TEAM CODE_HEIST

TEAM MEMBERS

- ANSH GUPTA
- TANISHKA GAUR
- RASHI GUPTA
- SUSMIT PATHAK

INTRODUCTION

We are from department of artificial intelligence and machine learning ADGITM presenting healthcare solutions in government sector using blockchain

REAL LIFE PROBLEMS

- A patient's medical records play a crucial role in helping the doctor in analyzing their current ailments.However, **storing and accessing different patient's medical records is quite cumbersome.**it **take much of hospitals time** to exchange the medical reports.
- Sometimes the **reports also gets misplaced or damaged** which is itself a big problem
- **During reference** from one hospital to another there is much **time delay** which causes serious life threatening problems to patients
- Some medical problems are **time crucial(eg pregnancy)**between these when time is taken in referring and reports exchange this can create problems to patient.

TECH RELATED PROBLEMS

1

Real time scheduling

2

Space

3

Far Routing: Data corruption

4

Fake data circulation.

5

Security disadvantage

6

Centralization of Data

OUR SOLUTION

We will be providing online blockchain platform for government organisations to track patient's medical history and deliver reports easily in much less time with secured network.

TECH USED IN OUR SOLUTION

Blockchain Technology

WHAT IS BLOCKCHAIN?

Blockchain is a shared, immutable ledger that facilitates the process of **recording transactions** and **tracking assets** in a business network. Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.

BENEFITS OF BLOCKCHAIN

- It is an immutable public digital ledger, which means **when a transaction is recorded, it cannot be modified**
- Due to the encryption feature, Blockchain is **always secure**
- The **transactions are done instantly** and transparently, as the ledger is updated automatically.
- As it is a **decentralized system**, **no intermediary fee** is required

The authenticity of a transaction is verified and confirmed by participants.

TECHNICAL APPROACH

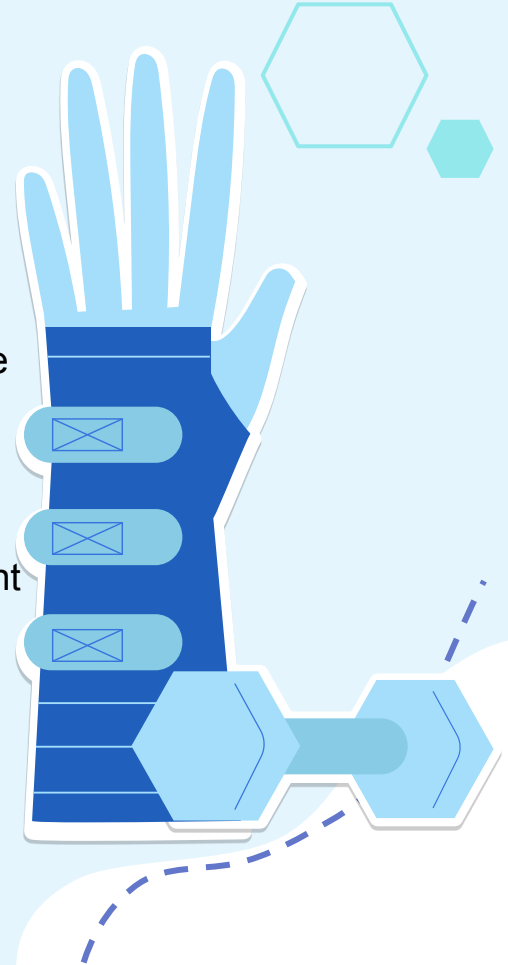What are we going to use to store data in blockchain?

we are going to use **IPFS(InterPlanerary File System)** to **store data in blockchain** and we will get CID (Content Identifier) through which we will be able to search for the data belonging to certain patient.

where we will be saving the CID?

All the CID will be saved in MongoDB with the patient name and ID. there might be multiple CID due to multiple upload of report of a single patient so the CID will be separated by commas.

What is IPFS?

it is a Peer-to-Peer technology which **will connect all the nodes to each other and help in the sharing of files instantly to authorized nodes.**
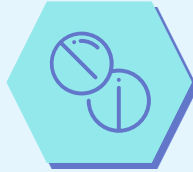
OVERVIEW

Reference from district to
state level in govt
hospitals are
cumbersome process

**Reports
referring**

A platform to save
medical history

service

Hospitals

Government hospitals
are divided
district,state and
national level

**Using
blockchain**

we will be shortening the
time of referencing
reports

PLAN OF ACTION

Step 1

Patients will check in any district level hospital and the tap his smart card linked with aadhar card.
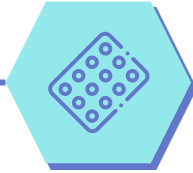
Step 2

His entry will be recorded and saved with successive visits

Step 3

If patient gets critically ill reference from district to state level hospitals will be done in minutes using blockchain.
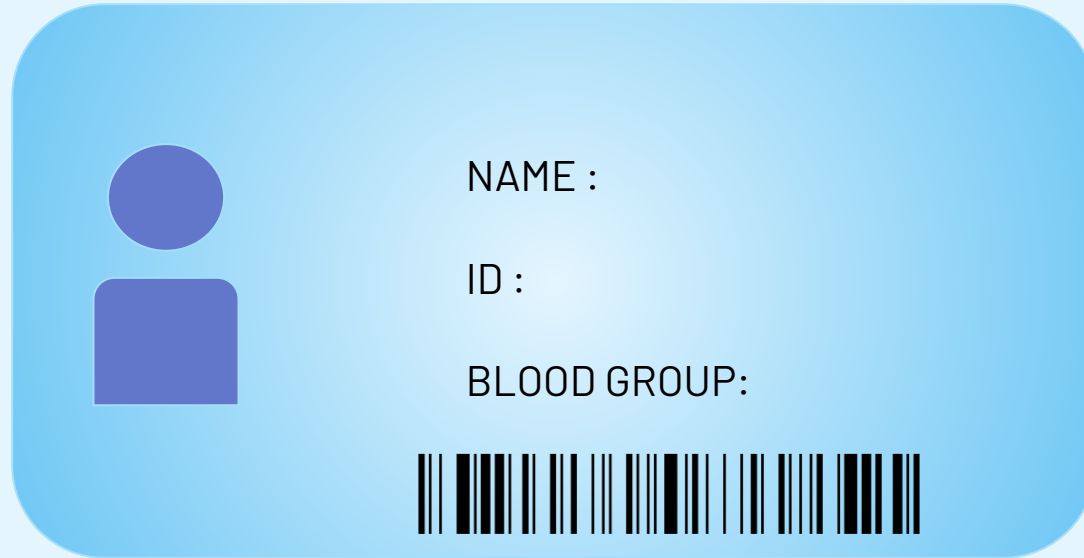
Step 4

Patients don't have to wait in queues for hours to get their reports in emergency situations

USP(unique selling proposition)

- nobody can breach the data once its updated which prevents data breaching(by corrupt doctors).
- With each successive visits medical reports of patient will be updated using card taping system.

PATIENT ID-CARD

NAME :

ID :

BLOOD GROUP:

an overview of how our smartcard will look like.

THANK YOU