

ATOS BLOCKCHAIN

Bi-Weekly Report: Issue 7 – 08/02/2017

Group 14: Andreas Zinonos, Charles Albert Desbaux, Gabriel Vanca

MEETINGS HELD. PROJECT COMMUNICATION

- 31 / 01 / 2017
 - Team meeting. Discussions about progress made over the past week.
 - Meeting with the team's own teaching assistant, Olawole Oni. Discussions about the progress made and about the tasks set out for the near future.
- 03 / 02 / 2017
 - Skype meeting with the team's client, Mr. John Hall. Discussion about the progress made, future plans and how some functionalities will be implemented.
- 07 / 02 / 2017
 - Same as previous team meeting.
 - Meeting with Mr. Hirsch. Discussions about Truffle, Solidity, smart contracts, databases, 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.

An additional face-to-face meeting with John Hall was also established for next Wednesday (15/02/2017). In this meeting, the team will present the client what was accomplished by this stage.

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

Charles has created basic web app based on AngularJS with an integrated database. The next step is to create the user login/log-out functions, user sessions and a basic contract-sending front end on which Gabriel can test Andreas's contracts.

2. App back-end – Gabriel Vanca

Gabriel has learned how to work with Truffle and TestRPC and has built a basic test page to test how to tie smart-contract functionality to a web page. Also, he plaid with several JavaScript functionalities has done some research into it. Plans for later is for him to learn how to connect Andreas' smart contracts with Charles's front end using AngularJS and then how do to that without needing to use Truffle and TestRPC, but by using a real blockchain and ABIs for connection to the blockchain. Finally, Gabriel has to be able to plug everything together.

3. Solidity back end – Andreas Zinonos

Andreas has improved his Solidity knowledge and worked on several smart contracts. The plan if for him to finish those smart contracts in the next two weeks.

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. The issues should be solved in the next week though.

Gabriel had some issues with getting some things working with Truffle, but he managed to figure it out. Also, he had some issues with ABIs, but he managed to get the issues fixed after talking with Mr. Hirsch.

Andreas also encountered some issues with writing the Solidity code for the smart contracts, but Mr. Hirsch helped him as well with that.

PERSONAL EFFORTS MADE BY TEAM MEMBERS

Gabriel:

For the past two weeks, I have spent a good amount of getting a better understanding of TestRPC and Truffle. Despite some initial issues with Truffle and with the testing environment, I was able to get a basic test page working and to deploy it on a local web server.

I have also spent some time researching JavaScript and NodeJS, but we have later decided, at Mr. Hirsch's recommendation, that we will not be making use of NodeJS. I will now have to learn the basics of AngularJS to make it easier to connect everything.

My task for the next period is to also learn how to make use of ABIs so that we do not need to use Truffle and TestRPC anymore and so that we can deploy the web app on a real webserver and to use a real blockchain that will be hosted on a server at UCL.

I'm aiming that by the meeting with our client next week, I will be able to plug some of Andreas' contracts with Charles' front end so that we can show a basic working app to the client (this will be conditioned on the progress that is being made on their sides as well).

Finally, I feel confident that me and my team-mates are making real progress with our work and we will be done on time with the project.

Andreas:

In the past two weeks, I have been writing the smart contracts which will form the back-end for our system. I have created the smart contracts following the back-end plan which I discussed with Hirsch on our meeting. My understanding of blockchain, Ethereum and solidity is becoming better as I progress and this helps narrow down problems as I go.

Currently I have written a Company contract to control the transactions and instantiations with companies, a Shareholder contract which represents the users and I've started writing a Governance contract to allow users to vote in company decisions.

I've also arranged a meeting with our mentor/client for next week where we will preview the work we've done so far.

Charles: