

Important dates for the project schedule and deadlines

The following table contains the tasks and deliverables and their respective deadlines, milestones and evaluation criteria.

Project schedule, output and objectives

Date (2019)	Activities	Output/target/milestone	Done ?
June 3 rd	Project kick-off, initial communication, share ideas and project organisation.	Agreement between mentor and mentee on project parameters. Delivery of the project planning document draft (this document).	√
June 14 th	Establish working practices, set communication schedule, agree on outputs/targets and milestones		√
June 25 th	Perform an analysis based on literature review to consider the systems, architecture and configuration tested in projects and compare these to the working model described in this plan.	Written confirmation (in the form of an outline) that HLF is a suitable blockchain platform for use on C&E projects and that Hyperledger Composer (“Composer”) is suitable for creating the business model and managing the network.	√
June 28 th	Literature review analysis to include the basic concepts on the automation of C&E projects and HLF and Composer.	Academic output: Outline for a paper that describes the selection and architecture requirements and design specifications based on a comparative analysis.	√
July 1 st	Final outline system design, architecture and configuration.	Final design for the commercial process used for this project.	√
July 5 th	Define the nodes and members of the system.	Academic output: Outline for a paper that describes the membership management system.	√
July 10 th	Finalise the membership system (as refined based on this paper) and apply business logic using Composer and chaincode in Fabric.	Academic output: Outline of a paper that justifies the use of Composer as the optimum tool for defining commercial models for C&E projects.	√
	Learn how to configure access control in Composer and linkage between access control in Composer with member service provider (MSP) in Fabric.	Academic output: why should we use Hyperledger Composer for creating and managing business network.	√
July 12 th	Based on the above work, produce an outline schematic for current architecture blockchain system of C&E. Start to code the architecture	Academic output: - Add schematic of blockchain system of C&E to specification.	√

	with a trial network setup.	- Create github for storing code and documents	
July 18 th	Add the results and submit as the first milestone.	1 st Evaluation and report	√
July 23 th	Based on specification and requirements for system, define assets	Output: model file (.cto)	√
July 26 th	Based on outline of the membership management system, define access control for participants	Output: Access control rules (.acl)	√
Aug 2 nd	Based on actions of participants, define use cases.	Output: use case tables	√
Aug 6 th	Based on use cases, assets, life cycle of transaction and ledger states, define transaction.	Output: gather transaction definition, assets and participants to create a model file (.cto)	√
Aug 10 th	Implement logic (smart contract) and query definition.	Output: Transaction Function (.js) and query file (.qry)	√
Aug 27 th	Package business network definition.	Output: archive file for business network definition (.bna)	√
Aug 29 th	Add the results and submit as the second milestone.	2 nd Evaluation and report	√
Sept 16 th	Based truth relationships, define channels and nodes in hyperledger fabric network.	Output: crypto-config.yaml, configtx.yaml and connection.json	√
Sept 23 rd	Test hyperledger fabric network with different types of orderers (single orderer, Raft, Kafka)		√
Sept 27 th	Deploy business network of hyperledger composer on hyperledger fabric.		√