Blockchain Development
Week: 4
Title: Formative Feedback

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Lecture Aims

Aims

The aims are to provide you with formative feedback to help you improve your submission the following week

Structure

There is no structure to today's lecture or lab. It is a formative feedback week and provides an opportunity to provide generic feedback to improve your submission of coursework 1

Lecture Objectives

Knowledge

- Formative Feedback
- Participants
- Assets
- Transactions
- Concepts
- Enumerators
- Coursework weightings

Module Structure

Week	Title
1	Introduction to Blockchain
2	Composer: Data Modelling
3	Composer: Access Control Language
4	Formative Feedback
5	Asynchronous Programming & Promises
6	Composer: Node.js I
7	Composer: Node.js II
8	Consensus Engineering
9	Smart Contracts
10	Feedback
11	Feedback
12	Presentation

Table: Lecture Plan, these are indicative titles

Coursework Weighting

Assessment	Formative Feedback	Deadline	%
Coursework 1	Week 4–5	3rd November 2019	25
Coursework 2	Week 12	5th January 2020	75
Deferred Coursework 1	N/A	1st August 2020	25
Deferred Coursework 2	N/A	1st August 2020	75
Resit Coursework 1	N/A	1st August 2020	25
Resit Coursework 2	N/A	1st August 2020	75

Table: In-course Assignments for CST4025

Chapter 4

Coursework 1

CST4025
Blockchain Development
Coursework 1: Data Modelling
Academic Year: 2019-20
Deadline: 3rd November 2019
Coursework is worth 25% of the module.

4.1 Instructions

The aims of this coursework is to build a data model of a blockchain application. The coursework is to be completed:

- as an individual

4.2 Introduction

You are to develop a blockchain application to a problem specification designed by you. Be aware of chosing trival problem specifications, since whilst they are easy to develop for solutions for, they do not have the complexity to exhibit the technical requirements to match some of the assessment criteria.

This part of the coursework is for data modelling and will form a the data model for coursework 2. Getting this correct is an important and incremental step.

A suggested plan for this coursework is as follows:

1. Write problem specificaiton and its suitability for a blockchain application

2. Model participants, assets and Transactions

3. Code Participants, Assets and Transactions

4. Get Formative Feedback and comment your code

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Coursework Spec.

5. Make any modifications and submit

4.3   Problem Specification

The problem specification should be written in Chapter 1 of the document and contain the following sections:

1. Use Case. Create a subsection in Use Case model

2. Description. An explanation of no more than 250 words explaining the use case model

3. Applicability How applicable is the problem definition to blockchain, use the flowchart in lecture 1 and explain each stage in an itemised list.

4.4   Data Model

The Data Model should be written in Chapter 2 of the document and contain the following sections:

1. Introduction

2. Participants

3. Assets

4. Transactions

4.4.1   Introduction

Include a class diagram of your problem specification. Any assumptions or explanations should be included and not exceed 100 words.

4.4.2   Participants

Based on your class diagram write the CTO code for the participants. Any assumptions or explanations should be included and not exceed 100 words.

4.4.3   Assets

Based on your class diagram write the CTO code for the assets. Any assumptions or explanations should be included and not exceed 100 words.

Coursework Spec.

4.4.4 Transactions

Based on your class diagram write the CTO code for the transactions. Any assumptions or explanations should be included and not exceed 100 words.

4.4.5 Comments

All the above code should include appropriate comments.

4.5 Documentation

All submissions are to be completed in LaTeX document template available on myLearning.

Assessment.

Assessment Criteria	Mark
§5.2 Introduction	20%
1. Originality: 5%	
2. Specification & Use Case: 10%	
3. Applicability: 5%	
§4.4 Data Model	70%
1. Participants: 20%	
2. Assets: 20%	
3. Transactions: 20%	
4. Comments: 10%	
§5.7 Documentation	10%
1. Template: 2%	
2. References: 5%	
3. Structure: 3%	
Total	**100%**

Web Resources

- http://hyperledger.org