Sprint Retrospective, Iteration # 3 Group Ubiquitous Broccoli

User story / requirement	Task	Task assigned to	Estimated effort per task (in hours)	Actual Effort per Task (in hours)	Done (yes/no)	Notes
As a developer we want to have a UML diagram of the architecture to give a broad overview of the system	Create UML diagram of existing architecture	**Matthijs Rijm**, Earth Grob	3	4	Yes	This should have been finished earlier, next time, read the question.
As a developer I want to have the bugs fixed so that the user experience is improved	Receptor tiles should adapt based on connections	**Bas Musters**, Fabian Mastenbroek	1	1	Yes	
	Fix stuttering of balls when leaving/entering receptors	**Bas Musters**	1	3	Yes	Due to the way the receptors are animated, this took a lot more effort than expected.
As a user I want to be able to see a working scoreboard	Display in-game score on screen	**Christian Slothouber**	2	2	No (Partially)	Due to other tasks taking a lot longer (especially the traceability), we moved this task to the next sprint. The score keeping is implemented in the core, but not on screen
As a user I want to be able to pause and resume a game	Implement freezing of game core	**Earth Grob**	2	2	Yes	Esc button is the pause button
	Add basic user interface for pausing/resuming game (i.e. escape)	**Bas Musters**	2		No	Due to other tasks taking a lot longer (especially the traceability), we moved this task to the next sprint

As a user I want to be able to hear sound effects and music in the game so the user experience is improved	Implement sound effects on interaction	**Fabian Mastenbroek**	3	1	Yes	This task was really straightforward and required just an hour of work
As a user I want to be able to see balls animating to make the game more realistic	Implement animation of balls	**Fabian Mastenbroek**	3		No	Due to other tasks taking a lot longer (especially the traceability), we moved this task to the next sprint
As a developer I want to have vertical and horizontal traceability of requirements so that we can easily trace back requirements	Define and motivate the choice of a strategy for keeping and maintaining traceability links as well as the tool to be used to create the traceability matrix	**Matthijs Rijm**, Bas Musters	3	2	Yes	This was only some theoretical work and writing down and just didn't take too long.
	Implement such a strategy through the use of a traceability matrix, i.e., a square matrix where both columns and rows represent the artifacts implemented and a generic entry of the matrix represents the presence of a link between two artifacts.	**Christian Slothouber**, Fabian Mastenbroek	4	6	Yes	This was just a lot of work that was underestimated.
As a developer I want to process the feedback received to improve the product	Process feedback for exercise 1 of the first assignment	**Earth Grob**, Matthijs Rijm, Bas Musters	1	1	Yes	

Main Problems Encountered

Problem 1

Description: The traceability exercise took longer than expected, because we found out we had to create a matrix with all requirements and classes that are connected to this requirement.

Reaction: Investigate the assignment better to get a better estimation of how long a task is going to take.

Problem 2

Description: The first user story took longer than expected, due to the fact that the question was wrongly interpreted.

Reaction: After finishing an answer of another interpretation of the question followed by a reread of the assignment, the answer was adjusted.

Adjustments for the next sprint

- Next sprint we should be more precise on deciding the amount of hours that are needed for finishing a task. Often, the hours are off, although this doesn't have to mean that this will cause problems. We can do this by taking more time during the making of our sprint backlog to not only look at the assignment, but also go a bit more in depth on the assignment, to see what actually needs to get done.
- (lets over vragen goed lezen)?
- Also we will now actively look at code distribution. There needs to be more balance, as now the people who are coding are coding even more and people doing administrative tasks are still doing administrative tasks.