Project Summary

csci205_final_project

Project Details

Members

- Jack Beneigh
- Nikita Bityutskiy
- Peter Johnstone
- Zohaib Cheema

Project Retrospective

What was your initial goal?

We wanted to create an adaptation of Flappy Bird with tons of improvements.

What did you achieve?

We were able to improve upon flappy bird, adding elements of powers and multiplayer

What went well in the project?

We were all able to achieve success in each of the sprints without worry of not being ready by the due dates.

What could be improved?

We could have implemented more "visually" appealing ways to show scores and popups

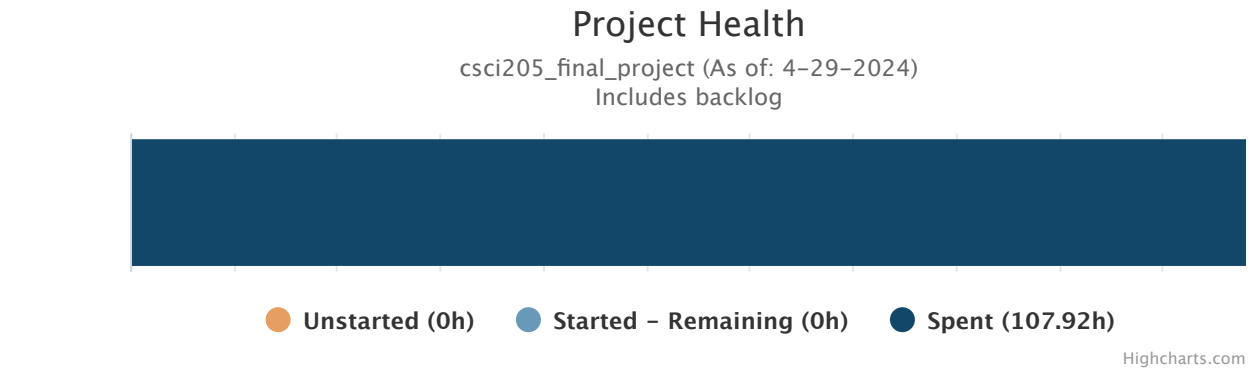
What would you change if you did the project again?

I would definitely incorporate a main menu to start things up rather than going straight

into the game

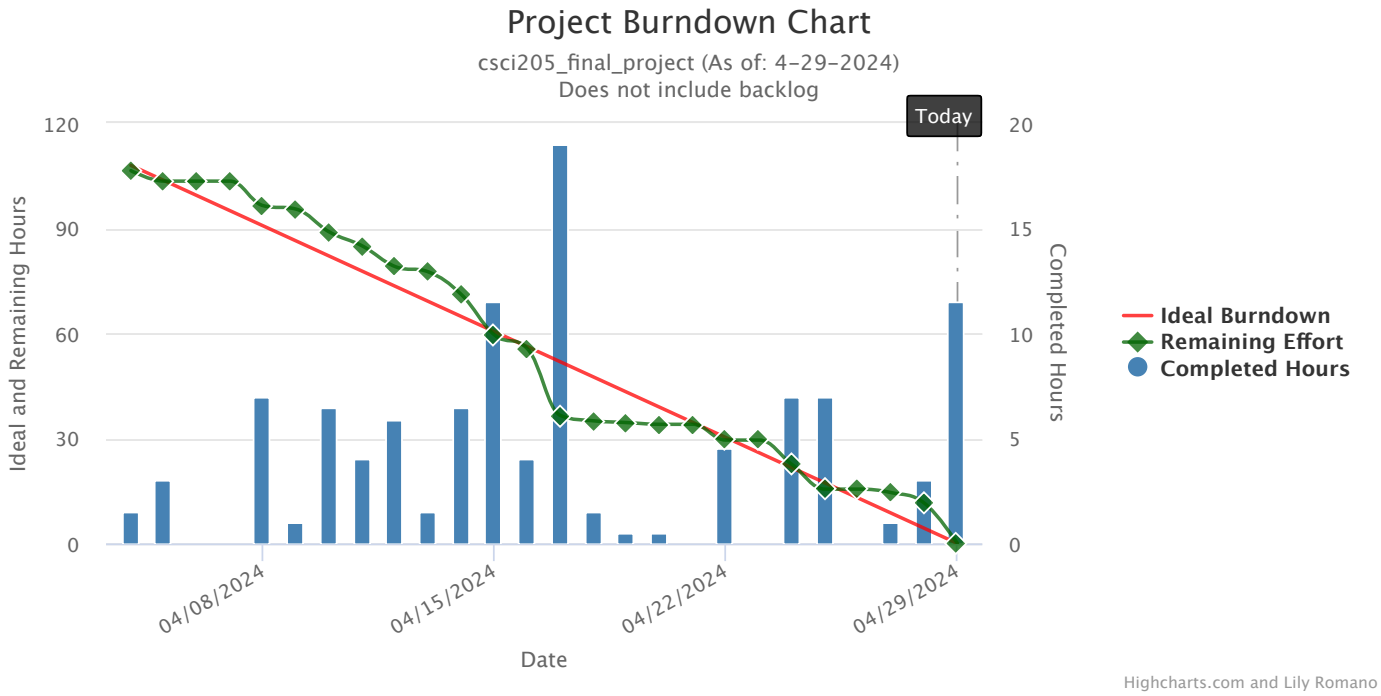
Charts

Health Bar



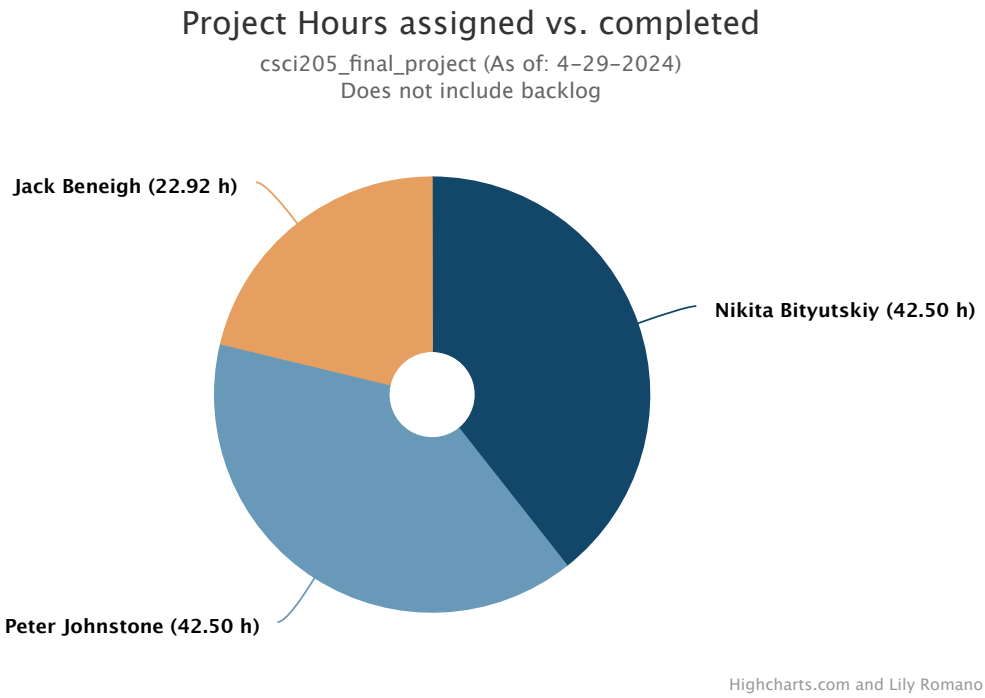
Being able to spread things out across various sprints, the 108 hours end up not being so much in the end! We are happy with the result we ended up with in the end.

Burndown Chart



Being able to complete tasks as a team effectively throughout the week helped our chart to be as 'ideal' as it ended up being. Us being proactive all throughout definitely ended up contributing towards the successful design we implemented.

Assignee Chart



We worked together in order to create the game which turned out to be a massive success of an upgrade. With down one team member, we believe that we all did well in making our design and final product one of the best adaptations of Flappy Bird.

Name	User Stories	Bugs	Tech. Tasks	Design Tasks	Spikes	Doc.
Jack Beneigh	0	0.42	4	7.5	4	7
Nikita Bityutskiy	1	1	12.5	15.5	0.5	12
Peter Johnstone	9	1.5	14	14	4	0

Sprints

Sprint 1

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

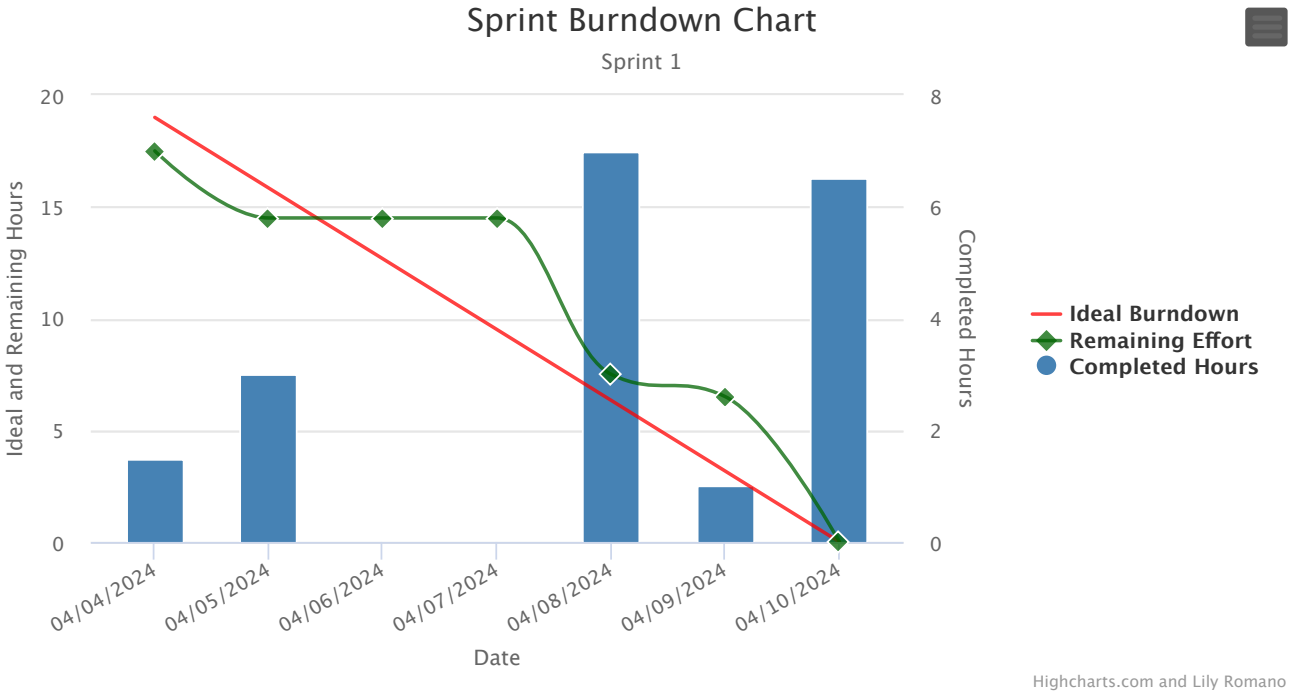
Review:

What went well in the sprint?
We were able to get pretty far ahead and able to implement a basic flappy bird game.

What could be improved?
We should work a little bit on creating tasks as soon as we have them, rather than waiting till the end at points.

Are you on track? What is your plan if not?
We are definitely on track, if not ahead of track.

What will you improve on in the next sprint?
We will try to create an implementation for you to have multiple pipes/avatars



Sprint 2

Dates: 4-10-2024 to 4-15-2024

Goal: Continuing forward on adapting the game into something more than simply flappy bird.

Review:

What went well in the sprint?
We were able to implement a background and continue to build our game

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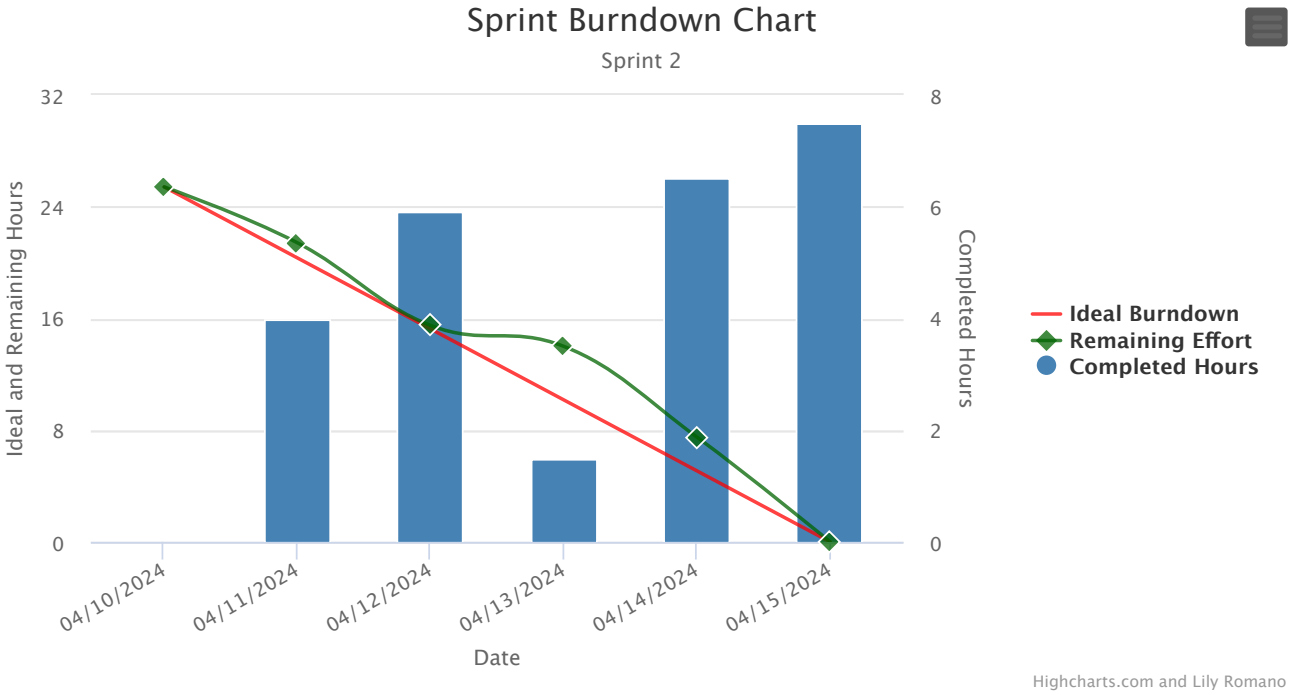
What could be improved?
We need to figure out how to have multiple birds/pipes

Are you on track? What is your plan if not?
We are definitely on track and are looking forward to what's to come!

What will you improve on in the next sprint?
We will eventually figure out how to display the scores in a much more visually-appealing way.



Sprint 3

Dates: 4-15-2024 to 4-22-2024

Goal: Get multiple birds/pipes in order to try to get a multi-player mode

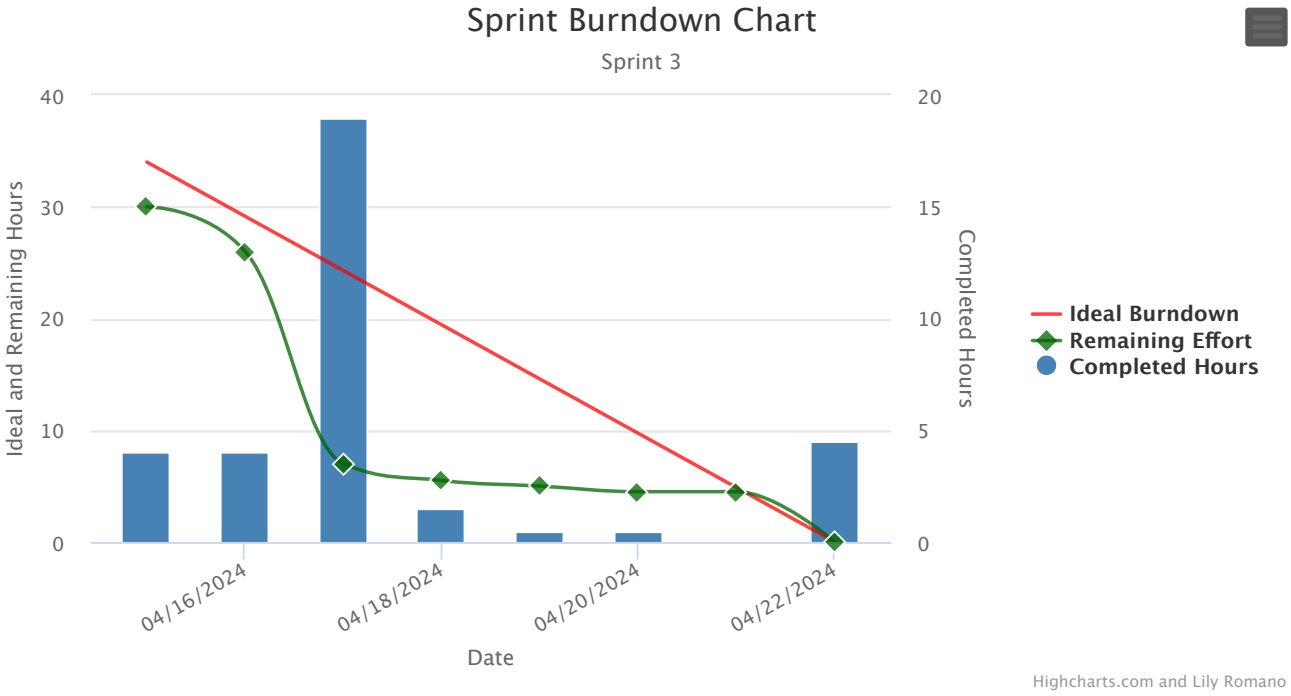
Review:

What went well in the sprint?
We were really able to make the game look/feel even more like a game!

What could be improved?
We could be more proactive on documentation

Are you on track? What is your plan if not?
Yes we are on track, we just have to do main screen and the power ups, then we will be all set!

What will you improve on in the next sprint?
Making sure we can get everything balanced out throughout the week



Sprint 4

Dates: 4-22-2024 to 4-29-2024

Goal: Put final touches/finish up manuals and credits/whatever's left

Review:

What went well in the sprint?

We were able to create a selection screen and get power up implementation to work

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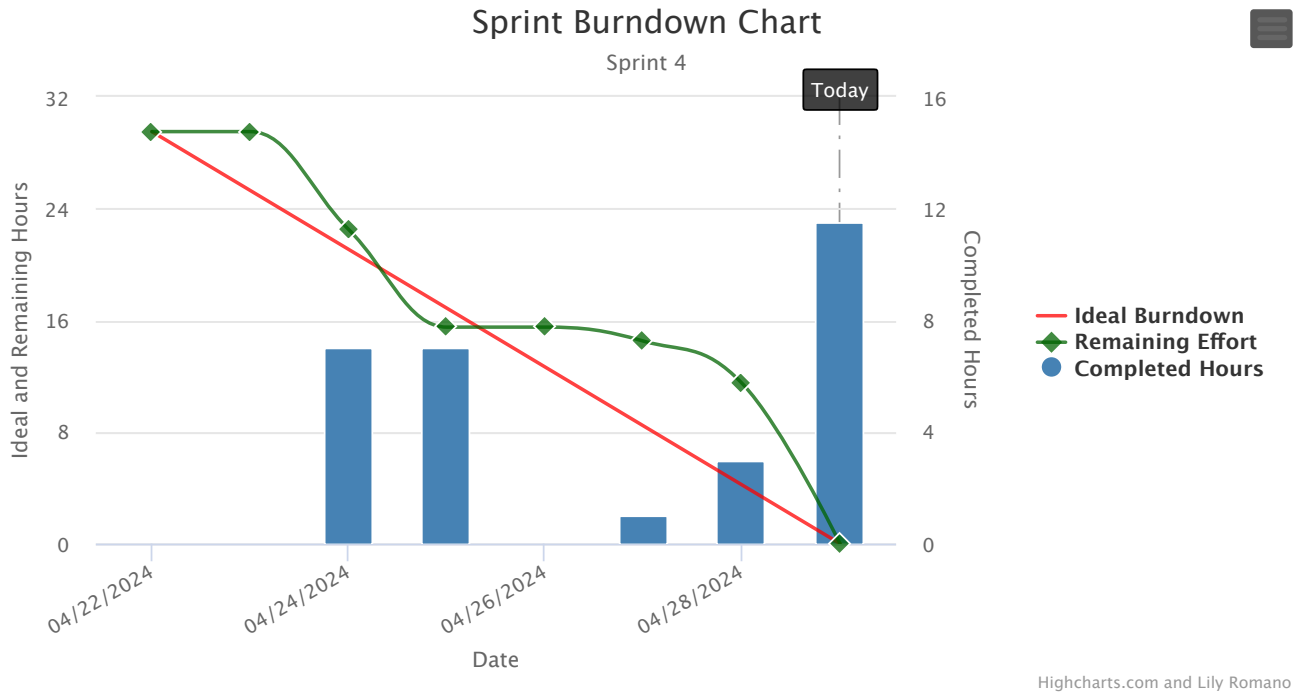
What could be improved?

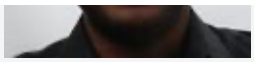
We could definitely add a better selection screen interface, but that's something to think about in the future.

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

We would try to implement the game online rather than on one device. We also would want to make a better selection screen interface.



Personas



Jeremy Gerard

Quote

I'm in it to win it, regardless of the challenge!

Narrative

Jeremy will try his best to complete the tasks as quickly as possible, whether it's a game or a problem.

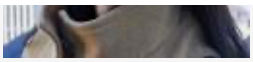
Connor Taylor

Quote

I want to be able to make a way to 'break' this game

Narrative

There must be a way to break a game, and Connor serves as the person who will try to do such.



Lycke Nieuwenhuize

Quote

"I want to be the best, I want the high score, I want to make it the farthest, I want it all"

Narrative

She will constantly play the game until she reaches max level. We have to make sure this will never happen so she will keep playing.

Cathleen Zeller

Quote

"I love to just sit back and watch someone else play the game. I want to see the pros play the game and achieve new high scores".

Narrative

Cathleen will look to find leaderboards and follow the top players

Joan Fernández

Quote

I want to ensure that everything works before launch

Narrative

Ensures that everything works before launch of the game

Oliver Christensen

Quote

"Im here to help out my teammate during co-op gaming"

Narrative

Serves as the second player during co-op gameplay

Table of Work

Search:

Showing 1 to 70 of 70 entries

Title	Type	Est.	Spent
Closed (70)		107 h, 55 m	0
Sprint 1 (18)		19 h	19 h
Add logic for bird and pipe movement	Technical Task	2 h	2 h
Add logic to refresh the screen based on the new locations	Design Need	1 h	1 h
Add pipe generation logic	Technical Task	1 h	1 h
Add starter assets	Design Need	1 h	1 h

Added highscore and score counter	Design Need	1 h	1 h
Added java docs for methods/classes	Design Need	2 h	2 h
Basic screen and config	Design Need	30 m	30 m
Comments for all code so far	Documentation	1 h	1 h
CRC Cards	Design Need	1 h	1 h
Create setup for AIECode	Technical Task	30 m	30 m
Create UML State/Class Diagram	Design Need	2 h	2 h
Make a screen that can display the bird and the pillars	Design Need	1 h	1 h
Mock Up a New Interface	Design Need	30 m	30 m
Refactorization, added death, added upper wall, and pipe list	Technical Task	2 h	2 h
Set Up Git Repository	Technical Task	30 m	30 m
Submit the Initial Proposal On Discord	Documentation	30 m	30 m
Sunday Email	Documentation	1 h	1 h
Weekend Work List	Documentation	30 m	30 m
Sprint 2 (18)		25 h, 25 m	0
Add background to the game screen	Design Need	2 h	2 h
Add moving background to the game screen	Design Need	2 h	2 h
Add Two more User Personas	Documentation	0	0
Adds functionality for multiple birds	User Story	0	0
Bird animation	Design Need	2 h	2 h
Create UML State Diagram for the Main Menu	Documentation	1 h	1 h
Fixed bug of the pipe not taking full screen	Bug	30 m	30 m
Fixed bug of the velocity not resetting after game restart	Bug	1 h	1 h
Functionality for multiple pipes	Design Need	2 h, 30 m	2 h, 30 m
Java docs for all non documented code	Documentation	1 h	1 h

Refactoring and rewriting code for cleanliness and readability	Technical Task	3 h	3 h
Study MVC structure, including lab	Spike	3 h	3 h
Understanding how to implement a better coordinate system	Spike	0	0
Unit Tests	Bug	25 m	25 m
Unit Tests for everything	Technical Task	4 h, 30 m	4 h, 30 m
Update CRC Cards for Menu	Documentation	30 m	30 m
Update Daily Scrum Logs	Documentation	2 h	2 h
Work through Lab11 in order to understand SceneBuilder	Technical Task	0	0
Sprint 3 (15)		34 h	34 h
Add 2 more user stories	User Story	1 h	1 h
Add Two more User Personas	Documentation	30 m	30 m
Added background music/created button to mute/unmute it	Design Need	1 h, 30 m	1 h, 30 m
Added daily scrum week of 4/15-4/19	Documentation	30 m	30 m
Adds functionality for multiple birds	User Story	6 h	6 h
Fix resizing background bug	Bug	1 h	1 h
Functionality for multiple pipes	Design Need	4 h	4 h
Implement pop up on death/make reset button work	Design Need	1 h, 30 m	1 h, 30 m
Lab 11	Spike	4 h	4 h
Refactoring and rewriting code for cleanliness and readability	Technical Task	6 h	6 h
Research how to implement "pop up" screen when crash occurs	Spike	30 m	30 m
Understanding how to implement a better coordinate system	Spike	1 h	1 h
Unit Tests for everything	Technical Task	1 h	1 h
Update text to be similar to in game text	Design Need	1 h, 30 m	1 h, 30 m

Work through Lab11 in order to understand SceneBuilder	Technical Task	4 h	4 h
Sprint 4 (15)		29 h, 30 m	0
Add java docs to corresponding methods	Documentation	1 h	1 h
Add powerup icon	Design Need	4 h	4 h
Added power up dissapeaing on impact	Design Need	2 h	2 h
Complete UML use case diagrams	Documentation	1 h	1 h
Create design manual	Documentation	3 h	3 h
Create user manual	Documentation	2 h	2 h
Download CRC cards/UML class diagram	Documentation	1 h	1 h
Generate scrum report	Documentation	30 m	30 m
Implement main screen	Design Need	4 h	4 h
Make credits screen	Documentation	0	0
Menu Screen	Technical Task	4 h	4 h
POWERUPS VISUALS	User Story	3 h	3 h
Tests for game state	Technical Task	2 h	2 h
Update daily scrum logs	Documentation	1 h	1 h
Update README	Documentation	1 h	1 h
Backlog (4)		0	0
add bar for countdown of powerup	Design Need	0	0
Identify Possible Libraries	Design Need	0	0
Potentially Learn a Library and What It Has to Offer	Design Need	0	0
Project Manager	User Story	0	0

Daily Scrum

Daily Scrum Notes

4/5

Nikita

- Did: Discussed the proper steps which need to be completed either by start of next week/
- Work: Submitted 'traits' about me due this Sunday
- Challenges: Implementing an early stage UML as a starting point (what exactly do we start off with?)

Peter

- Did: Built the grounds for the game to be played on
- Work: Coding setup for game
- Challenges: How would resizing work with the pipes

Jack

- Did: Understood what needed to be accomplished
- Work: Setup work for Sprint 1
- Challenges: Errors within AIE code/creation

4/8

Nikita

- Did: Completed UML classes
- Work: Completed a part of the UML, started to plan out the CRC cards
- Challenges: The darn arrows...

Peter

- Did: Continued to implement pipe algorithm
- Work: Pipes (Bird hit box)
- Challenges: Pipes do not tackle OOB inputs

Jack

- Did: Finished up UML state diagram
- Work: UML State
- Challenges: Only a simple version, without any home screen

4/10

Nikita

- Did: Completed CRC classes, looked over code and implementations
- Work: CRC cards completed
- Challenges: Lucid doesn't have a direct implementation for CRC cards directly

Peter

- Did: Planned out sprint 2 w/ what tasks should be done
- Work: Added work/sprint assignments
- Challenges: Not knowing exactly how much we can do within the sprint

Jack

- Did: Planned out sprint 2 w/ what tasks should be done
- Work: Added work/sprint assignments
- Challenges: Not knowing exactly how much we can do within the sprint

4/12

Nikita

- Did: Complete more unit tests for classes
- Work: Unit tests
- Challenges: Some tests crash but will be able to fix

Peter

- Did: Implementation for flapping bird
- Work: Wings and bird gravity
- Challenges: Hit box still off, but will be worked on

Jack

- Did: Updated unit tests to work for all cases
- Work: Unit Tests
- Challenges: Still waiting on last class for tests

4/15

Nikita

- Did: Added moving background which resets infinitely
- Work: Making moving background
- Challenges: Sometimes the reset is offset from the desired spot

Peter

- Did: Implementation of two pipes
- Work: Multiple pipes on screen
- Challenges: Resizing screws everything up, but could be fixed by locking in place

Jack

- Did: Implementation of two pipes
- Work: Multiple pipes on screen
- Challenges: Resizing screws everything up, but could be fixed by locking in place

4/17

Nikita

- Did: Added customized deathbox with buttons and interaction
- Work: Deathbox/buttons
- Challenges: Figuring out how to get the buttons to reset everything

Peter

- Did: Added a co-op implementation
- Work: Co-op customization
- Challenges: Figuring out how to make sure that the co-op mode works on command

Jack

- Did: Continued work on Lab11
- Work: Lab11, understanding interface
- Challenges: Working towards the process of building

4/19

Nikita

- Did: Added music to the game/button to mute
- Work: Background music/mute button
- Challenges: Figuring out how to get mute to work on press

Peter

- Did: Implementation of mute on press
- Work: Refactoring/linking button for mute on press
- Challenges: Lots of refactoring still needed to be done!

Jack

- Did: Working of Lab11 for SceneBuilder
- Work: Lab11, understanding SceneBuilder
- Challenges: Understanding how linking would work

4/22

Nikita

- Did: Complete more unit tests for classes
- Work: Unit tests
- Challenges: Some tests crash but will be able to fix

Peter

- Did: Research on power ups
- Work: Looking up how to implement power ups
- Challenges: Understanding if new class is necessary

Jack

- Did: Working of Lab11 for SceneBuilder

- Work: Lab11, understanding SceneBuilder
- Challenges: Understanding how linking would work

4/24

Nikita

- Did: Plan out the rest of the final sprint
- Work: AIECode tasks updated
- Challenges: Figuring out which things to do when

Peter

- Did: Implementation of power ups
- Work: Working powerups
- Challenges: Hitboxes so that powersups work

Jack

- Did: Working with SceneBuilder
- Work: Figuring out SceneBuilder
- Challenges: Understanding how to link it to the code

4/26

Nikita

- Did: Added dissapearing powerup
- Work: Dissapearing powerup
- Challenges: Understanding if hitbox would be affected

Peter

- Did: Implementation of power up (actually working)
- Work: Linking actions to power up images
- Challenges: Figuring out if it would work for two player or not

Jack

- Did: Working with SceneBuilder
- Work: Figuring out SceneBuilder

- Challenges: Understanding how to link it to the code

4/29

Nikita

- Did: Created UserManual
- Work: Wrote the user manual
- Challenges: Having to make sure the user understands the process

Peter

- Did: Created selection scene
- Work: Selection scene for one/two players
- Challenges: Figuring out if we want anything else added or not

Jack

- Did: Created DesignManual
- Work: Wrote the design manual
- Challenges: Having to make sure the reader understands the process to make the game