Reflection on Iteration # 3

Context Project: Health Informatics
Group: House Gryffindor

User Story#	Task#	Task Assigned To	Estimated Effort per Task (in hours)	Actual Effort per Task (in hours)	Done (yes/no)	Notes	Github Issue #
As a user, I want to have a body in the Virtual Environment and be able to move it, so that I know where I am in that environment.	**Represent the player's* body in the simulation** - Create a 3D mesh in Blender that represents the player* and import it to Unity. - Create an armature (3D skeleton) in Blender for the player mesh so that the mesh can be controlled with Kinect and import it to Unity. - Create scripts** to make the player mesh & armature move accordingly with the Kinect as input.	Wing Wing Wing & Viktor	1h 1h 7h each***	0.5h 0.5h 7h	Yes Yes yes	For the body mesh and armature, we used already existing resources from the Kinect SDK. We only had to modify those so it took less time than expected.	#3

As a user, I want to have a virtual hand with fingers, so that I can more easily interact with the environment.	**Represent the player's hand in the simulation** - Create a 3D mesh in Blender that represents the hand, combine it with the mesh of the body and import it to Unity. - Create an armature (3D skeleton) in Blender for the hand mesh so that the mesh can be controlled with Manus-VR and import it to Unity. - Create scripts to make the hand mesh & armature move accordingly with the Manus-VR.	Matthijs Matthijs Matthijs & Wing	3.5h 3.5h 5h each	2h 2h 6h	yes Yes Yes	For the hand mesh and armature, we used already existing resources from the Manus-VR SDK. We only had to modify those so it took less time than expected.	#4

As a user, I want to be able to pickup and drop objects, so that I can have a real supermarket experience.	**Grabbing objects** - Create scripts to have the player grab objects in the simulation using Manus-VR - Create scripts to have the player drop object in the simulation using Manus-VR - Create scripts to make dropped objects go back into the supermarket racks neatly - Create scripts to detect boundaries of objects so that the simulated hand doesn't go through the object when the user grabs too tightly with the Manus-VR gloves.	Wing & Matthijs Maria Maria Viktor	3h each 4.5h 4h 3.5h	4.5h 5h 4h 3.5h	yes Yes Yes yes	We had to refactor the grab function to minimize duplicated code so this took longer than expected.	#5
As a user I want to be able to hold the shopping basket so that I can put items in it.	**Shopping basket** - Create scripts to have the player grab the shopping basket using the Kinect - Create scripts to let the player drop objects into the basket.	Magdalena Magdalena	5h 3.5h	4.5h 4h	yes Yes	The player can grab the shopping basket, but does not happen with the kinect. We will link the grabbing of the basket with the manus.	#6
As a developer, I want to use design principles in my code so that I have a rigid and stable system.	**Design Principles** - Refactor existing code (if possible) so that these adhere to the SE practices taught.	Team	4h each	5h each	yes		

As a developer, I want to have a document explaining the interrelation of core components in the system, so that I know how the system works.	**Architecture Design** - Complete the Architecture Design document to the current state of the system.	Team	4h each	0.5h	yes	The state of the system did not change a lot, basic functionalities are still working in the same way as they used to.	
As a client I want the system that my customers use to be reliable so that patients can be treated effectively with the simulation.	**Testing** - Add testing tools that facilitate assertions, integration testing, and unit testing. - Test existing code for playercontroller and grabbing controller.	Maria Viktor & Maria	3h 4.5h each	3h 1.5h	Yes No	Unity Test Tools did not give us the required possibilities for testing, so we started looking into NUnit testing, but it costed much time to understand the working of Visual Studio's test project and build system.	
As a user I want to be able to interact with the objects and be able to move and interact within a stable environment.	**Finish the 3D environment for the simulation** - Finish static scene (3D supermarket layout model). - Add a few more dynamic objects that the player can grab and drop (supermarket items).	Magdalena Magdalena	4h 3h	3.5h 3h	Yes yes	Maybe we will make some changes in the coming sprints to the 3D environment.	#7

Additional hours worked

The hours logged for each task are not representative for the total amount of hours worked. We have also planned meetings in which we gather to discuss the Sprint Backlogs, Sprint Reflections and worked on (unplanned) tasks that were not in the Sprint backlog but were necessary for the development of the project. These hours we've spent as a team so each member has also worked these additional hours.

Day	**Event**	**Hours**	**Github issue #**
Wednesday	Product planning and vision	3h each	#2

Main Problems Encountered

Problem 1

Description: Testing did not worked out the way we wanted. Unity test tools did not provide good enough functionalities.
Reaction: Started looking into NUnit framework, which will be used during the next sprint.

Adjustments for the next Sprint