Sprint Retrospective #3

Computer Games Contextproject 2015-2016
Course TI2806, Delft University of Technology

Group PixelPerfect

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Contents

1 Backlog **3**

2 Problems **5**

3 Adjustments **5**

User story	Task	Responsible	Assignee	Estimated Effort (hours)	Actual Effort (hours)	Done	Pull-Request ID	Notes	Priority
As a stakeholder, an assessor or a contributor, I would like to be informed about the evaluation of the past iteration and the planning for the upcoming iteration of the development process in order to verify the progress of the product and to hold team members responsible for their work.	Write and hand-in Sprint 4 Backlog. (Due 13/5)	David	Jesse	2	1	Yes	N/A		A
	Write and hand-in Sprint 3 Retrospective. (Due 13/5)	David	Jesse	1.5	1	Yes	N/A		A
	Attend Sprint 3 Review Meeting with Teaching Assistents.	Everyone	Everyone	0.5	0.5	Yes	N/A		A
As a developer, I would like to be up to date with the project so that I can decide what requires my attention.	Organize and participate in a Sprint Planning Meeting. (Mon 9/5)	David	Everyone	1	1	Yes	N/A		A
	Organize and participate in daily scrum / stand-up meetings every working day of the sprint.	David	Everyone	1	1	Yes	N/A		B
As a developer, I would like to make sure my personal knowledge as well as the common understanding amongst the team members of the technology we are dealing with is update, so that I may contribute more effectively and understand what is going on with the product development.	Study the documentation for the jMonkeyEngine for intermediate and advanced users.	Wouter	Wouter	10	3	Yes	N/A	We decided to study the jMonkeyEngine documentation selectively, i.e. only search when we bump into an issue with the framework. This allowed us to spend our time more effectively.	B
			Dmitry		2.5	Yes			
			Jesse		3	Yes			
			Floris		2.5	Yes			
			David		5	Yes			
	Study the documentation provided with the library that functions as an interface between the jMonkeyEngine and the Oculus Rift.	David	David	2	2	Yes	N/A		B
			Floris		0	No			
			Dmitry		0	No			
			Wouter		4	No		Since it doesnt work yet, I need to figure out why	
			Jesse		0	No			
	Get familiar (again) with Blender to prepare for the modelling / rigging / skinning / texture mapping that will have to been done in the upcoming sprints.	Wouter	David	3	0	No	N/A	Graphical pripority was placed in the GUI, see problems.	E
			Wouter	3	2	Yes			
			Jesse	3	0	No			
As a developer, I would like to have the project organized in a clear and structured manner in order to increase the efficiency of the development process and to increase the maintainability of the software product.	Enter implementation related tasks of the backlog into the GitHub Issue tracker.	Jesse	David	1	1	Yes	N/A, see issues tab		B
As a developer, I would like to be able to grasp what the game will come to look like, in order to be able to effectuate this and work synchronized with my colleagues in order to prevent double work from being done, and to ensure a good	Draw sketches / design mockups of the graphical user interfaces.	Floris	Wouter	4	4	No	#70 #81	Did not get import from blender to work, so created one using seperate JME Spatials. David also created one by hand, see problems.	C
As a user fulfilling the role of captain, when I launch the game I want to be able initialise a game session in order to allow other players to join the game.	Implement a rule that indicates victory in some way (may for now be a pop-up message) when the main timer exceeds.	Floris	Floris	2	1	Yes	#58		B
As a user fulfilling the role of captain, when I am in a game session I want to be presented events occuring at random time intervals in order to keep the game interesting for everyone, including myself.	Implement a visual log listing all events in the active queue.	Dmitry	David	4	7	No	N/A	See problems.	B

As a user fulfilling the role of crew member, I would like to connect my device to the game, in order for me to play along to prevent passive participation.	Implement basic networking interface in the server application.	Jesse	Dmitry	4	7	Yes	#62		C
	Implement basic networking interface in the Android client application.		Jesse	4	8	Yes	#3 (client repo)		C
	Make a simple demo action that can be performed via the Android client's user interface, which can subsequently propagate via the network interfaces to the server application.		Wouter	6	0	No	N/A	Done by Jesse during the implementation of the Android client networking.	D
As a developer or tester, I would like to ensure a certain quality of the delivered code, in order to meet the customer's non-functional requirements.	Evaluate the report generated by the static analysis tools and fix the issues that have escaped into the repository during the sprint.	Floris	Wouter	2		Yes	N/A	Done by Floris before the new release.	A
	At the end of the sprint do a final refactoring before submitting the code.	David	Jesse	1		Yes	#64 #65		B
As a user, I want to be able to have a route in the spaceship as this leads to the finish, in order to allow the game to be replayable.	Implement route generator algorithm for creating routes.	Jesse	Floris	2	4	Yes	#75		B
	Implement a hierarchie of RouteNodes and implement RouteNode to be more complete.		Floris	3	3	Yes	#60		B
Unplanned Tasks									
As a user fulfilling the role of crew member, I would like to connect my device to the game, in order for me to play along to prevent passive participation.	Make a basic GUI for the Android application, allowing the user to make a connection with the server.	N/A	Jesse	n/a	8	Yes	#4	Harcoding the ip-address in the client was not an elegant solution, both for testing an production purposes. Therefore I made a basic GUI for the Android app already to make manually testing more easy.	
	Study the documentation for Android.	N/A	Floris	n/a	2	Yes	N/A		
As a user fulfilling the role of a crew member, I want to be able to see all the events from my device, so i can complete them.	Implement synchronization for events between Server and Client	N/A	Dmitry	n/a	6	Yes	#78	Current implementation not fully operational. Will be fixed in Sprint 4.	
	Tweak EventScheduler to implement a better probability distribution.	N/A	Jesse		1		#47		
	Implement Event Subtypes	N/A	Wouter	n/a	4	Yes	#72	Took me a bit too long, had troubles remembering the parallel testing hierarcy	
As a developer or tester, I would like to ensure a certain quality of the delivered code, in order to meet the customer's non-functional requirements.	Create a regressive automated test suite for classes created in the previous sprint(s).	N/A	David	n/a	6	Yes	#71	Test coverage increased from less than 10% to over 65%.	
	Fix the last static warnings in the project	N/A N/A	Floris	n/a	5	Yes	#85 #91	Took a long time, because no one maintained the code with these tools.	
As a user fulfulling the role of the captain, I want to be able to see the scene using the Oculus Rift	Implement dependencies and code to use the Oculus Rift	N/A	Wouter	n/a	5	No	N/A	Doesnt work yet, will be extended to sprint 4.	

2 Problems

a) The jMonkeyEngines own maven repository went down (hence the sequence of a couple of build failures somewhere near the end of the sprint). We responded to this in a very agile manner: we replaced the repository reference with an alternative (jCenter). We even hosted some libraries ourselves on a VPS (so we did not have to include the libraries in the repository, which would have been a shame).

b) A lot of static errors were introduced, code reviews were not strict enough. This was fixed by performing major refactoring as entire tasks throughout the sprint. This came at the cost of a lost team member who was doing nothing but fixing these issues.

c) Dynamic errors were introduced (scene graph, networking) which mainly arose due to a lack of proper manual testing. These errors were only encountered on the final evening, and thus was solved by simply rushing hotfixes until all the problems were removed.

d) Feature development started too late in the sprint, meaning features were not finished or were unstable on the evening of the code deadline. This was fixed by, just as for the dynamic errors, hotfixing the features and rushing them a few hours before the deadline.

e) Code was not tested, which made it very hard to meet the required test coverage in the end. This was solved by having David dedicate himself to writing regressive tests as a task.

f) Some features that were planned for basic implementations (such as Davids task to implement a visual event log) became too ambitious (coding a large part of the GUI into the engine instead), resulting in them being unstable, and thus delayed, and thus pushed back to the next sprint.

g) The games support for VR is currently nonexistant. As a result, all developments related to the user interface and gameplay do not take VR movement into account.

3 Adjustments

a) Assigned implementations that are simple features (such as Davids visual log task) must first be completed before they are extended with more features (such as a full GUI-like visual display of them).

b) Code Reviews will be done more strictly: no static errors can be introduced by a pull-request and it may not decrease the test coverage of the base branch before it can be merged.

c) Code will be controlled more thoroughly beforehand for dynamic errors (preferrably before merging), so they can be fixed in the same sprint. Before merging or during code review, local tests should be run to see if the implementation is fully operational.