## Sprint Retrospective, Iteration #3

Context Project: HI Group: CondExt Team (2)

User Story	Task	responsible	Assigned To	Estimated Effort	Actual effort	Done	Notes	Commit when done
As a user I want to be able to see and move my hands in the virtual world and interact with objects	Implement basic visualization for hands and arms	Jasper	Jasper Luke	5 hours	7 hours	yes	Problems with orientation when using blender files in Unity. Solved by exporting to fbx and then import that file into Unity.  Finding the right rig configuration for the Leap motion hands proved to be difficult because of the lack of documentation.	c5adc53
	Implement behaviour for virtual hand and arms when tracking with Leap Motion is lost	Matthias	Matthias Luke	6 hours	9-5-2016: 3 hours	WIP	Experimented with different ways to resolve the virtual hand behaviour when tracking is lost. However this still needs more work and research.	9166b69
	Create specific objects in Unity to be made interactable with the virtual hand	Arjan	Arjan Bart	4 hours	6 hours	yes	Worked fine, only problem that appeared was the grabbing radius of the hand was too small, so bigger objects could not be grabbed. Fixed and works properly now.	9c830be
	Implement gesture recognition with Manus VR	Jasper	Jasper Matthias Arjan	7 hours	8 hours	yes	Manus does not actually track the position of the hand, only how far the fingers are bend making it less accurate but more stable then the Leap.	3476780
	Use Manus VR for picking up objects in virtual world	Matthias	Bart Mathias Arjan	8 hours	3 hours	yes	Was done by re-using code of leap motion grabbing, thus time spent on this task was limited.	aa16175
	Implement ability to grab virtual object with virtual hand with Leap Motion	Luke	Luke Jasper	8 hours	10 hours	yes	Grab and gesture recognition was done at same time, hours worked on both overlap however most hours spent on implementing grab logic and testing.	b2e58ab
	Implement gesture recognition with Leap Motion	Luke	Luke Jasper	4 hours	7-5-2016: 4 hours	yes	Extended the functionality of previous logic written in LightPinch script.	38248c2

As a user I want a environment to interact in	Model shelves and supermarket items in Blender, to be used in the environment	Arjan	Arjan Bart	5 hours	8	yes	Blender skills were not as good as expected (anymore), had to take some time to relearn and rewatch tutorials.	db6b256
	Import new models into Unity and update environment with new models	Bart	Arjan Bart	3 hours	4	Yes	Importing took longer than expected: Unity could not handle the files properly, textures were hard to get working	e9ea7e2
As a developer I want to have a better understanding of the project	Create an UML of the classes and systems within Unity	Bart	Arjan Bart	3 hours	1	yes/WI P	Made a start on UML, not sure how to connect the subparts in unity yet. This will be updated as new parts are added	7631d97
-	Finish and hand in final version of product plan	Bart	Bart Luke	-	11-5-2016: 4 hours	yes	This task was originally not included, see problem 1	

## General notes:

Some work was done on the Kinect because we did not have access to the Manus VR gloves in the first few days of the sprint.

## Problems:

- 1. Problem: We didn't take into account that we had to fix and improve our product plan.
  - Solution: Bart and Luke has rescheduled some hours to work and improve the product plan.
- 2. Problem: Cloud build is very slow with an average build time of 2 hours, this makes it very difficult to use with pull requests.

  Solution: We merged some pull requests before cloud build was finished when it was stopping other people from working on new features. After cloud build was done we would fix any errors that were found.
- 3. Problem: The Manus VR hardware was not always available for certain periods of time Solution: We worked with the kinect instead when Manus VR was not available