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# Ethereum Blockchain Development Week 4

## 1 Pizza

- Download `Pizza.bna` from MyLearning
- Start the VM
- Start terminal
- Type in the terminal: `composer-playground`
- Load the `pizza.bna` into the empty network
- Complete the textbox for admin rights: `admin@pizza`
- Connect using `admin@pizza`
- Deploy the network
- Create a pizza with ID `7777`
- Add two customers with IDs `1111` and `2222`, respectively

- Add two restaurants with IDs 3333 and 4444, respectively
- Add a pqc with ID, 9999
- Go to admin and create business network cards for each of the participants
- As customer 1111 to order a pizza 7777 from restaurant, 3333.
- As customer 2222 to order a pizza 7777 from restaurant, 4444.

Answer the following questions:

- Are the access privileges for customer correct, what do I need to change?
- Are the access privileges for restaurant correct, what do I need to change? For example, can a restaurant dispatch an order place with a different restaurant?
- Are the access privileges for the participant “`pqc`” correct, what do I need to change?

## 2 Use Case

- Open VM
- Open terminal
- Install UmLet: `sudo apt-get install umlet`
- Password: `cst4025`
- Open UmLet: `umlet`
- Create a use case diagram for a pizza delivery restaurant

### 3 Use case

In the previous exercise the use case was reversed engineered from an example already implemented. This is incorrect and the order should be Use Case Diagram first, then code.

Create a Use Case Diagram using UMLet for the following problem domain.

The system is to develop an example of using blockchain to administer and manage the handling of evidence in a forensic lab. Some key features that you are required to model are as follows:

- Each artifact requires a recording of the following procedures: identification; seizure; transport; exchange; and, analysis.
- Senior management to add new investigations.
- Senior management to assign individuals to a new investigation.
- Record the chain of custody of every artifact and ensure continuity of evidence.
- The system needs to allow management to change access privileges of staff
- The system needs to allow external audits to view the lifecycle of all artifacts

### 4 Coursework

This section is to be considered outside this tutorial and if you have questions then please attend office hours of the Module Leader.

Draw a use case diagram using UMLet for your coursework.