Sprint Retrospective, Iteration #3

User story #	Task #	Task assigned to	Estimated Effort per Task	Actual Effort per Task	Done (yes/no)	Notes
Leaderboard	GUI	Victor	2h	3h	yes	The leaderboard shows both the all time high scores and the weekly high scores.
Badges	Creating Achievement Screen Badges on client side Badges on server side Testing Badges Design Badges	Ziad Elena Elena Elena Elena	4h 1h 3h 3h 2h	5h 1h 3h 3h 2h	Yes Yes Yes	Achievement Screen showing user badges.
Database	Modifying and Testing database methods. Having the scores restarted each week.	Ziad Ziad	4h 2h	5h 2h	Yes yes	#Problem 3
Hexagon structure	Construction Datastructure overhaul Spinning Bubbles' neighbours Popping Score	Ana Victor Victor Ana Ana Ana	3h Not estimated 8h Not estimated 5h 2h	4h 4h 8h 5h 2h 2h	yes Yes Yes Yes Yes yes	#Problem 1

Different difficulties	Different bubble amount per level GUI to show allow user have different difficulties	Ana Ziad	4h 1h	None 1h	No yes	Having more bubbles and allowing user to choose between the different difficulties. Problem #2
Consequences and special bubbles	Points deduction when a player miss a certain amount of shots.	Ziad	8h	None	No	#Problem 4
Drawing Arrow	Export to Class	Paolo	1h	0h	no	Decided to prioritize completing the game before refactoring.
Key Bindings	Advanced Keys	Paolo	4h	4h	yes	They can be found in doc/key_bindings.md
Tutorial	Walk-through Tutorial Box	Paolo	2h	2h	yes	
Infinite Games	Infinite Timer Time Selection Consecutive Levels	Paolo	2h 30m	2h 30m	yes	
Achievements	Achievements Calculation	Paolo	3h	3h	yes	

Project: Bubble spinner
Group: 15

Main Problems Encountered

Problem 1

Description:

The hexagon structure, as it was set up after sprint 2, proved to be insufficient when trying to implement some of this sprint's features. This meant we had to do quite a large overhaul regarding the way the hexagon data structure worked. This took some time we initially hadn't planned for. Moreover, the score proved to be a bigger challenge than anticipated as well as setting up the neighbours of the bubbles. Seeing as multiple people were still dependent (and working) on the older version of the hexagon, great care had to be taken and the process was quite gradual and slow.

Adjustments for the next Sprint Plan:

Because this was quite a specific problem, we don't expect to run into anything quite similar again. What this problem has taught us however is that when implementing classes that are integral to the design of our application, more planning is needed.

Problem 2

Description:

Unfortunately, there were problems and setbacks regarding the Hexagon Structure so we couldn't focus on making different difficulties if even the easiest didn't work. As such, this will be the priority for next week.

Adjustments for next Sprint Plan:

Seeing as there was no attempt at this feature, there is nothing to adjust for the next sprint.

Problem 3

Description:

The Server side in the application needed to be tested and that took a lot of time. Using mockito testing to test the untested methods and also applying mockito to test the connection between the client and the server. Lots of problems have been encountered during testing and also this sprint we needed to change some methods signatures for some methods it had an impact on these methods already tested.But at the end the database has 100 percent branch test coverage.

Problem 4

Description:

The problem for not starting this issue was that the bubble popping and the hexagonal construction finished at the end of this sprint. so It will be our priority in the upcoming week.