

# Sprint Retrospective, Iteration #3

Context Project: Carried Away  
Group: MIGI1

User Story	Task	Member responsible for the task	Task Assigned To	Estimated Effort per Task (in hours)	Actual Effort per Task (in hours)	Done (yes / no)	Priority (A—E) (A is highest)	Note	Link to commit / pull request	reviewer(s)
As a player of this game, I want to be put in a main menu once I launch the game. So that just like every other game, I have a simple way to navigate through all features of the game.	Make the server menu functional	Remi	Remi	3.0	3.0 - Remi 6.0 - Nils 2.0 - Damian	yes	A	Nils was mainly responsible for refactoring the code.  <b>The code still needs serious refactoring.</b>	<a href="https://github.com/MrCrime/ContextMigi-1/pull/26">https://github.com/MrCrime/ContextMigi-1/pull/26</a>	Damian Remi
	Create the android menu and make it functional	Remi	Remi	1.0	2.0 +12.0* - Remi 3.0* - Luka	no	A	*Troubleshooting took the most time. The code should be functional, but something from niftygui causes issues.	-	-
As the user that controls the server running the game, I would like to easily create a lobby, to which the Android users can connect, so that we have a place to wait until everybody is successfully connected before the game begins.	Allowing the user to press a button from the main menu, that creates the lobby and allows Android Users to join it.	Luka	Luka + Remi	1.0 pp	2.0 - Luka	yes	A	<b>The code needs serious refactoring.</b> Feature won't be merged with master until this has been done.	<a href="https://github.com/MrCrime/ContextMigi-1/commit/c4bd1e8e48b3a4890ec03da9f5005209a2c95017">https://github.com/MrCrime/ContextMigi-1/commit/c4bd1e8e48b3a4890ec03da9f5005209a2c95017</a> (This commit and all those before in that branch)	-
	Placing a start button in the Lobby UI, that is greyed out until four users have connected to it and an Oculus Rift is connected to the PC that runs the server (if possible)	Luka	Luka + Remi	1.0 pp	3.0 - Nils	no	C	Nils replaced Remi in this task.	-	-
	Displaying users (using their IP addresses for example) that have joined the lobby, on the Lobby UI.	Luka	Luka + Remi	1.0 pp	2.0 - Nils 3.5 - Luka	yes	C	<b>The code needs serious refactoring.</b> Feature won't be merged with master until this has been done.  Nils replaced Remi in this task.	<a href="https://github.com/MrCrime/ContextMigi-1/commit/36a98300d988c28c0fe52419e8fb0b995ebab053">https://github.com/MrCrime/ContextMigi-1/commit/36a98300d988c28c0fe52419e8fb0b995ebab053</a> (This commit and all those before in that branch)	-



As an Android user of this game, I would like to be able to join a lobby that a server has created, so that the server and I can start sharing information that can be used in the game.	Allowing the user to go to into a “Join Lobby” screen from the main menu, where the user can enter the IP address of the server lobby and click a “join server” button that will connect the user to the server.	Luka	Luka + Nils	1.0 pp	3.0 - Nils	no	A	<b>The code needs serious refactoring.</b> Due to technical difficulties with building the project (the Nifty framework is the problem) this task could not be finished.-	-	-
	In the “join lobby” screen, automatically display all ip addresses of servers that are running on the same LAN.	Luka	Luka + Nils	1.0 pp	3.0 - Luka	no	B	Because of the technical difficulties with the game, the UI is not finished. In place of this, there is a feature that automatically connects the Android to the first LAN server it detects (that’s where the 2.0 hours have been spent on).	<a href="https://github.com/MrCrime/ContextMigi-1/pull/27">https://github.com/MrCrime/ContextMigi-1/pull/27</a>	Nils Damian
	Adding a lobby screen with a similar display like the one described in the server, only here there is no start button.	Luka	Luka + Nils	1.0 pp	-	no	A	Not started, due to the technical difficulties with building the project.	-	-
As a <i>carrier</i> I want to use my android device to provide input, so that the game becomes more interactive for me.	Implement gyroscope functionality, make the input visible on the server side	Marcel	Marcel + Damian	10.0 (total)	4.0 + 14* - Marcel 3.0 + 10* - Damian	yes	B	Were are actually using the accelerometer instead of the gyroscope *Time spent troubleshooting the contextApp and making maven and android cooperate, also deploying the app on certain phones proved difficult	<a href="https://github.com/MrCrime/ContextMigi-1/pull/25">https://github.com/MrCrime/ContextMigi-1/pull/25</a>	Nils Luka
	Make gyroscopes work together, implement functionality for multiple android users at the same time	Marcel	Marcel + Damian	8.0 (total)	-	no	C	This depended on networking functionality, which was only finished near the end of the sprint	-	-
As a user I want the characters to be animated, so the game looks more attractive.	Create carrier models	Damian	Damian	2.0	2.0 - Damian	no	C	The models have been made for the carriers, they haven’t been implemented in the game yet though, because it didn’t have a high priority	-	-
	Make animations for the characters, so the carriers actually walk, and the commander moves when the platform moves	Damian	Damian	8.0	5.0 - Damian	no	D	The animations have been made for the carriers, they haven’t been implemented in the game yet though, because it didn’t have a high priority	-	-
As a developer of this game, I would like to have at least one computer that is able to run with	Get the Oculus to work on either of the developers pc’s, being	Nils	Nils	3.0	1.0 - Nils	No	A	Oculus still doesn’t work	-	-



the Oculus Rift that we have been given.	able to get a constant visual on the headset.									
As a <i>commander</i> , I would like to use the Oculus Rift to perceive the World, so that I can immerse myself more in the game.	Allow the Oculus Rift user the operate the server menu without having to touch the computer the server is running on.	Nils	Nils + Luka	6.0 (total)	-	No	E	Not possible to do in this sprint because of other troubleshooting.		
	Allow the user to perceive the current World with the Oculus Rift.	Nils	Nils + Luka	6.0 (total)	3.0 + 6.0* - Nils	Yes	A	Oculus camera is still fixed, but can perceive the world from the commander's perspective. * Time spent troubleshooting why maven wouldn't want to work with the oculus.	<a href="https://github.com/MrCrime/ContextMigi-1/pull/26">https://github.com/MrCrime/ContextMigi-1/pull/26</a>	Damian Remi
As a developer of the game, I'd like the architecture design to be updated, so that it is up to date with the team's current architecture.	Fix problems in the architecture design pointed out by the Student Assistants.	Luka	Luka	1.0	1.0 - Luka	Yes	B	The only remaining missed point that is pointed out by the TA, is the short introduction.	<a href="https://github.com/MrCrime/ContextMigi-1/pull/29">https://github.com/MrCrime/ContextMigi-1/pull/29</a>	Marcel Nils
	Add a section that describes how the package organization of the project works.	Luka	Luka	2.0	-	No	B	The original idea was to have three packages. One for the server, one for the client and one for both. However, this was later changed by a Maven Module.	-	-
	Add a section that describes the Maven Modules (this was was later added as a substitution to the task stated above).	Marcel	Marcel	1.0	1.5 - Marcel	Yes	B	-	<a href="https://github.com/MrCrime/ContextMigi-1/pull/29">https://github.com/MrCrime/ContextMigi-1/pull/29</a>	Luka Nils
The following tasks are ones not specified in the Backlog, but done because they were required before some other task.	Write test cases for the ClientWrapper and ServerWrapper	Luka	Luka	-	3.0 - Luka	Yes	-	Both classes were already done in previous sprint as part of the task "basic networking implementation". However, Luka thought that these classes could be tested before merging, so that there is at least some code coverage in the project.	<a href="https://github.com/MrCrime/ContextMigi-1/pull/16">https://github.com/MrCrime/ContextMigi-1/pull/16</a> (this pull request was closed, so that a proper merge could be done with the Moduled Project setup that was currently in master. The approved pull request containing the same features is here: <a href="https://github.com/MrCrime/ContextMigi-1/pull/23">https://github.com/MrCrime/ContextMigi-1/pull/23</a> )	Nils Remi
	Merging the networking branch with the master which contains the Moduled Maven project.	Luka	Luka	-	2.5 - Luka	Yes	-	-	<a href="https://github.com/MrCrime/ContextMigi-1/pull/23">https://github.com/MrCrime/ContextMigi-1/pull/23</a>	Nils Remi (reviewed together with )
	Downloading the Android SDK on your personal computer	-	-	-	5.0 - Luka 2.0 - Nils	Yes	-	-	-	-
	Hacking some temporary code together for the demo.	-	-	-	3.5 - Luka 3.5 - Nils	Yes	-	This mainly includes the Lobby GUI and creating a main method in AutoConnector that connects the client.	-	-



# Main Problems Encountered

## Problem 1

**Description:** Implementation of VR functionality requires usage of Java 1.8, while at the same time the Android devices that we target do not support it.

**Reaction:** We made the desktop application to run on Java 1.8, while the android application runs on Java 1.7. This problem reinforced the need for the two parts of the project to be put into separate modules.

## Problem 2

**Description:** We wanted the game to support the usage of gyroscope, but not all smartphones have a gyroscope.

**Reaction:** Instead of using a gyroscope, we switched to using the accelerometer instead. Since the gameplay we wanted to use the gyroscope for only involved tilting the smartphone, this does not matter. However, it does limit how we can extend our gameplay. For example, with a gyroscope you can detect rotation around the vertical axis, while with an accelerometer you cannot.

## Problem 3

**Description:** Nifty gui doesn't interact all that well with android/maven, at least in our case. The game wouldn't build at all.

**Reaction:** We haven't quite figured out what causes the problem, all we know is that the dependencies clash somehow. When we removed the nifty gui dependencies from the pom in the contextApp, everything worked fine. In the desktopApp the same dependencies are present, without any clashes. We are unsure why this is the case. We do really want nifty to work on android, so fixing this has a high priority next week.

## Problem 4

**Description:** Due to many of these technical problems, some members of our team don't have a number of commits/LOC that correctly reflect their amount of time spent.

**Reaction:** In the retrospective, writing this down so that TA can take this into account and not pick on the members with a small amount of commits.

## Problem 5

**Description:** JMonkey is down! This caused two main problems: 1. Travis can't build the project properly as it fails to connect to the repository. 2. We can't view the JMonkey Wiki, which makes writing code that much more difficult.

**Reaction:** For the first problem: It's fine if Travis fails as long as we test the project manually (and run Maven test) before merging with Master. For the second problem: A lot of communication between team members is required to figure these things out. One member may know a lot about the JME3 networking library, while the other knows a lot about the NiftyGUI.

# Adjustments for the next Sprint

- Based on response from the TA, every untestable piece of code should be manually tested and well documented. This document should specify *why* the code can't be tested and also a confirmation that the manual tests worked.
- Tasks should be split more evenly.
- Get together more. We noticed this sprint that much more progress is made when we all sat together. We should also start reserving meeting rooms in *EWI* so we don't have to keep moving our study places.

