Sprint Retrospective, Iteration # 5

Context Project: Blockchain
Group: BullsBearsWolves

Introduction

As you know the previous weeks were not optimal. Some radical changes were needed to ensure that everybody was on the same page. This worked out rather well and resulted in a better group process, which can be seen back in the amount of pull requests along with the comments made. This week was focused on getting a working demo along with features that we needed for this. Next to that, our codebase was a mess and needed a lot of refactoring: the methods were becoming too large, there were too many class attributes. This was the reason of the code becoming too complex and decreased our understanding of what actually was happening in several parts of the code. Therefore we started thriving to a simpler, more logical code which should follow the good practices of SEM.

User Story	Ticket #	Task	Members worked on	Estimated Effort per Task (in hours)	Actual Effort per Task (in hours)	Done? (yes/no)	Notes
As a developer, I want to have a draft of the structure of the Graphical User Interface	#87	Updating Document describing MainActivity page.	Ymte	3	0	no	Document doesn't exist yet.
	#101	Updating Document describing Contacts page.	Ashay	3	1	yes	

	#68	Updating Document describing Friends/Pair Page.	Naqib	3	1	yes	
As a user I want to have the updated blockchain of myself nicely displayed.	#102	Implementation	Ashay	4	0	no	This wasn't a priority
	#102	Testing	Ashay	4	0	no	This wasn't a priority
As a developer I want to have well tested activities with at least 75% line coverage.	#78	Testing the Main Page Activity	Luat, Naqib	4	12	no	see 'what went wrong'
	#79	TestingTesting the Friends Page Activity	Luat, Naqib	4	12	no	see 'what went wrong'
		Testing the Contacts Page Activity	Ashay, Naqib	4	4	no	see 'what went wrong'
	#80	Testing the Pair Page Activity	Luat, Naqib	4	8	no	see 'what went wrong'

As a developer I want to be able to send and receive blocks.	#63	Implementation of exchanging keys	Naqib	4	0	no	Changed plans, this task was obsolete.
		Documentation of exchanging keys	Naqib	1	0	no	Changed plans, this task was obsolete.
	#62	Testing of exchanging keys	Naqib	4	0	no	Changed plans, this task was obsolete.
	#65	Implementation of exchanging chains	Naqib	4	0	no	Changed plans, this task was obsolete.
		Documentation of exchanging chains	Naqib	1	0	no	Changed plans, this task was obsolete.
	#64	Testing of exchanging chains	Naqib	4	0	no	Changed plans, this task was obsolete.

	#67	implementation of updating the chain	Naqib	4	0	no	Changed plans, this task was obsolete.
		Documentation of updating the chain	Naqib	1	0	no	Changed plans, this task was obsolete.
	#66	Testing of updating the chain	Naqib	4	0	no	Changed plans, this task was obsolete.
Adding key cache to speed up lookup of keys when blockchain is unchanged	#81	Testing	Luat	4	0	no	Obsolete
	#81	Documentation in architecture design	Luat	2	0	no	Obsolete
	#81	Implementation	Luat	4	0	no	Obsolete
As a developer, I want to split up the creation of the blocks in several classes,	#85	User class integration	Ymte	4	7	yes	Lots of tests and code had to be refactored

following the single responsibility principle.						
	#85	User class	Ashay	2	3	yes	
	#85	User tests	Ymte & Ashay	4	2	yes	There really was only one method to test, which succeeded instantly.
	#84	BlockFactory removal	Ymte	4	6	no	Became reforming BlockFactory modification and using
	#84	Tests hotfixing	Ymte	4	5	yes	
	#83	New block creation	Ymte	4	3	yes	
	#83	Block creation testing	Ymte	4	8	yes	

As a developer, I want to be able to display the average trust value of all blockchains in a fancy graph-like style.	#38	Implementation	Ashay	4	4	yes	Instead of displaying the average trust value, other values were put on the axis.
	#38	Testing	Ashay	4	1	no	see 'what went wrong'
	#38	Documentation	Ashay	2	2	yes	
As a user, I want to be able to confirm before I truly add or delete a contact because I might clicked add/delete accidently.	#86	Implementation	Ashay	2	4	yes	
	#86	Testing	Ashay	3	2	no	see 'what went wrong'
As a developer I want to set my own information at the start of the app	#100	Testing	Ashay	2	2	no	see 'what went wrong'
	#100	Documentation	Ashay	2	2	yes	

	#100	Implementation	Ashay	4	4	yes	
As a developer, I want to be able to verify the trustworthiness of a block using backtracking.	#90	Implementation	Jasper	4	4	Yes	
	#90	Testing	Jasper	4	4	Yes	
	#90	Documentation	Jasper	2	2	Yes	
As a developer, I want to optimize the calculation and mutation of the trust values.	#91	Testing	Jasper	4	4	Yes	
	#91	Implementation	Jasper & Ashay	4	4	Yes	Ashay: 1hr
	#91	Documentation	Jasper	2	2	Yes	

As a developer, I want to implement the ED25519 protocol to generate private and public keys.	#92	Testing	Jasper	4	0	No	Focused on the implementation of the build tools like checkstyle, pmd and findbugs instead, which holded a higher importance.
	#92	Documentation/ Reading	Jasper	2	2	Yes	Deepend my knowledge of this subject, so this subject can be implemented more easily in the next sprint.
	#92	Implementation	Jasper	4	1	No	Implemented a single secret key which is stored and read out of a file. This is a temporary solution
As a developer, I want my application to update the visual representation of the blockchain upon modifying; adding or revoking the blockchain.	#31	Implementation of Friendspage Activity	Naqib & Luat	2	8	yes	
	#30	Implementation of DisplayContactFriendsActivity	Ashay	2	2	yes	
	#79	Testing of Friendspage Activity	Naqib	2	2	no	see 'what went wrong'

	#39	Implementation of ContactsPage	Ashay	2	2	yes	
	#39	Testing of ContactsPage	Ashay	2	2	no	see 'what went wrong'
As a developer, I want my application uses methods from BlockController instead of DatabaseHandler	#15	Implementation	Luat	2	4	yes	It was lots more then expected.
	#16	Testing	Luat	2	2	yes	
As a user I want my code to sufficiently good in passing CheckStyle/ PMD/ FIndbugs a block, like owner/description.	#82	Checkstyle	Luat	3	0	no	Have to wait for the refactoring from all members. There were a lot of refactoring going in the process.
	#82	PMD	Luat	3	0	no	
	#82	Implementation	Luat	3	0	no	

As a user, I want to have a working demo by bringing all components together before friday 2 June (Including solving bugs)	#71	Implementation	Luat	6	6	yes	A lot of bugs from other members branches are encountered in the process, for each small debugging a ticket was not made because they should be parts of the implementation
	#106	Bug fix application crashes when a block is added twice.	Luat	4	4	yes	
	#119	App crashes when a user is added twice	Luat	1	1	yes	
As a user, I want to keep track of the feedback from the TA, so everyone could look into and improve Sprint feedback & making a plan to improve our Sprints.	#69	Implementation	Luat & Naqib	1	1	yes	
As a user, I want to have a working implementation of Continuous Integration	#116	Implementation of PMD	Jasper	4	5	yes	

	#116	Implementation of Checkstyle	Jasper	4	5	yes	
	#116	Implementation of Findbugs	Jasper	4	5	yes	
	#116	Implementation of Cobertura	Jasper	4	5	yes	
	#116	Implementation of Coveralls	Jasper	4	5	yes	The coveralls will be updated, when there is a new change of the version on the master.
As a user, I want to make a transaction to one of my contacts	#24	Implementation	Ashay & Naqib	4	10	yes	
	#22	Testing	Naqib	4	1	no	See what went wrong.

What went well

1. We made 20 pull requests since last week. This is 50% of our total pull requests.
2. The pull requests were well reviewed. The comments made sense and this resulted in code improvement.
3. The overall deadline on thursday was lived by. Of course we also made a few pull requests after this deadline but this was not disturbing our plans for friday.
4. We had an internal meeting about group process. We talked what went wrong and about the rolls of some members. We wrote down some agreements and the consequences. We introduced 'Kut punten' system. Every member that did something significantly bad, received a 'kut punt'. In the end, the one with the most 'kut punten' will receive a penalty, which will be chosen later.
5. We wrote the new sprint backlog and retrospective together so the newly-made tasks make sense now.
6. We made sure that person that creates a pull request is not the same person that merges the changes into develop. This way everyone was responsible for the changes and the last person that approved had to merge. This person had to check whether the changes were made.

What went wrong

1. The sprint backlog and retrospective were not made together (previous one).
2. Not everyone updated the architecture design, according to their changes to the code.
3. Not all pull requests were finished before friday.
4. The sprint backlog of this week was incorrect. It wasn't made well and therefore a lot of tasks were omitted. Also the tickets did not correspond so new tickets had to be made.
5. Because other tasks had higher priority, we prioritized them above the tasks of the current sprint. This was the cause of the planning becoming a little bit chaotic. The same holds for the github project.
6. Since the creation of the block class was being refactored, we could not fix the checkstyle/pmd/findbugs before the refactoring was done and this was also the cause of the delay and the cause of the tasks not being done.
7. Because the checkstyle errors could not be fixed due to point 4, the travis build kept failing.
8. Some pull requests were too large.

9. We did not manage to test the activities (yet). A lot of effort was put in this task by some members and we feel like we make progress but it still does not result in some coverage. We first tried to write tests that would just make sure some buttons were clicked. We did not hit any methods or lines. Then we did lots of research on the internet, but a lot of proposals were outdated. After one of the member spoke with Martijn, he said that Martijn suggested to checkout Nervous Fish's repository. They managed to test activities. We tried to test it like they did (via Cucumber) but still got the error 'Instrumentation Runner class not specified' (See commit: 4224c1c). Then we tried to do it the old way (just via @Runnerwith(JUnit4). Now working on this and trying to fix this in the weekend.

How should we improve

1. Everyone should have finished their task before friday. This is and was already the rule and should be kept.
2. Everyone should update the architecture design, according to their changes to the code.
3. The pull requests should be split up to address 1 or max 2 issues.
4. Everyone should be responsible for their own checkstyle/ pmd/ findbugs/ code coverage. The pull requests should not be merged, before these issues have been fixed.
5. For testing purposes: We should change some methods that are created in the activity classes such that we can access them via the layout XML files.