CSE 528
Introduction to Blockchain and Cryptocurrency

Group Project Progress Report-2

Team Members :

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Problem Statement:

We have seen significant developments in medical facilities over the years.
But from the perspective of visitors or patients at hospitals, clinics, there are still some procedures that are inefficient and cause discomfort to the citizens.People always need to carry their medical records whenever they see the doctor. And it's tough to keep a record of all your documents and take them with you each time you go to the hospital or clinic.

Idea:

Our idea is to provide a solution to this problem using blockchain technology. We aim to store people's medical records on the blockchain, which will keep the information safe and accessible. This would also help us in decentralizing the data in the medical field.
The primary users of our network would be the doctors and the patients.
The patient will have the authority to give access to their records to anyone. And hence, it would be possible to retrieve a patient's medical history from any hospital in the world.

Planned Goals for Week 3 and 4:
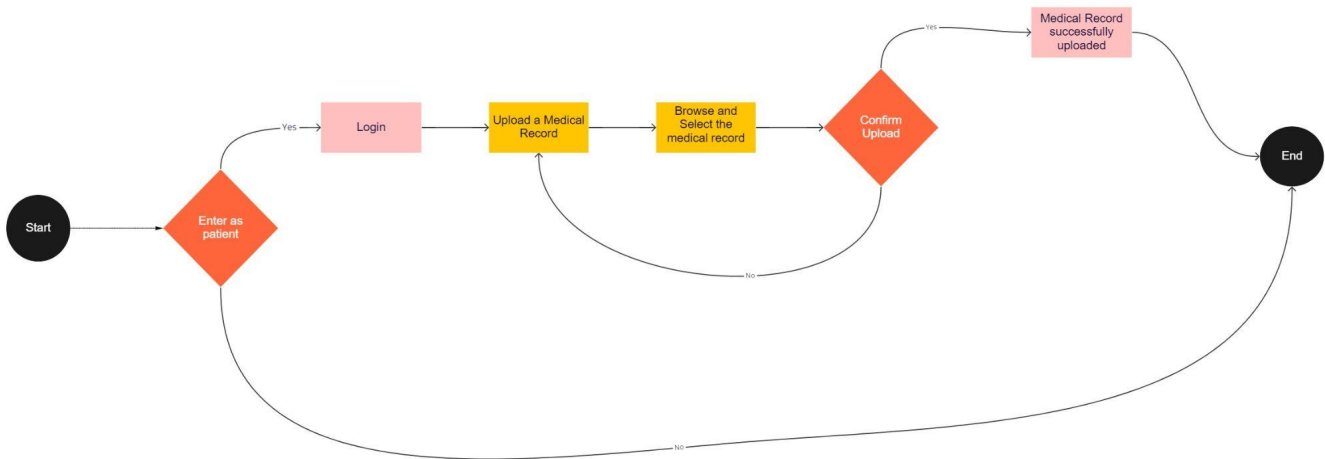
09 Oct 2021 - 23 Oct 2021 :
- Learning the basics of Dapp development
- Designing the flow diagram of our app to define the use cases
- Designing a UML diagram to understand the structure and flow of our app at a deeper level
- Identifying the suitable platform for our blockchain
- Designing the nodes of our blockchain

Individual Contributions by each team member for week 3 and 4 are as follows:
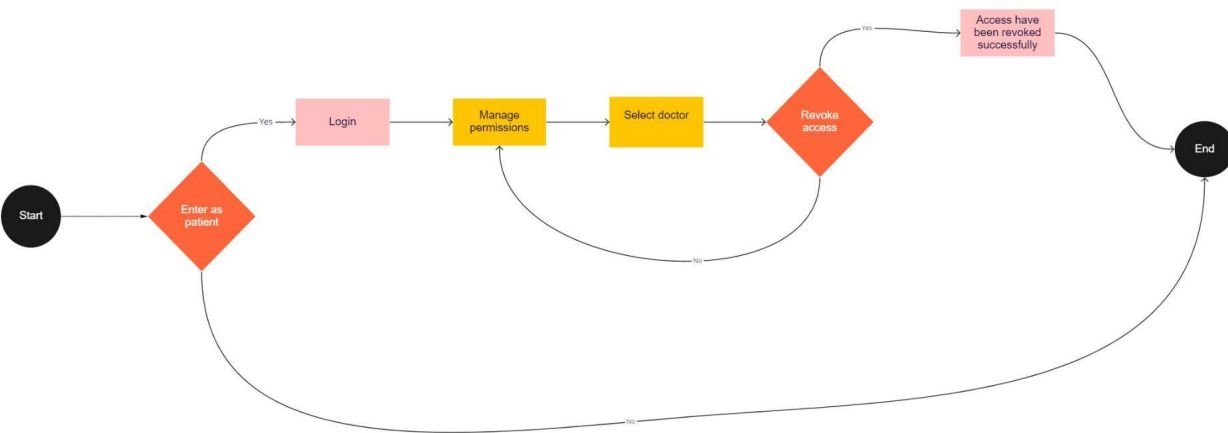
Aabhaas Batra and Udit Narang

Goals Achieved:

- Identified the users of our app.
- Identified tasks and functionalities of our app.
- Designed the workflow diagrams for different tasks of our app.
- Designed the UML diagram for our app.
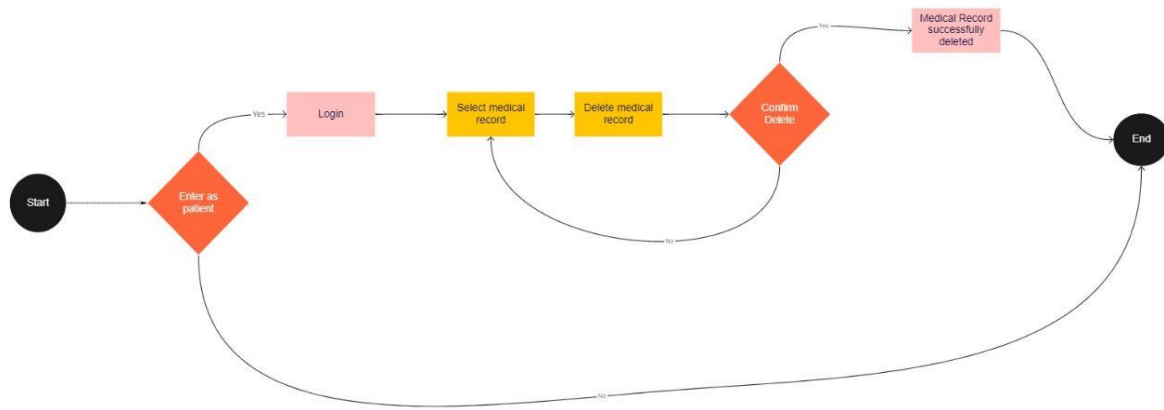
Screenshots of workflow diagrams:

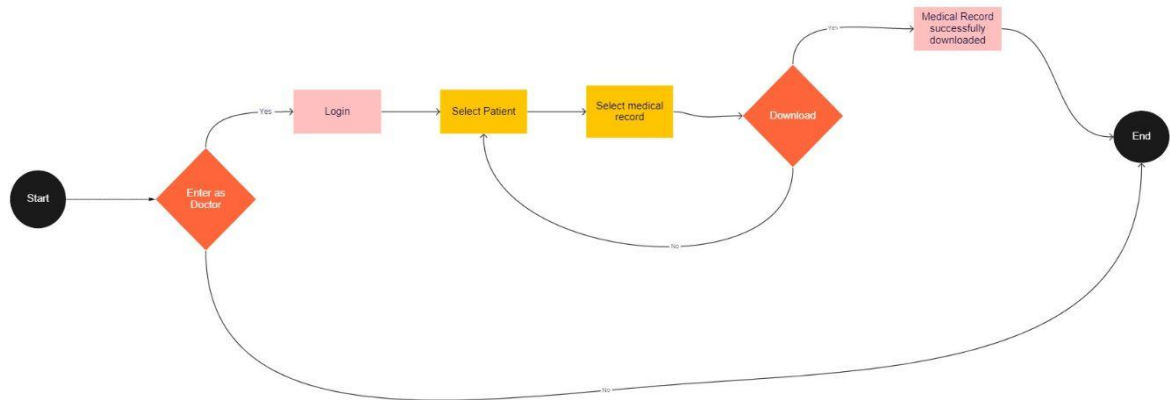
Workflow diagram to upload a medical record as a patient

Workflow diagram of revoking access of a doctor to the medical records as a patient
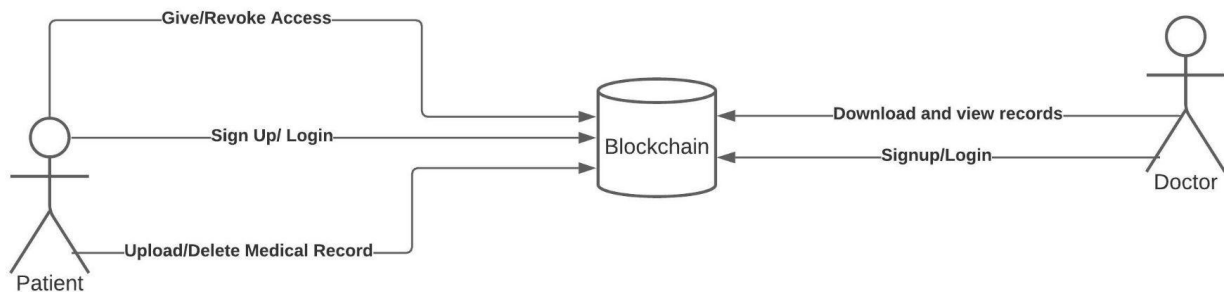
Workflow diagram to delete a medical record as a patient

Workflow diagram to view medical record of a patient as a doctor

Screenshot of Use Case Diagram:

Use Case Diagram

Raj Kumar

Goals Achieved:
    a) Chose solidity as the platform for building our blockchain
    b) Learned basics of solidity and how to build a smart contract using solidity
    c) Wrote some basic smart contracts in solidity and learned about oops concepts
       implementation in solidity.