Sprint Backlog, Iteration #6

User Story	Task	Member responsible for the task	Task Assigned To	Estimated Effort per Task *(in hours)*	Priority (A—E) *(A is highest)*	Priority explanation
As a user I want multiple device integration, so that I can play the game with more people	Assigning each connected Android device a different position (corner) under the platform.	Luka	Luka	2.0 (only tests are still required)	A	-FROM PREVIOUS SPRINT- Required for the task below, which also has priority A.
	Moving the platform into a certain direction depending on all four Android devices (taking the average seems to be the logical choice).	Luka	Luka	3.0	A	-FROM PREVIOUS SPRINT- This is a core gameplay feature. If there isn't support for four connected devices, then it isn't much of a party game.
	Get the platform to tilt if the four accelerometers aren't very well synchronized.	Luka	Luka	5.0	C	-FROM PREVIOUS SPRINT- This only works well with the camera tilting and eventually with the *commander* falling of. So this task is only useful if all these others have been implemented as well. Also, this is a very difficult to test mechanic, as it requires a lot of manual testing with four Android devices. It's still a core game feature though.
As a developer I want the code to be clean and future proof so it is easier to work on in the long run	Close the Server and Client at appropriate moments.	Luka	Luka	2.0	A	Leaving open ports on a device may cause problems on that device, this task should fix it.
	Refactor ClientWrapper te same way as the ServerWrapper previous sprint	Luka	Luka	2.5	A	-FROM PREVIOUS SPRINT- It is weird that the ServerWrapper and ClientWrapper pretty much do the same (but for different applications), but their class structure is completely different.
	Refactor damageDealerGenerator and its factories	Damian	Damian	5.0	A	This class structure functions as a foundations for anything related to enemies and obstacles. Both these features are a high priority to fix

User Story	Task					Notes
As a user I want to be able to collide with walls so the game becomes more challenging and fun	Make collision able with the path boundaries	Damian	Damian	4.0	A	If there would be no collision with the walls, the carriage could walk of the level, which is a major design flaw
As a user I want the carriers to have full functionality so the game becomes more challenging and fun	Make the carriers spawn at the designated spot under the platform as soon as the game starts	Marcel	Marcel	1.0	A	Many functionalities depend on this.
	Make carriers able to be immobilized when they lose their health	Marcel	Marcel	5.0	A	This is a core gameplay mechanic that we want to have working in the beta.
	Make carriers able to recover after a set time, and keep on playing	Marcel	Marcel	3.0	B	Nice addition to the game feel. Easy enough to implement before the beta.
	Make the carriers have 3 spots where enemies can stand next to them	Marcel	Marcel	5.0	B	This is how enemy interaction should work in the final game. A basic implementation would be great for next week.
As a user I want the enemies to have full functionality so the game becomes more challenging and fun	Make the enemies spawn correctly according to the revamped game world, and not for example spawn in trees	Damian	Damian	3.0	A	-PARTLY FROM PREVIOUS SPRINT- The enemies spawning in trees makes the game look unpolished. When it comes to enemies, this is a core feature
	Make the enemies pick the spots next to the carriers at random, and only when they are empty	Damian	Damian	7.0	A	-PARTLY FROM PREVIOUS SPRINT- The enemies have no use if they are not standing near the carriers to attach them. Moving towards the carriage is already implemented, making them pick the spots is next important step
	Make enemies get hit and die and remove them from the game when they die	Damian	Damian	3.0	B	This feature relies on the carriers being able to damage the enemies. It can be implemented without them and is still a important feature.

	Make enemies hit the player after a certain amount of time	Damian	Damian	3.0	B	Same reasoning as the enemies being killable
As a player with android device, I want to be able to be hit and get hit by enemies	Make players lose health when hit.	Remi	Remi	1.0	A	Losing health is absolutely necessary, because the player needs to have some form of challenge
	Create visuals to losing health	Remi	Remi	2.0	A	The player needs to be able to see how much health he/she has left and when he/she gets hit.
	Make the buttons send data saying that the player performs an attack in a specific direction.	Remi	Remi	3.0	A	Battle mechanics are necessary for the players to defend against enemies.
	Implement a cooldown after pressing a button with visual representation	Remi	Remi	4.0	B	The cooldown on attacks balances the game and incentivises the player to listen to the commander, rather than just to blindly press all of the buttons, so it's pretty important, but not as much as the three tasks above.
As a player with Oculus Rift, I want to feel like I am actually standing on a platform, carried by players.	Implement the rotating of the camera when the platform moves in a certain direction	Nils	Nils	2.0	A	We want this to give the VR player a natural feeling in game, therefore we want this feature to be added to our game.
	Implement the shaking of the camera when the platform becomes unstable	Nils	Nils	2.0	B	The feeling of instability of the camera is a feature that is not necessary for the game, but would be a really nice addition.
As a gamer, I want to be able to lose the game, so that I can be challenged.	Create game over routine	Marcel	Marcel	6.0	A	This will improve game flow tremendously.
	Implement a scoring mechanism	Marcel	Marcel	4.0	B	This makes the game more challenging. Important feature that will need a lot a finetuning.

	Being able to save the score to a file	Marcel	Marcel	4.0	D	Not very important, but a nice addition to the final game.
As a player with android device, I want to have something to do other than just doing wat the commander tells me to.	Implement random events for the android device	Nils	Nils + Remi (uitleg android)	10 + 2 uur respectively	A	We need this feature to make the android user enjoy the game as well, because otherwise we think the gameplay for the app can be a bit boring.
As a player, I want to have progression while I play the game.	Implement a checkpoint system in the game	Nils	Nils	4.0	A	Checkpoints are a must have in our game
	Increase the difficulty of the game each checkpoint.	Nils	Nils	8.0	A	Without the increase in difficulty, the checkpoints would be pretty useless, therfore this also has priority A.
	Create a visual representation for the Android players that a checkpoint has been reached	Nils	Nils	2.0	C	This would be nice to have, but is not required for the game to work.
	Create a visual representation for the Oculus player that a checkpoint has been reached	Nils	Nils	2.0	C	This would be nice to have, but is not required for the game to work.
As the Oculus Rift player, I want to be placed in a *lobby world*, where I can wait until all Android users have joined.	Create an Environment that serves as the lobby	Luka	Luka + Remi	4.0 pp	A	Where else could you wait for your friends to connect? It can't be the actual main world.
	Add a GUI button to the *lobby world*, that the Oculus Rift user can select to start the actual game.	Luka	Luka + Remi	1.0 pp	A	How else are you going to start the game?
	Add a GUI button to the *lobby world*, that the Rift user can select to exit the game.	Luka	Luka + Remi	0.5 pp	C	It's convention for every game to have an exit button. But not quite necessary as there are multiple ways to close a game.
	Don't allow the selection of the start button if not	Luka	Luka	2.0	B	This forces the player to wait for four carriers, which really are required for the game to work.

	all players have connected.				
As a player I want to hear music and sound effects while playing.	Make sfx play when pressing start in the lobby	Remi	Remi	2.0	D	-FROM PREVIOUS SPRINT- Not super necessary, but it's nice to hear a sound when pressing a button, confirming you pressed it.
	Make music play and loop during gameplay	Remi	Remi	3.0	C	-FROM PREVIOUS SPRINT- Without music, it's all a little boring
	Make sfx play when getting hit and when attacking in the android app	Remi	Remi	3.0	B	Players need to know when the get hit and get confirmation when they've successfully hit an enemy.
As a newcoming developer, I want the big changes in the last sprint being documented in the EAD	Create class diagrams (UML) for several class structures of the project in the EAD. (Task from previous sprint)	Luka	Luka	4.0	D	While it is nice to keep an update EAD and have lots of UML in it, it can be time consuming that could have been spent on other more important things such as new features/refactoring.
	Create state chart diagrams (UML) of the project in the EAD	Damian	Damian	3.0	D	
	Create several sequence diagrams (UML) of the project in the EAD	Remi	Remi	3.0	D	

Context Project: Computer games
Group: MIGI1

Total ESTIMATED Hours:
Marcel: 28
Nils: 30
Luka: 26 (Luka usually spends more on reviews as the lead programmer, therefore it's a little
       bit lower than the rest, considering time spent reviewing in previous sprints)
Damian: 28
Remi: 28.5