

User Story	Task #	Task Assigned To	Estimated Effort	Actual Effort	Done	Notes
Bugfix powerups	49	Paula Iacoban	3	3	yes	
Pause menu	25	Paula Iacoban	3	3	yes	
GUI improvements	37	Paula Iacoban	2	2	yes	
Start Menu	21	Paula Iacoban	1	2	yes	Positioning elements (buttons & logo) took longer than expected
Fix spawn apple bug	39	Paula Iacoban	3	3	yes	
				DOCS		
Class diagram for Factory design pattern	--	Oleksandr Fomin	1	1	yes	
Class Diagram for States	---	Mikolaj Knap	2	3	yes	
Helping fix Architecture Document	---	Mikolaj Knap[3	3	Yes	
Making Architecture Document	---	Kamron Geijsen	3	3	yes	
Level selector	50	Kamron Geijsen	3	3	partially	Mostly taken over by Paula Iacoban
Board boundries	48	Kamron Geijsen	15 minutes	15 minutes	yes	Not done testing
Fix Login GUI	50	Kamron Geijsen		4	yes	Side-tracked off of issue 50, initial idea was to put Level selector in seperate screen, along the way we tried to put it in LoginScreen, which needed a redo. After the redo we realized it looked better on a seperate screen anyway
Clear board when game starts	43	Kamron Geijsen	30 minutes	30 minutes	yes	
Fix spawn apple bug	41	Kamron Geijsen	30 minutes	30 minutes	yes	
Game States		Kamron Geijsen		8	yes	Large architectural change, spent more time organizing files and classes than fixing states, includes issue 41, 43, and 49
Settings	47	Marius Birkhoff	3	1	yes	
Display Score	38	Marius Birkhoff	5	6	yes	Implemented it and had to fix it after refactoring
Leaderboard (making api request)	35	Marius Birkhoff	3	2	yes	
Symbols for powerups	53	Marius Birkhoff	3	3	yes	Symbols still have to be implemented, but that is not part of this issue
Leaderboard (making the screen)	35	Oleksandr Fomin	3	5	yes	Was hard to configure proper font, so it doesn't look pixelized (doesn't look like low reso font)
Sound effects	40	Oleksandr Fomin	3	5	yes	Adding sounds was easy, but something I didn't know (or consider) that it will throw nullpointers when I run tests, so I had to restructure code so I can mock sound effects, since pretty much every test on board and snake was failing. Also there are many merge conflicts with another branch where a lot of refactoring had been done, so it wasn't possible to include this feature in a tag.
Test Casses Redo		Mikolaj Knap	5	6	yes	Took quite a while since the whole of game was refactored and many of the functionalities that were in board were moved to game. Besides this whole refactoring I also chose to add more tests under the review on how we should include more bad weather tests

Integration Testing		Mikolaj Knap	2	2	yes	After our review on Testing I decided to create some game scenarios and test them out to see if the game behaves exactly as it should under given circumstances (running into itself)
---------------------	--	--------------	---	---	-----	---

Main Problems Encountered

Problem 1: Refactoring

Description: As we build on top of previous features, our code became more coupled and disorganized.

Reaction: We refactored and restructured our classes.

Problem 2: Merge conflicts

Description: As we started to refactor, not all branches were updated and this resulted in a large number of merge conflicts when got to the point of merging code.

Reaction: Resolve as many conflicts as possible and leave the rest for the next sprint.

Adjustments for the next Sprint Plan

- Updating active branches regularly to avoid conflicts when merging
- Better communication with teammates on what branches should be merged