The SCARP Project

Building a secure Inter-institution Data Sharing Platform with Blockchain

Deliverable

- A Data sharing Platform
    - A dynamic website for data sharing
    - A blockchain platform to make the data sharing secure

Who are the users of this platform?

- Institutions:
  - hospital, nursing home, medical school
- The users of this website including:
  - Doctors
  - Nurses
  - Researchers
  - Patients

What can this platform do?

- Website:
  - User Login and authentication mechanism
  - Display users' data
  - Role-based access control (RBAC):
    - require access to a specific dataset
    - grant access to a specific user
  - Upload data (network transactions)
  - Share data (network transactions)
- Blockchain platform:
  - Monitoring the data uploading and data sharing activities

Preparation before the project start (I)

Website development:

1. HTML5, CSS, JavaScript, python
   - [W3Schools](#)
   - YouTube tutorials

2. Django

3. Node.js
   - [Node.js Documentation](#)
   - YouTube tutorials

Preparation before the project start (II)

Blockchain technology:

1. Prepare a desktop/laptop with native Ubuntu 18.04 LTS

2. Finish reading Hyperledger Fabric documentation:
   - Key Concepts, Getting Started, Developing Applications

3. Deploy the sample "test network" given by Hyperledger Fabric.