Sprint Retrospective

Iteration #2

TEMPLATE

Project	Laser reflection
Group	62

User Story	Task	Task Assigned to	Estimated Effort (in hours per person)	Actual Effort	Done	Notes
As a player, I would like to have my user data stored in the server.	Setup the database on the server	Xiangyu & Liudas	0.5h	0.5h	Yes	Now everyone in the group can get access to the database and test their own stuff.
As a player, I would like to be able to logout a game and keep my progress saved.	Store the player's progress when logout in the database	Xiangyu & Liudas	1h	0.5h	No	Added a menu screen with a logout button, but we didn't implement the function to store the progress for the reason that it isn't a priority until we have multiple levels and fully set up database.
As a player, I want the level to be loaded when I press the "play" button.	Extend the menu screen with a "play" button	Liudas	0.5h	0.5h	Yes	Extended the menu with the button. When we have multiple levels, the implementation will have to be adjusted to allow player select levels or open the latest level he played.
As a player I would like to register.	Finalize the database setup. Host it in TU Delft servers	Xiangyu & Liudas	2h	2h	Yes	The database was created with the right schema and constraints. It was linked to the project. The connection tested.
As a player, I would like to control the mirrors so that my laser interacts with it. So that I can reach the goal.	Implement the laser class that calculates and renders the laser beam.	Kasper & Selim	4h	5h	Yes	The laser travels in the four cardinal directions. It does so tile based, namely from tile to tile. Depending on what tile it meets, it might either reflect into another cardinal direction or be stopped in it's path. Mirror's can reflect the laser in a 90th degree angle depending on the rotation of the mirror. For further improvements we might be able to implement the laser going in more than just the four cardinal directions and even turn the laser in-game.
As a player, I would like to control the mirrors so that my laser interacts with it. So that I can reach the goal.	Implement the function that when the goal is achieved the player wins the level.	Kasper & Paul	0.5h	0.5h	Yes	The end goal can be pinpointed to a singular tile. When the laser passes this tile, the game recognizes this and can act accordingly. For now we make it print out into the console that the player has won the level. In the future we might implement several lasers, which all have to hit this end goal to win the level. This functionality is not checked for at this moment.
As a player, I would like to control the mirrors so that my laser interacts with it. So that I can reach the goal.	Implement the function that mirrors can reflect lasers.	Kasper & Paul	3h	4h	Yes	If a laser collides with the tile on which the mirror is seated, depending on the rotation of the mirror, then it might either be reflected in a 90th degree angle in the perpendicular plane or, if it hits the back of the mirror, it will stop it's progression at that tile. Clicking on a mirror will change it's rotation.

Main Problems Encountered

Problem 1	Misalignment between branches
Description	For this sprint we had a bit of a misalignment in the branches. Working on the implementation of the laser functionality went side by side with the work done on the implementation of the mirror functionality. Our branches were kept seperate for a long time of this sprint. This meant that when the moment came to merge the two together, that the laser and mirror were not compatible with each other because of the way that they were implemented.
Reaction	We had to make a choice in which branch we wanted to continue development, either continue with the laser implementation or continue with the mirror implementation and complement whichever branch we choose. We eventually chose the mirror branch because we feel that this design was the better design to continue forward with. This had as a result that we ditched the initial laser class and had to reimplement it once again.
Problem 2	The database connection is not that stable. So we cannot test our program in any time.
Description	Since we are using the server to store our database, it could be an issue that we cannot get connection with database at any time. For example, sometimes a 'Too many connections' warning would show up to block our access.
Reactions	We couldn't figure out a good way to solve it for the reason that it might be the issue of TU Delft server. But we will ask TA for help.

Adjustments for next Sprint Plan

Adjustment 1	To avoid problems similiar to Problem 1 above, we have agreed to do many more regular small merge requests instead of one big merge request at the end of finishing a functionality. This forces us to reconsider the work that we are working on and, when incompatibilities arise, make decisions on how to go forward.