

Sprint Retrospective, Iteration #6

Context Project: HI

Group: CondExt Team (2)

User Story	Task	responsible	Assigned To	Estimated Effort	Actual effort	Done	Notes	Commit
As a user I want to be able to pick up items in a physically realistic way so that I can interact with the world in a more natural way.	Implement new context based gesture recognition grab	Matthias	Matthias	12 hours	15 hours	wip	Still having trouble with releasing objects, and testing is not fully finished yet. Will continue in next sprint.	bf8f8d5
	Implement new context based gesture recognition for dual handed grabs	Luke	Luke	10 hours	6 hours	wip	Since this work was related to physics based grab, the progress was limited by Matthias progress. An early implementation is now available in a branch, but its still WIP.	3d35003
	During a grab correct the hand-to-object clipping	Jasper	Jasper	9 hours	5 hours	yes	We expected that we needed to use the IKScript but that was not necessary. This made the task easier.	659ae59
	Make sure an object follows the hand correctly when it is picked up	Bart	Bart	7 hours	1 hour	no	Moved to next week -Due to time restrictions and not enough occasions to use the manus VR	
As a user I want my virtual body movements to look realistic so that I can immerse myself in the simulation.	Encorporate the elbow data of the kinect to improve the IK pole position	Jasper	Jasper	4 hours	-	no	We just use the leap motion for the pole position as we only need to use them when the leap is tracking the hands	
	Use the leap data to improve the IK pole position	Jasper	Jasper	3 hours	3 hours	yes	Gives a way better feeling of the hand now that the arms are displayed properly.	666746f
As a developer I want to know how well my code is tested and covered so that I can improve the test and code quality.	Research which methods are used (if any) and chose the the best method for our project	Arjan	Arjan Jasper	4 hours	6 hours	yes	No perfect method found, see issue #20 on github.	-
	Update the project to work with the new testing method	Arjan	Arjan	4-10 hours Depending on found method.	-	wip	See issue #20 on github.	-

	Improve current tests according to the coverage	Arjan	Everyone	4 hours	-	wip	See issue #20 on github.	-
As a developer I want to have a clear overview of the project so that potential new members can understand the mechanics behind it too.	Expand the Architecture Design.	Bart	Team	1 hours	1 hours	yes	Waiting for feedback from previous week	
As a user I want to have receive feedback on my virtual actions to improve the interaction with the virtual world	Implement the vibrate function of the manus	Jasper	Jasper Arjan	4 hours	6 hours	yes	Implemented. finding the index of the gloves turned out to be hard. Various speeds do not work (yet?) in our gloves (Hardware wise), and right glove motor does not work..	2ad4322
	Make the gloves vibrate on hand collider contact	Arjan	Arjan	6 hours	4 hours	wip	Collision detection was implemented too late to fix this this sprint, moved to the next one.	2ad4322
	Make the gloves vibrate in a distinct pattern whenever an object is picked up	Matthias	Matthias Arjan	5 hours	4 hours	wip	Distinct patterns are implemented, but grabbing recognition is not linked yet. Will be done next sprint.	2ad4322
	Implement way to highlight objects that are grabbed or not grabbed.	Luke	Luke	5 hours	6 hours	yes	Researched several methods, went with outline shader added to object. Not added to main scene yet, but the script works in a separate test environment.	42e7eda
As a user I want a realistic environment to interact in	Fix the doors so that the player cannot fall through	Arjan	Arjan	1 hour	30 minutes	yes	Added solid, invisible wall	1c1b957
	Fill remaining shelves with products	Arjan	Arjan	4 hours	-	no	Other tasks with higher priority were done instead.	-
	Add sounds to the supermarket scene	Arjan	Arjan	3 hours	-	no	Other tasks with higher priority were done instead.	-
As a user I do not want to make a mess of the virtual supermarket so that I can have a clean	Implement dynamic physics that turn on/off per object	Bart	Bart	3 hours	3 hours	yes	The concept of this technology works properly, however we still need to find a fix that gives physics shorty to the items in the supermarket at spawntime.	6d330f53dde9

environment to perform actions in.	Create script that enables physics when an object is grabbed	Bart	Bart	5 hours	7 hours	yes	Had to implement thing twice because it did not work with collisions but with colliders that go on trigger instead	f48c8b5c2
As a developer I want to implement design patterns so that I can improve my coding skills	Implement strategy pattern in grab behaviour scripts	Luke	Luke	4 hours	6 hours	yes	After researching I Implemented a state design pattern instead, it seems the better option considering the context and what was most compatible with Unity. Since MonoBehaviour must be attached to a GameObject we had to use ScriptableObjects instead to implement this.	fb71c30

Additional tasks for TI2806

User Story	Task	responsible	Assigned To	Estimated Effort	Actual effort	Done	Notes	Commit
As a student enrolled in TI2806 Contextproject I want to make sure I do all the necessary tasks besides the actual project to pass this course	Make a draft version for interaction design of our project	Arjan	Jasper Arjan	1 hour	1 hour	yes	Done.	-
	Prepare and attend meeting with lecturer	Bart	Everyone	1 hour	1 hour	yes	Done.	-
	Study the slides from the ID lectures again and make and pass the four quizzes	Jasper	Everyone	4 hours	3 hours	yes	When you fail the quiz you can only try again the next day, which can be very time-consuming	-
	Pass end test	Matthias	Everyone	1 hours	1 hours	yes	Everyone passed to this requirement is yet satisfied	-
As a course manager I want to make sure my students know the course material for SIG	Visit guest lecture that is scheduled	Luke	Everyone	2 hours	2 hours	yes	Everyone was there. I made sure.	-
As a developer I want a clear overview of and reflection on my tasks this sprint	Create Sprint plan #7	Arjan	Everyone	1 hour	1 hour	yes	Done.	-
	Create Sprint reflection #6	Matthias	Everyone	1 hour	1 hour	yes	Done.	-

General notes:

Problems:

1. Problem: We overestimated the work we could do in one week
Solution: Part of the work will be moved to the sprint of next week, and we will try to plan more carefully next time.
2. Problem: Bart forgot the Leap Motion hardware at home on thursday.
Solution: Bart went back home again to retrieve the hardware and we also borrowed the Leap Hardware of the other team.
3. Problem: Test coverage is a disaster with Unity 3D.
We tried multiple methods found online some of them are outdated (DLL injection) and others are too much work (Disconnecting logic from Unity)
Solution: We have decided to manually highlight our coverage by going over all branches.