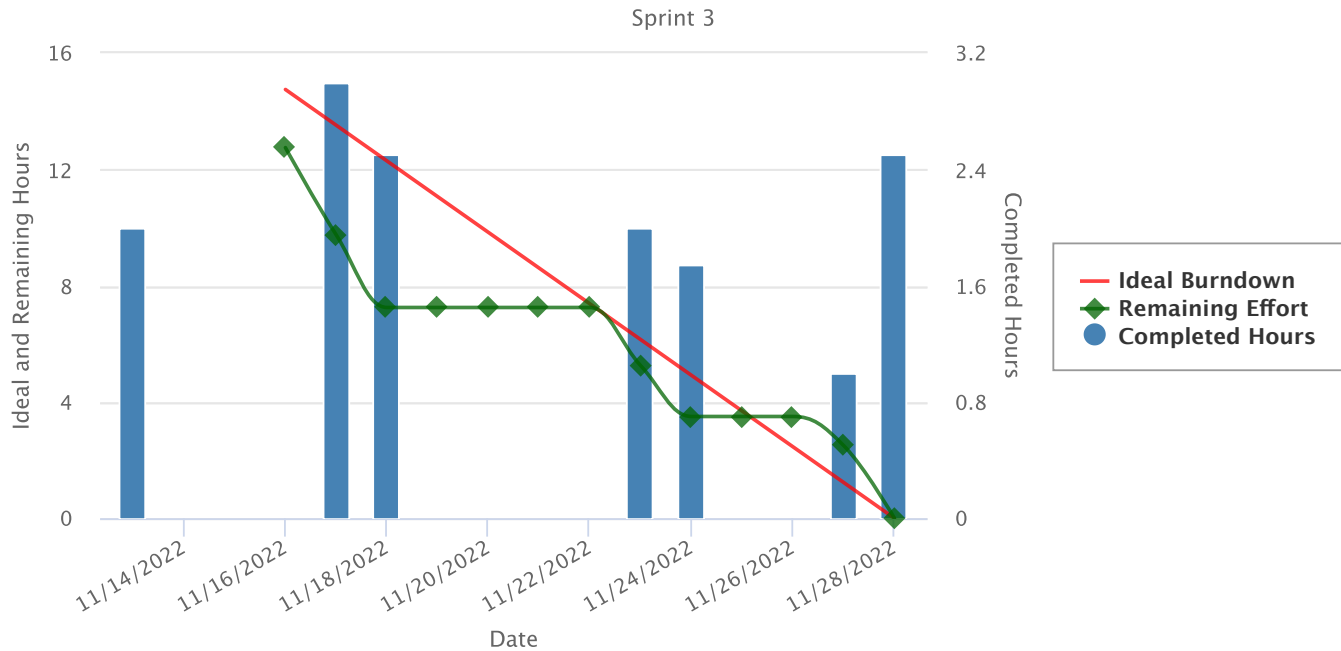
Settings, results of the game, and other features.

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

Yes, but still a lot to do.

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

Starting a user manual and adding more directions to the app.

**Sprint Burndown Chart****Sprint 4****Dates:**

11-28-2022 to 12-5-2022

**Goal:**

We will add more features and a better user interface.

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

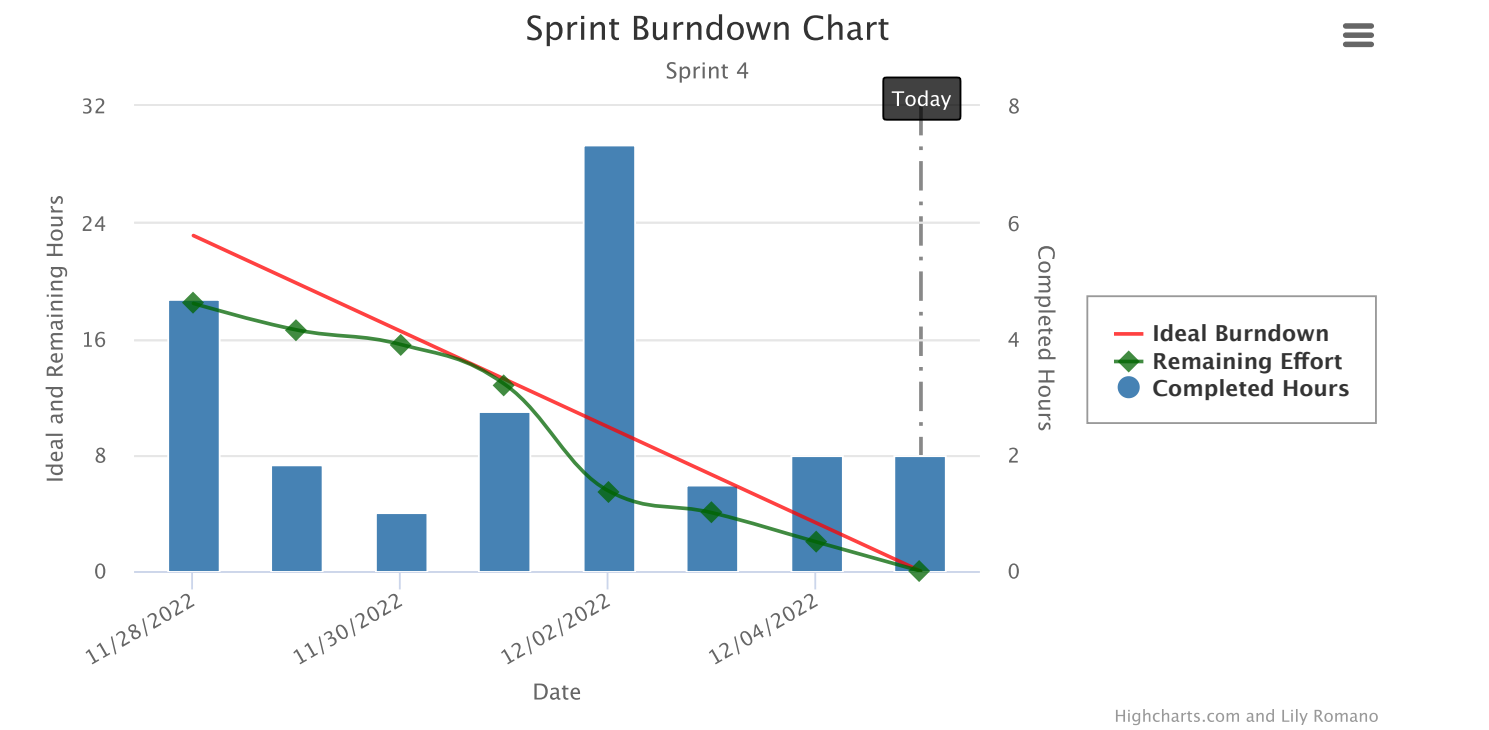
We finally ironed out all of our important bugs, added some settings, and increased the functionality.

**What could be improved?**

We could improve the documentation of our code and some visual aspects, like making the text bigger.

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

We would increase the amount of coding languages the user could type in and add more ways to play the game. We could also figure out a way to store the user's past results and display it on the results screen. We'd also like to add more accessible features.



Personas

Clara Walker

Quote

I'm hoping to improve how fast I can code and familiarity with the programming languages. I'm learning a bunch of new languages around the same time and I'm struggling to differentiate similar between languages with similar syntax.

Narrative

She has some coding experience from high school, but is still in beginner/intermediate computer science classes. She's highly sensitive to really bright screens, and would prefer a darker interface.

Elif Tunaboylu

Quote

I am a high school student and I'm looking into learning how to code and improve my typing skills for writing papers. I think learning how to type faster will improve my ability to complete assignments in time.

Narrative

She spends a lot of time in front of screens and her eyes get tired. She likes apps that have the ability to change the text size and that have bright interfaces.

Deniz Babacan

Quote

I am looking to maintain my proficiency in coding languages and staying up to date.

## Narrative

She recently graduated college and is looking for jobs in the software engineering field. She thinks that being able to type fast and well will help her once she has a job.

## Table of Work

Showing 1 to 56 of 56 entries

Search:

Title	Type	Est.	Spent
closed (48)		80 h	80 h
Sprint 1 (15)		16 h, 55 m	16 h, 55 m
Answers to Questions We Have	Design Need	1 h	1 h
Copy the Online Code	Design Need	1 h	1 h
CRC Cards	Design Need	1 h	1 h
Create Instructions for How to Push to Development	Design Need	45 m	45 m
Create Sentence Generating Software	Technical Task	2 h	2 h
Create the first UML Diagram	Design Need	2 h	2 h
Design a Simple Mock Interface	Design Need	2 h, 30 m	2 h, 30 m
Edit Letter Checking Coloring	Technical Task	30 m	30 m
Java Doc and Banner	Design Need	1 h	1 h
Refactoring, Commenting	Design Need	1 h	1 h
Research Implementing Scores and Timers	Design Need	30 m	30 m
Research Text-Based Toggle Buttons	Design Need	30 m	30 m
Set up development branch	Design Need	10 m	10 m
Set up GitLab	Technical Task	1 h	1 h
Transfer Code to Scene Builder	Technical Task	2 h	2 h
Sprint 2 (18)		34 h, 5 m	34 h, 5 m
Add to CodeBash Model	Technical Task	2 h	2 h
Clean up the git repository!	Technical Task	1 h	1 h
Create A Settings Class	Technical Task	30 m	30 m
Create Game Status Enum class	Technical Task	1 h	1 h
Create LetterEvaluator Class	Technical Task	1 h, 30 m	1 h, 30 m
Create the Controller	Technical Task	1 d	1 d
Create the Timer Class	Technical Task	1 h	1 h
Create the Welcome Screen	Technical Task	2 h	2 h
Edits to LineGenerator	Technical Task	45 m	45 m
FIX BUTTON???	Technical Task	20 m	20 m
Implement Testing Classes	Design Need	1 h	1 h
Improved the game play and interface	Technical Task	1 d	1 d
JavaDoc	Technical Task	1 h	1 h
Start a View Class	Technical Task	2 h	2 h
Text looking buttons	Technical Task	1 h	1 h
Update Test Files and Fix Shift Bug	Technical Task	45 m	45 m
Update the UML diagram for LineGenerator	Design Need	15 m	15 m
Work on View as a Group	Technical Task	2 h	2 h
Sprint 3 (7)		14 h, 45 m	14 h, 45 m

Title	Type	Est.	Spent
Add a "Play Again Button"	Technical Task	45 m	45 m
Apply Dark/Light Mode Across Game Play Screen	Technical Task	3 h	3 h
Create Timer Button	Design Need	3 h	3 h
Find a cool font	Design Need	30 m	30 m
Set up color settings/ theme picker - Welcome Screen	Design Need	4 h, 30 m	4 h, 30 m
Stats Class	Technical Task	2 h	2 h
Update the Welcome Interface	Design Need	1 h	1 h
Sprint 4 (8)		14 h, 15 m	14 h, 15 m
Add Instructions	Design Need	1 h	1 h
Add Timer Setting to Welcome Screen	Technical Task	4 h	4 h
Change Results Display	Design Need	30 m	30 m
Get the timer text to change when timer buttons are pressed	Technical Task	1 h, 20 m	1 h, 20 m
Improve the Color Settings	Technical Task	3 h, 10 m	3 h, 10 m
JavaDoc and Class Descriptions	Technical Task	2 h	2 h
Make Purple Theme	Design Need	30 m	30 m
Reorganize Code and Display	Technical Task	1 h, 45 m	1 h, 45 m
opened (8)		8 h, 50 m	8 h, 50 m
Sprint 4 (8)		8 h, 50 m	8 h, 50 m
Apply the Stats Class to the Results Scene	Technical Task	2 h	2 h
Change the text when the play again button is pressed	Bug	30 m	30 m
Implement the GameState Class	Technical Task	2 h	2 h
Space Bar Bug	Bug	1 h	1 h
Timer not starting when no timer setting is pressed	Bug	30 m	30 m
Update the Welcome Screen and Results Screen for New Design	Design Need	1 h, 30 m	1 h, 30 m
Use Code in Line Generator	Technical Task	1 h	1 h
Windows Shift Bug	Bug	20 m	20 m

## Daily Scrum

# Daily Scrum Notes

**12/2/22**

###Group To do: The user manual, and other documentation bits Push to main! Timer working Add coding languages

###Katrina Did: Added an intro screen, reorganized the display, improved the color themes, and improved documentation  
To do: More formatting of the website, documentation Challenges: Not many, I feel like I have a very good idea of how things work in our app

###Nolan Did: Ironed out bugs in the stats class, fixed the game state functionality, added game feedback to "make it more alive", fixed shift bug Going to Do: TBD Challenges: N/A

###Nahom Did: Got the timer to work (in a separate class) Going to do: connecting the button clicked to the actions  
Challenges: timer in general

###Harmony Did: Working on the timer Going to do: Making the timer work, working on the banners Challenges:  
Problems with the timer

**11/11/22**



###Katrina Did: Created the LetterEvaluator class and started the settings class Going to Do: connecting everything through a controller Challenges: do we need a settings class?

###Nolan Did: Re-did the entire line generator, pulls through two novels and pulls full sentences, got weird of the watermarks. Combined functionality with the CodeBash class. Edited the UML diagram. Going to Do: Add more to the controller Challenges: Figuring out the right regex for the LineGenerator, all figured out tho!

###Nahom Did: Worked on the View Class, tried to create a model main and controller to test it out, used the same organization as we used before Going to Do: Finish the view class Challenges: How can we test that the view class is working?

###Harmony Did: Worked on the timer class, found a youtube video and is implemented it Going to Do: Finishing the timer class Challenges: A little sick

DATE: Friday, 11/4/22 -- In Class

On Wednesday 11/2, we worked together as a team to complete the first work tasks. We started by brainstorming on two big whiteboards in the library, starting to understand our design specifications, what we'd like to accomplish first, and what we would like to add once we have working code. We will be using a lot of the same techniques we used in Wordle but we will learn how to handle key input rather than a textField input. We worked on our personas, outlining and completing 3 of them. We have a high school student learning how to code, a college student who is in the middle of learning a bunch of coding languages, and a recent college graduate who is looking to maintain her skills in coding fluency while on the hunt for a job. We also worked on our first UML diagram. Though it is very basic now, we know that we need seperate classes to run the game, evaluate the guesses, apply the settings, and create the data sets. Katrina set up the GitLab repository and we dealt with our first merge issues trying to all edit the README.md file. Would not recommend working in the same branch again.

We are now going to work on a basic user interface and build up our project repository. We found an example typing game on YouTube found at this link: <https://www.youtube.com/watch?v=1If6xa4hM1Q>. Some of us will watch this video, and implement it to get a better understanding of how this kind of game is possible. We should also create CRC Cards.

We have already met the challenge of syncing work in the Git repository. We all tried to edit the README.md file at the same time and it was a mess. Luckily, we got everything resolved but we learned our lesson. We're all still learning how to use AIECode.