MyRation
Group 56

Problem Statement

- In India, the Government provides Ration(food) to people through the Public Distribution System (PDS).
- The current system is hierarchical and centralized .
- This leads to inefficiencies and loss of transparency in distribution as well as a lot of corruption.

Our Solution

- We propose to replace the current PDS by a decentralized platform using blockchain technology.
- This would provide a system with more transparency and efficiency.
- We will also provide a WebApp for a hassle free user experience and comprehension

Why Blockchain

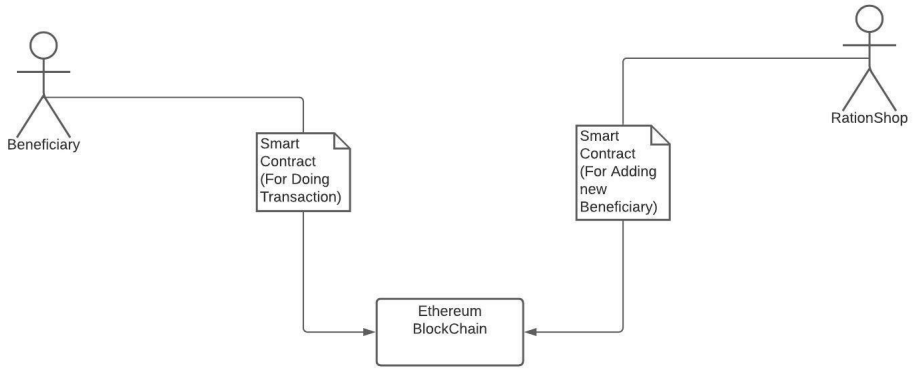
- The transaction data would be transparent to everyone involved in the blockchain.
- Safety of data and easy transactional interface
- Malpractices of shopkeepers in distribution such as showing fake entries, providing ration to ineligible people or in greater amounts etc. will be stopped.

Technologies Used

remix

Stage 1 of Project

- Started by doing literature review on the topic.
- Decided the work flow and architecture of the project
- Explored the tools and technologies used in project



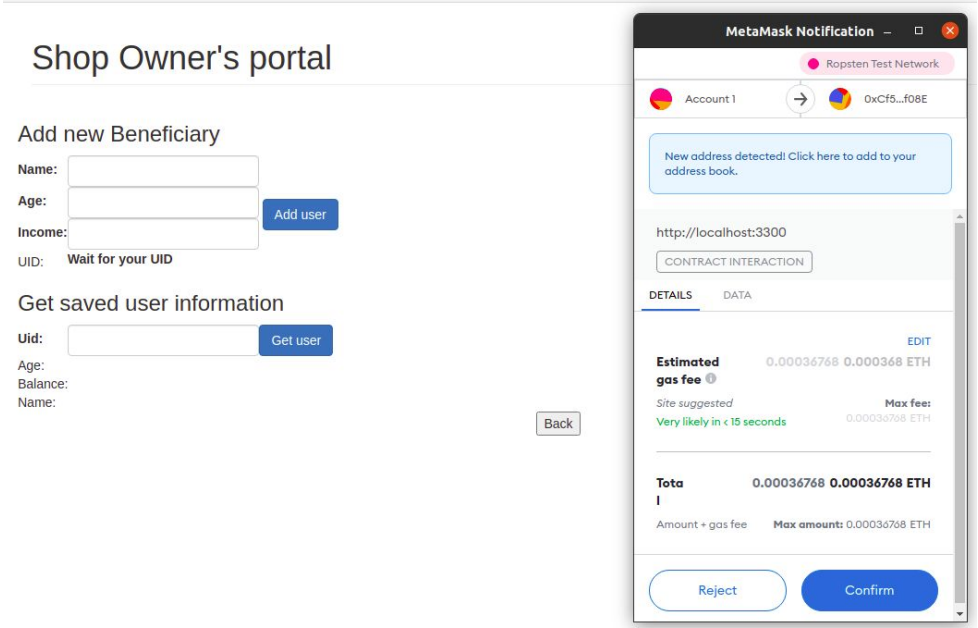
Stage 2 of Project

- We started by deciding the structure of smart contracts and coding them
- Started with the WebApp and decided the tools to be used with it

```
contract ShopOwner {
    struct User {
        uint256 Age;
        uint256 balance;
        string Name;
        uint256 lastTime;
    }

    mapping(uint256 => User) public AllUsers;
    function changeUser(uint256 uid, uint256 age, uint256 bal, string memory name, uint256 lt) public {
        AllUsers[uid] = User(age,bal,name,lt);
    }

    uint256 public uid = 0;

    event printMessage(uint256 msg);

    function addNewUser(
        string memory _Name,
        uint256 _Age,
        uint256 _income
    ) public {

        uid++;
        uint256 _bal = 0;
        if(_income <= 300000) _bal = 1000;
        else if (_income > 300000 && _income < 600000) _bal = 500;
        else if(_income < 800000) _bal = 250;

        AllUsers[uid] = User(_Age,_bal,_Name,0);

        emit printMessage(uid);
    }

    function getUserInfo(uint256 _uid)
        public
        view
        returns (
            uint256,
            uint256,
            string memory,
            uint256
        )
    {
        return (
```

Stage 3 of Project

- Developed the WebApp
- Used Injected Web3 from Remix interface to access Metamask
- Set up integration of the 2 smart contracts with each other and with Ethereum blockchain



Thank You