ATOS BLOCKCHAIN

Bi-Weekly Report: Issue 8 – 27/02/2017
Group 14: Andreas Zinonos, Charles Albert Desbaux, Gabriel Vanca

MEETINGS HELD. PROJECT COMMUNICATION

- 10 / 02 / 2017
    - Team meeting and discussions about certain front-end issues and design.

- 15 / 02 / 2017
    - Meeting with Mr. John Hall, the team's client from ATOS. Presentation of progress until this stage and discussions about future implementations of certain features as well as certain technical issues, including the use of Truffle and the management of databases.
    - Meeting with Mr. Hirsch. Discussions about Truffle, Solidity, ABIs, NodeJS and AngularJS.

Besides the previously mentioned meetings, several meetings and discussions between the team members have been conducted using Microsoft Skype and Facebook Messenger. The team has continuously communicated with John Hall, the team's client from ATOS, via e-mail, as well as with Mr. Hirsch.

PROGRESS MADE & FUTURE PLANS

All tasks were divided on three main areas, each team member taking charge of one such area:

1. **Front-end – Charles Desbaux**

   Besides the main page and the company pages which already existed, Charles has introduced the accounts register/log-in feature, despite several initial issues. These accounts come in two flavours: investor accounts and business (company) accounts. The team decided this was the ideal approach for creating user accounts after discussing it with the client.

2. **App back-end – Gabriel Vanca**

   Gabriel has done some research into AngularJS and some JavaScript features. He also created a basic demo of how Truffle and TestRPC work which he showcased to the client. Gabriel also managed to plug in the AngularJS website with the Truffle framework. Unfortunately, several issues with calling certain functions arose and now Gabriel and Charles plan to fix them for next week.

   Gabriel also had a meeting with Mr. Hirsch in which it was discussed again about Truffle and the use of ABIs. It has been decided that the use of ABIs is probably unnecessary as it would overcomplicate the work too much, as well as it would go beyond the purpose of the project of providing a working proof of concept. As such, it was decided that the team would not be making use of the ABIs, except if nothing else will work when fully connecting Truffle and TestRPC.

3. **Solidity back end – Andreas Zinonos**

   Andreas has enhanced his Solidity knowledge and improved the current smart-contract while creating a few additional ones. After the meeting with the client it was stated that a different approach should be taken regarding the contracts, and hence has changed their architecture to comply with it. The plan is for him to finish these smart contracts and create additional ones to introduce further capabilities to the platform in the next few weeks.

Overall, the team feels confident that substantial progress is being made and that the project will be finished on time.

PROBLEMS ENCOUNTERED

Charles has encountered some issues with the log-in/log-out functionality in AngularJS, mainly due to severe issues with the framework's documentation, but he managed to fix them.

Gabriel had some issues with getting some code working with AngularJS and he hopes that with Charles' help he will be able to fix it as soon as possible.

Andreas again encountered some issues with writing the Solidity code for the smart contracts, but Mr. Hirsch helped him clear up some ambiguities.

PERSONAL EFFORTS MADE BY TEAM MEMBERS

Gabriel:

For the past two weeks, I have spent a good amount of getting a better understanding of Truffle, JavaScript and AngularJS. I was able to create a basic test page with Truffle, but without AngularJS, which I showed cased to the client in the meeting during Reading Week.

I have therefore started connecting the two together. Fortunately, there was no need for me to use NodeJS when connecting as I was simply able to use the Truffle framework to run the AngularJS website. Unfortunately, I have a hard time calling some of my previous code from the AngularJS website, so I will have to liaison with Charles on these issues. Progress over this has been a little bit slowed down due to Scenario Week, but I am now planning to fix the issue in the coming week.

Andreas:

During the past two weeks I have continued working on the smart contracts for Ammoenio.

Based on the new insight from our client meeting I have added new functionality and changed the architecture of the contracts. I have also created a master Ammoenio contract with which all other contracts can be controlled and instantiated.

Finally, I have met with our supervisor's PhD student, Hirsch, to discuss further implementation of the smart contracts as well as ways to combine front-end and back-end. He informed me that the new contracts look much better than before and the logic in the code is solid. Furthermore, we discussed different ways to approach the harder problems of the platform, like paying dividends.

Charles:

Over the past two weeks I have advanced on the development of the final website. The meeting with John was extremely useful for me in that we thoroughly discussed the structure and user experience of our final platform. For example, he advised me that it would be better to have two mutually exclusive sections for users and for businesses, with distinct logins and accounts for both. I implemented all the authentications for both sections, I created the structure that allows businesses to create a company and I made all the previews for the companies, directly connected to the database.

In conclusion, I think the first iteration of the website is not far from being completed and we are now starting to think about connecting the block chain back end to my front end.