Term 2: Bi-Weekly Report 4

Atos Blockchain Team 3

George Pîrlea, Alexis Enston, Danish Alvi

February 28, 2017 – March 10, 2017

1 Overview

Over the last two weeks, we've continued work on the API and smart contracts. We have implemented floating records, added API functions for references and membership, re-factored the existing smart contracts, and started integrating the UI with the API. Our scheduled meetings have not taken place. We are hoping to finish the implementation by the end of term.

2 Meetings

Feb 28: Lab meeting

Attendees: George Pîrlea, Danish Alvi, Alexis Enston

- Work on slides
- Assign tasks to be done by next lab (March 7th):
 - George: slides by evening March 1st, key storage, floating records
 - Alexis: UI integration, finish API
 - Danish: CV generation, not necessarily with UI

Mar 3: Client and supervisor meeting

- Meeting with supervisor cancelled; will be rescheduled
- Call with client postponed for March 10th

Mar 7: Lab meeting

Attendees: George Pîrlea, Danish Alvi, Alexis Enston

- · Before lab, wrote demo slides and prepared demo content
- Reviewed and integrated our work

- Gave demo to Dr. Yun Fu
- Assigned tasks (note Danish and Alexis have exchanged their commitments):
 - George: crypto for provideReference(), API for floating records, identity UI
 - Alexis: identity log in bkMain, CV creation; *maybe*: IPFS pinning via bkMain, CV UI
 - Danish: unit tests, UI to request, provide, create references; maybe: CV UI

Mar 10: Call with client

• Client did not answer message

3 Completed tasks

- Floating record smart contract
- API: request, fulfill, get references using IPFS + smart contracts
- Integrate reference request UI with API
- API: membership functions
- Re-factor smart contracts to be condition-oriented

4 Plan for the next two weeks

- Finish implementation:
 - user interface
 - creation of CVs
 - unit tests

5 Individual Reflection

George: Over the past two weeks, I've implemented storage of WebCrypto keys using IndexedDB and done work on smart contracts: wrote the floating record smart contract (allowing creation of records for people who don't have BitKariero identities) and re-factored the existing smart contract code to be condition-oriented, so it's easier to understand, verify and reason about.

Alexis: Over the past two weeks I have worked primarily on the API, adding support for the new versions of embark and solc, and support for the refactored bkReference and bkMembership contracts. I worked on integrating the IPFS based storage with the smart contracts, so now references can be seamlessly saved and loaded from IPFS, with the hashes being stored in the corresponding smart contracts. I also did some work on the UI, however it has not been progressing as quickly as planned due to the core API work.

Danish: I am currently in the process of integrating the UI with the API and am learning about the different functions provided by the API to be used in our application.