

Sprint Retrospective, Iteration # 8

Context Project: Blockchain

Group: BullsBearsWolves

Introduction

After heavy conflicts in the beginning of the week we managed to work through a lot of issues, ranging from writing the Draft of the Final Report to importing the entire Tribler blockchain to writin`g a beautiful tree-like GUI.

User Story	Issue #	Task	Members worked on	Estimated Effort per Task (in hours)	Actual Effort per Task	Done? (yes/no)	Notes
As a developer I want other groups to test our API for Interaction Design because I want to know whether our customers can use our product easily.	201	Preparing the API and making sure that there are not bug and the program is actually written according to UML, making sure everything works.	Luat, Naqib	4 / person	Luat: 10 Naqib: 7	yes	Old API was complicated and hard to use, major structural changes had to be made
	202	Let two groups of programmers interact with our code via API.	Luat, Naqib	4 / person	Luat: 2, Naqib: 2	yes	The actual testing took not quite as long as expected.
	203	Setting up tests and document this set up.	Naqib, Luat	2 / person	Luat: 7, Naqib: 7	yes	We had to find a creative way to let adult programmers interact with our API and this is very difficult. Testing traditionally would take too long. See chapter 5 of the Final Report.

	205	Collecting the data and analyse this.	Naqib, Luat	3 / person	Naqib: 3, Luat: 0	yes	Luat adjusted the API in the meantime
	206	Write a report (HCI)	Naqib, Luat	4 / person	Naqib: 5, Luat: 0.5	yes	Same here; Luat was programming.
	207	Adjust API according to the feedback from the test subjects.	Luat, Naqib	4 / person	Naqib: 5 Luat: 5	yes	
	207	Fix the database to multichain query	Ymte	not planned	3	yes	This query was needed for the API to work properly, however a bug was introduced.
As a developer, I want to crawl a huge dataset to test our blockchain implementation	197	Reading in the data	Jasper, Ashay	2 / person	2, 2	yes	
	197	Crawling	Jasper, Ashay	4 / person	4, 4	yes	
As a developer, I want to use the crawled huge dataset to test our blockchain implementation	198	Analyzing the crawled data	Jasper, Ashay	2 / person	2, 2	yes	
	198	Implementation - Reading the data	Jasper, Ashay	4 / person	15 15	yes	Existing database was hard to import
	198	Implementation - Processing the data	Jasper, Ashay	4 / person	6, 6	yes	
	198	Testing	Jasper, Ashay	4 / person	1, 1	yes	There was not much to test
	198	Documentation	Jasper, Ashay	2 / person	1, 1	yes	

As a developer, I want to run through the Definition of Done that we had written in Product Planning, because I want to meet the requirements.	208	Run through the list and check every single element of our Definition of Done.	All	1 / person	1	yes	The definitions are correct.
	209	Adjust code according to our conclusion from the analyses in the previous task.	All	2 / person	0	no	
As a developer, I want to update my code, according to the feedback of SIG, so that my application can have a higher score upon running on SIG website.	72	Refactoring the objects package	Naqib, Luat	2 / person	0	no	There was no feedback.
	199	Refactoring the Controllers package	Jasper, Ashay	2 / person	0	no	There was no feedback.
	72	Refactoring the Database package	Ymte	2	1	yes	Only some columns needed to be split
As a developer, I want to write a final report that meets the requirements in	211	Introduction, including a brief problem description and end-user's requirements	Ymte	1.5	2	yes	
	212	Overview of the developed and implemented software product	Ymte	3	3	yes	

the course guideline.	213	Reflection on the product and process from a software engineering perspective	Ymte	1	2	yes	
	214	Description of the developed functionalities	Ymte	3	2	yes	
	215	Special section on interaction design (development of the HCI module)	Ymte	3	1	yes	Needed some adjustment and importing in Latex from the document from Luat and Naqib
	216	Evaluation of the functional modules and the product in its entirety, including the failure analysis	Ymte	1	2.5	yes	More failures than expected
	225	Writing a chapter in the final report on Outlook	Ymte	not planned	1.5	yes	We forgot to add the ticket
	226	Integrating feedback from other group members and adding bibliography into Latex	Ymte	not planned	2	yes	Proper BibTex was a pain to set up

As a developer, I want to update the EAD such that it describes the components.	200	Update: Introduction	Jasper	2	1	yes	Introduction was mostly complete
	218	Update: Design goals	Ymte	2	1	yes	
	217	Update: Subsystem decomposition (sub-systems and dependencies between them)	Ymte	2	2	yes	
	219	Update: Hardware/software mapping (mapping of sub-systems to processes and computers, communication between computers)	Ymte	2	1	yes	
	220	Update: Persistent data management (file/ database, database design)	Ymte	2	1	yes	Not much has changed about the persistent data management.
	221	Update: Concurrency (processes, shared resources, communication between processes, deadlocks prevention)	Ymte	2	0.5	yes	There is not much concurrency going on in our library

As a developer, I want to minimize the GUI functionalities such that it only displays what our required functions are, because it is not our task to have a nice GUI and this way our test coverage will improve in case we won't be able to test the activities.	210	Minimize the GUI such that only the necessary things are simply (and ugly) displayed.	Naqib, Luat	2 / person	Luat: 8 Naqib: 8	yes	A tree view has to be included, which was difficult as it is not built-in into Android. We underestimated this task since in the previous weeks we spend a lot of time on the GUI. Now we had to start from scratch and some methods in the GUI had to be for example recursive. We also had to try a lot because this was the first time we used the API in this way. Overall we think we underestimated this task.
	210	Try to improve the testing	Naqib	1	0	no	
	210	Make a functional prototype of a treeview	Ymte	not planned	4	yes	First some built-in functionality was used using ExpandableListView and a normal ListView, however they did not provide sufficient functionality to create a fully-fledged tree. A library has finally been used.

* Note that the person that is responsible is not the same person that has to do the task. Since the EAD is a small weakness of us we want to make sure that the assigned person is not the same as the responsible person. Just like we do it with the merging: the person who made the PR is not the person who will merge it.

What went well

1. We completed all tasks despite there being a lot of work.
2. Thank to the new UML, now we have seen that this makes our work went more smoothly and less conflicts
3. Everybody worked on separate code, mostly in pairs, so that there were no merge conflicts and no disagreements. This made it so that everybody could work a lot.
4. The pull requests were smaller and more reasonably-sized than previous week. No gigantic pull requests that kept growing over the days were made, and the pull requests that were submitted were merged in a normal timespan.
5. Almost all of the work was done on Thursday, this way we had no pressure on Friday finishing tasks.

Which improvements from the previous sprint did we apply?

1. Ymte was on time.
2. No other member was too late, applying the improvements and punishments from the previous retrospective.
3. The sprint backlog of this week was filled well with everyone having an equal amount of work of around thirty hours.

What went wrong

1. Exporting and importing a SQLiteDatabase on Android is hard.
2. Underestimated the GUI task; a custom library had to be used to show the TreeView.

How should we improve

Since this is the final week *some general* improvements for future projects will be listed.

1. Creating a proper design from the beginning, using CRC cards, and all approving. If necessary reserving multiple days for creating this design since it is the true backbone for our product. This would result in a UML and this would be our lead.
2. Creating more severe punishments for group members when pushing boundaries or breaking rules.
3. More direct communication is desirable when something is wrong; not individually solving it or building up anger until a final outburst.
4. We had to make requirements documents from the very beginning. This way we would not have to deviate on monday what we planned on the fridays. Our team had first members who were responsible for the front-end and member who were responsible for the back-end. This also results in some members having less commits on the master than others because the GUI was removed and did not make it to the master. This is not completely our fault, but it is something we will remember for the next project.
5. We had to solve the problems first internally.