Distributed Electronic Medical Record (EMR)

By (Group 11) -

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What problem is this project solving?

Current Scenario

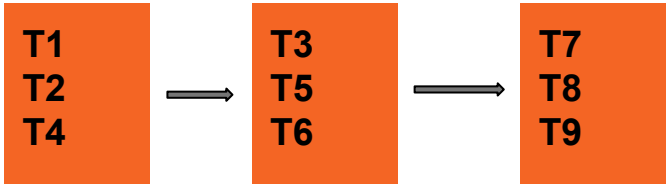
Doctors are very limited in diagnosing a patient because of the lack of access to his medical history.

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