# Distributed Electronic Medical Record (EMR)



\_

#### What problem is this project solving?

#### **Current Scenario**

Doctors are very limited in diagnosing a patient because of the lack of access to his medical history.

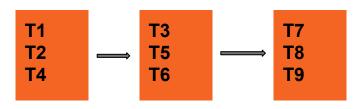
Currently, this is solved only if the person is visiting the same hospital of which he is a regular patient (hospital database) or he is carrying his documents with himself.

But what if the patient is in critical condition and is in a immediate need of a doctor?

\_

#### **Proposed Solution**

There can be a Medical Record Ledger cryptographically written and accessible by all the stakeholders (distributed ledger). Patients can access their personal records by using a service like a wallet. A private key representing each of the user can be used to access their Medical wallets.



Each block will contain n number of transactions.

A block when filled with n transactions can be verified or mined using (Prev Hash + Current Data + K)

Once a block is mined it can be added to the ledger.

## Step 1

Understanding the Ledger

- mineBlock()
- createBlock()

\_\_\_

# Each wallet will have a public key accessible to everyone.

Each user will have a private key.

The wallet can be accessed only when they are in right combination.

## Step 2

# Accessing the MedWallet

viewUser()

A signature will be generated from the private and the public key.

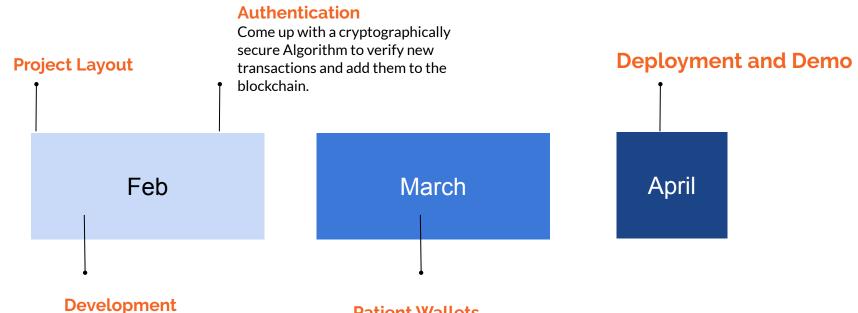
This signature together with the public key can be used to verify if the request is from a trusted source or not. If valid, the transaction can be added to a block.

## Step 3

Making a new Transaction

verifyTransaction()

#### **Plan Of Action**



Implement basic functionalities and the four required functions.

#### **Patient Wallets**

Implement wallet functionality for individuals to access their data.