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 3rd	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 14th	Establish working practices, set communication schedule, agree on outputs/targets and milestones		√
June 25th	Perform an analysis based on literature review to consider the systems, architecture sand 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 Hypeledger Composer ("Composer") is suitable for creating the business model and managing the network.	√
June 28th	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 1st	Final outline system design, architecture and configuration.	Final design for the commercial process used for this project.	√
July 5th	Define the nodes and members of the system.	**Academic output:** Outline for a paper that describes the membership management system.	√
July 10th	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 12th	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 18th	Add the results and submit as the first milestone.	1st Evaluation and report	√
July 23th	Based on specification and requirements for system, define assets	**Output:** model file (.cto)	√
July 26th	Based on outline of the membership management system, define access control for participants	**Output:** Access control rules (.acl)	√
Aug 2nd	Based on actions of participants, define use cases.	**Output:** use case tables	√
Aug 6th	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 10th	Implement logic (smart contract) and query definition.	**Output:** Transaction Function (.js) and query file (.qry)	√
Aug 27th	Package business network definition.	**Output:** archive file for business network definition (.bna)	√
Aug 29th	Add the results and submit as the second milestone.	2nd Evaluation and report	√
Sept 16th	Based truth relationships, define channels and nodes in hyperledger fabric network.	Output: crypto-config.yaml, configtx.yaml and connection.json	√
Sept 23rd	Test hyperledger fabric network with different types of orderers (single orderer, Raft, Kafka)		√
Sept 27th	Deploy business network of hyperledger composer on hyperledger fabric.		√
Oct 7th	Generate REST APIs for business network		√
Oct 10th	Evaluate pilot project and provide improvements.	3rd Evaluation and report	√
Oct 18th	Based on use cases, define test cases.		√
Oct 12th	Test system by using REST APIs		√
Nov 15th	Final synthesis of project outputs.	Final evaluation and report	√