

# Team 16 - Biweekly Report #1

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Due Friday, January 27<sup>th</sup> 2017

## 1. Overview

The beginning of the term was very important in terms of assessing our performance in the last project, planning, organisation, and building the ground to start our implementation.

Logistically, we've also met our client to update him about our progress, we created a plan for next term with major milestones (Section 1.2), and redistributed the responsibilities (Section 1.1).

Technically, we decided on using ethereum, and created a Proof of Existence smart contract, which is the basis of our app.

### 1.1. New Responsibilities

Because of the complexity and the uniqueness of the project, and after having clearly identified the strengths and weaknesses of each other, we decided to create new responsibilities for the second term.

#### **Sadir**

Team Leader  
Blockchain Developer  
Client Liaison  
Planning Officer

#### **Kristelle**

Front-End Developer  
Project Website Editor  
Secondary Blockchain  
Developer

#### **Alex**

Back End Developer  
Secondary Front-End  
Developer  
Documentation officer

### 1.2. Plan for the term

**Week 3:** Plan and prepare for development

**Week 4:** Basic smart contract to sign a document. Web App Detailed Architecture.

**Week 5:** Smart contract which handles signing documents, verifying the signatures. Build the Front End and its interface with the Back End

**Reading Week:** Final smart contract ready. Front End ready.

**Week 6:** Scenario Week

**Week 7:** Integration of the Front End and the Back End

**Week 8:** Filling the gaps & finish the integration

**Week 9:** Testing

**Week 10:** Testing

*NB: This plan is quite ambitious. We will have a 1-month buffer before the deadline in case we face any major problems.*

## **2. Meetings**

### **Meeting 1 - Tuesday, January 17th || Client Meeting**

**Attendees: Andy Wallace (Atos), Sadir, Kristelle, Alex**

We met with our client, who was satisfied about our performance last term. He also gave us tips about planning, and highlighted the importance of testing, scalability and decision criteria.

### **Meeting 2 - Tuesday, January 24th || Lab session**

**Attendees: Sadir, Alex**

We analysed our performance last term, and we thought that we might be behind the other teams, but this is due to the nature of the project. We decided on using ethereum, and have drawn the plan for next term (section 1.2)

### **Meeting 3 - Thursday, January 27th**

**Attendees: Sadir, Kristelle, Alex**

Due to the modification of the nature of the project (as we need to start with the implementation now), we decided to redistribute the responsibilities according to the preferences of each person, their strengths and weaknesses (section 1.1)

## **3. Tasks Completed**

- Analysed our performance during last term
- Drew a timeline of our future milestones
- Created new roles and redistributed them
- Created a smart contract for Proof of Existence of a document
- Deployed the smart contract on TestRPC

We believe that the project is running on time, even though we might need to work hard in the next few weeks because of the complexity of the topic.

## **4. Plan for the next two weeks**

- Finalise our web app structure and prototype
- Finalise on the tools that will be used to build the web app (Frameworks, Libraries...)
- Build a Front-End skeleton
- Start building the back-end
- Create smart contracts which allow users to upload documents, sign documents, and view the signatures on a specific document.

## 5. Individual section

### Sadir:

As the team leader, I've done my best in this beginning of the term to redistribute the workload, according to each person's strengths and weaknesses, as the team members didn't contribute the same at the end of the last term. As the liaison, I scheduled a meeting with the client and two meetings between the team.

Technically, and since we've decided to work with ethereum, I've implemented a smart contract which allows people to prove they owned a document at a certain moment (Proof of Existence). I've done this using Truffle and TestRPC. Here's the output of my code:

```
truffle(default)> var yo = ProofOfExistence2.deployed()
undefined
truffle(default)> yo.checkDocument("hello").then(console.log)
false
undefined
truffle(default)> yo.notarize("hello")
'0x23fc0d1815fdc8788d7646ebdff58c57d21b1876e9720ff122c9323e5f811267'
truffle(default)> yo.checkDocument("hello").then(console.log)
true
undefined
truffle(default)> █
```

### Alexandru:

Since term 2 started I have looked at ways to start building up our website.

Currently I am about to make the decision on which framework fits best for our project, the main ones being React JS, Angular JS and PHP. I have started learning React by watching a step by step tutorial which proved really useful and simple to follow by. The plan for the following weeks is to build the front end of our website together with Kristelle while also trying to help Sadir to integrate ethereum through the back end.

### Kristelle:

During the past weeks, I mainly did some research on the front end of our web app. We assigned the tasks for the rest of the term. I am responsible of the front end with Alex and I plan to work on the backend with Sadir as well. My goal for the next week is to have the structure of our website ready and some sketches of the design as well as a list of the different features we need and think about the navigation of the website. We decided to use ethereum for our project, thus I plan to do a deeper research on this public ledger since I focused more on bitcoin during the past term.