Sprint Retrospective #5

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

Group PixelPerfect

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As a stakeholder, an assessor or a contributor, I would like to improve the organisation of the project so that I have a better overview of the tasks that need to be done and things that can be improved.	Write and hand-in Sprint 6 Backlog. (Due 27/5)	Jesse	Everyone	1.5	2	Yes	N/A		A	This is an important, graded deliverable document.
	Write and hand-in Sprint 5 Retrospective. (Due 27/5)	Jesse	Everyone	1.5	2	Yes	N/A		A	This is an important, graded deliverable document.
	Attend Sprint 5 Review Meeting with Teaching Assistents.	Everyone	Everyone	0.5	0.5	Yes	N/A		A	This meeting is mandatory. Furthermore it allows us to demo our product and gather useful feedback from our stakeholders, so this is crucial.
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 16/5)	David	Everyone	1	1	Yes	N/A		A	Very useful way to get everyone on the right track for the sprint, crucial to our development process.
	Organize and participate in daily scrum / stand-up meetings every working day of the sprint.	David	Everyone	1.5	2	Yes	N/A		A	Synchronizing collective effort is necessary to prevent redundant effort and make sure everyone works according to plan.
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	4	0	No	N/A		B	We work with the jMonkeyEngine framework quite extensively, so knowing our way around in it is important.
			David		2	Yes	N/A			
			Jesse		0	No	N/A			
			Floris		0	No	N/A			
			Dmitry		2	Yes	N/A			
	Study the documentation provided with the library that functions as an interface between the jMonkeyEngine and the Oculus Rift.	David	Everyone	2	2	Yes	N/A	Difficult due to remaining JMonkeyEngine website issues.	B	Making the game playable with the Oculus is a strict customer's requirement. In order to make this realizable we need to know how to use the library.
	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	3	Yes	N/A	Early version of Cockpit.	E	Getting models of good quality in the game would be nice, but is definitely not important. Getting the game to function properly is far more important than aesthetics.
			Wouter	3	0	No	N/A			
			Jesse	3	0	No	N/A	Until now I have not focussed on art, so I did not spend any time on working with Blender.		
	Study the documentation provided for Android development.	Jesse	Everyone	2	1	No	N/A		A	We still need to implement some new features in the Android application demanding more knowledge of the SDK. These features are crucial to the gameplay, therefore we should continue studying the documentation carefully.
As a developer, I would like to have the project organized in a clear and structured manner so that I can 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		B	Since we work with GitHub Issues as our main Issue Tracker, it is important that we can track our backlog items there. (It is not crucial because we still have the original backlog as a reference.)
	Distribute main package code over more classes to ensure better responsibility / intelligence distribution.	David	Jesse	4	0.5	No	N/A	Postponed to next sprint, due to midterm exam I could not complete all my tasks this week.	C	The code works this way, and consists mainly of integrations with the frameworks used. Hard to test and get nice and clean, so refactoring it is not that important.
As a developer, I want to know what the game will come to look like, so that I can work synchronized with my colleagues, and to ensure a good understanding of the product to allow for a more effective contribution to the product.	Draw sketches / design mockups of the graphical user interface for mobile devices (2D).	Floris	Wouter	2	1	yes	N/A		C	Not very important because the implementation does not require very careful planning. However it might be useful to synchronize our thoughts on this matter.
As a developer or tester, I would like to ensure a certain quality of the delivered code, so that I can 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	1	yes	N/A		A	Code Quality is a major part of the rubrics, so making sure to eliminate as many static/dynamic errors is of great importance.
	At the end of the sprint do a final refactoring before submitting the code.	David	Jesse	1	0	No	N/A	Too many code had to be submitted right before the deadline, so there was no right moment for a final refactoring.	B	Code Quality is a major part of the rubrics, so making sure to eliminate as many static/dynamic errors is of great importance. We consider refactoring slightly less important than testing and debugging, since it does not necessarily help eliminating defects.
	At the end of the sprint, check the test coverage and write a new regressive test suite based on the changes and new classes/methods.	Wouter	Dmitry	7					A	Code Quality is a major part of the rubrics, so making sure to eliminate as many static/dynamic errors is of great importance.
	Performing active code reviews on all pull requests	Floris	Floris	4	4	Yes	N/A		A	Code Reviews help to improve code before merging it into the codebase, allow contributors to keep track of the changes made, increase the extent to which code ownership is shared et cetera. It is crucial for guaranteeing the code will meet some quality requirements.
			Dmitry			Yes	N/A			
			Jesse		2	Yes	N/A			
			Wouter		4	Yes	N/A			
			David		4	Yes	N/A			
	Implement: smoke test the game.	Jesse	David	5	4	Yes	#174	Choice was made to manually test this due to Travis and Java Robot incomapatbility.	E	Really not important, just a nice way to boost test coverage in the main package, but we might as well ignore that package when it comes to test coverage.
	Implement: Android test suites / test cases must be implemented to raise test coverage to an acceptable level, mainly the Android Application Test is of importance.	Floris	Dmitry	5	9	No	N/A	Application Test not working.	A	Testing is a really important part of the process.
As a user fulfilling the role of captain, I want to have a simple heads-up display that shows the ship's current health, the game timer, and the group score, so that I can give the user a nice overview of the game.	Implement World Space Indicators that show the team score, time remaining, and the ship health.	Dmitry	David	6	5	Yes	#189		B	We want to give the players better insights in the status of the game, so they evaluate how they are doing. This is important to keep players motivated and improve the gameplay experience.

User Story	Task	Responsible	Assignee	Estimated Effort (hours)	Actual Effort (hours)	Done	Pull-Request ID	Notes	Priority	Priority Motivation
As a user fulfilling the role of captain, I want to have the option to choose a route in the game at a comfortable pace, so that I will not have to deal with time pressure during my choice.	Implement: EventScheduler can be paused and resumed, so moments of rest can be introduced (for example when choosing a RouteNode)	Jesse	Jesse	1	1	Yes	#166		B	We would like to introduce some moments of rest in the game to improve the experience. For example allowing the Captain to make a decision on which next node on the Route to pursue requires such a moment. Therefore we need a way to control the flow of Events that are introduced. This is rather important for the gameplay experience.
As a user, I want to have progression in the game so that I will not get bored of the game due to having too much skill already.	Implement: update EventScheduler poisson process lambda variable to increase gradually with respect to the progression of the game session.	Jesse	Jesse	3	2	Yes	#166		C	We would like the players to get in a certain flow, having both skill and difficulty increase over time. Therefore we need a way to control the flow of Events that are introduced. This is not vital part of the gameplay yet however.
As a user, I want to be able to connect to the server before the game starts, so that I can chose a role or choose to leave the lobby if I want to.	Implement: different game states; main menu and/or lobby, allowing the players to interconnect before the game session launches.	David	Wouter	10	10	yes	#170		A	Currently when launching the Game everything starts running all at once. This obstructs gameplay testing and disallows us to invite other users to try the game. Therefore it is really important to introduce different game states.
As a user fulfilling the captain role, I want to be able to see a World Space Indicator, so that I can easily choose a route in a nice visual way.	Implement: update the visualization of the Captain's Log to be a World Space Indicator instead of a Heads Up Display.	David	David	5	1	No	N/A	Not enough time to complete, events were not yet properly planned out. This has been postponed to the next sprint.	C	As long as the information is presented (which is the case), it doesn't really matter how exactly it is visualized for now. However it would be nice to require the captain to look around in the ship to monitor statusses; that is why we use the VR headset. Therefore this would make for an interesting enhancement, but not that important.
As a user fulfilling the role of captain, when I am in a game session I want to be presented with events occuring at random time intervals so that I can keep the game interesting for everyone, including myself.	Implement: roles must be allocated in the beginning of the game. Each player can choose a role when connected on their own device.	Floris	Floris	8	5	yes	#159, #172		A	This implementation represents a must have of the game. The role feature is an important entertainment factor.
As a user, I want to get a location allocated to me when I choose a certain role, so that every role chosen gets his own place on the ship to allow more enterainment between crew members.	Implement: location Activies must be added. Each Player gets into the Location Activity corresponding to his/her role.	Jesse	Floris	5	4	yes	#159		B	This week we focus especially on improving the Events, the way they are generated, communicated and solved. These form the center of the gameplay. Allowing different roles to have different ways to solve events is a rather interesting enhancement.
As an Android developer, I want to be able to have activities present so that I can start implementing more flexible between multiple activities and implement specific code for events.	Implement: event Activities are added, representing the action / micro-game that must be performed to solve a specific type of Event, taking the Event parameters into account.	Jesse	Dmitry	8	0	No	N/A		B	
As a User, I only want to complete tasks that belong to the role I chose at the start of the game, so that every crew members has his/her own tasks belonging to his/her job (eg. engine defect --> engineer room).	Implement: the Location Activities have links to distinct subsets of the available Event Activies.	Jesse	Floris	4	3	yes	#159		C	This week we focus especially on improving the Events, the way they are generated, communicated and solved. These form the center of the gameplay. Having the basis of role allocation and different locations is most important, this enhancement is not that crucial yet.
As a user, I would like to have an interesting gameplay experience by being challenged while solving problems in the game, for this is the main reason I play a video game.	Implement: each Event must be parameterized (e.g. Hostile Alien Spaceship has some coordinates and perhaps a type of armor that should be penetrated).	Dmitry	Jesse	5	1	No	N/A	Postponed to next sprint, due to midterm exam I could not complete all my tasks this week.	B	Parameterizing Events boosts experience, making solving Events way more interesting. However we already have a lot of tasks that must happen first, so for this week it is not crucial yet.

Unforseen Tasks	Task	Responsible	Assignee	Estimated Effort (hours)	Actual Effort (hours)	Done	Pull-Request ID	Notes	Priority	Priority Motivation
	Configure Project for SIG tool (Coveralls and .scope.yml).	N/A	Jesse	N/A	1	No	N/A	Didn't get Coveralls to work properly. We got notified that we had to use this service way too late.	N/A	N/A
	Upload code to SIG.	N/A	Jesse	N/A	0.5	Yes	N/A	Apart from the Automated Tests section in the report, the tool worked for us.	N/A	N/A
	Create presentaton for the midterm presentation session.	N/A	David	N/A	4	Yes	N/A		A	Presentation was required to give a clear overview of the project.
	Create demo video for the midterm presentation session.	David	Jesse	N/A	4	Yes	N/A		N/A	N/A

2 Problems

a) The midterm for the automata, formal languages, and computability course was scheduled in the middle of this sprint, along with continued deadlines for that course, such as lab work and lecture preparations. The exam and combined deadlines made it difficult to focus on the project until Thursday. We dealt with this by doing as much work as possible after the exam and the deadlines had been passed.

b) Due to the shortage of time, many unforseen bugs were present at the end of the sprint that required a very quick pre-deadline rush to fix. These bugs were also present during the presentation. The workaround for these bugs was to publish them right before the deadline, and to explain during the presentation what happened when the bugs did not exist.

3 Adjustments

a) Start work earlier than the previous sprint, to allow for enough time to fix bugs and errors.

b) Better code review is required to ensure that hard bugs which can be easily caught through manual verification/testing do not make it in.