

Project Title

MyCiTizen

Profile Photo

<https://www.linkedin.com/in/mohit-padhye-73b381154>

Name

Mohit Padhye

Gitlab link

<https://github.com/PMohit/WeNagarik>

Linkedin Profile

<https://www.linkedin.com/in/mohit-padhye-73b381154>

Project Description (at least 500 words)

MyCiTizen is a project to create a token economy and manage a fictional country and its citizens by deploying smart contracts on Ethereum blockchain and interacting with them through this dApp :

- connection to the Ethereum network via MetaMask provider
- interaction with the smart contracts using ethers.js library.
- projet set up using Create React App
- styled components with Bootstrap 5 and Chakra UI
- modular components to call different functions of the smart contracts using React Hooks API (useState, useEffect, useContext, useReducer, useCallback) and custom hooks
- responsive, accessible

Problem

- Every citizen is deprived of basic human rights
- Not all government services are crystalline
- Every citizen has lost some trust one way or the other towards government
- Official forms are too lengthy and vexing
- on contrary citizens are also not accountable both on paper and work

Solution

- Every work on this platform is crystalline and not a single penny is lost
- Every entity is accountability of its own
- Every citizen right is inaugurated
- Fictional country operates smoothly and builds confidence among entities

Workflow

token CITIZEN

A token called CITIZEN (symbol CTZ, 18 decimals) serves as national currency and citizenship point inside this country.

1 ETH == 100 CTZ.

100 CITIZEN are automatically awarded to any individual who wishes to become a citizen.

Sovereign

An entity called sovereign is the owner of the state, has the right to register and unregister companies and hospitals or to denaturalize citizens.

It is minted, during token contract deployment, 100% of the total supply (1 million CTZ) and retains the right to burn or mint tokens CTZ in the future in order to regulate the economy.

Companies

A company is identified by its Ethereum address and, in order to function, it must be first registered by the sovereign.

It can then buy CTZ from the sovereign.

A company can recruit employees among the registered citizens, pay them salaries in CTZ tokens and dismiss them.

Hospitals

A hospital is identified by its Ethereum address and, in order to function, it must be first registered by the sovereign.

A hospital can change the health status of a registered citizen between healthy and sick, or declare the death of a citizen.

The citizens

The citizens are identified by their Ethereum address and can have different properties:

alive / dead

healthy / sick

working / unemployed

an employer

a date when it's possible to ask for retirement etc.

A citizen has also a balance of CTZ spread between a current account, an unemployment insurance, a health insurance and a retirement insurance. Only the current account is at the citizen's disposal.

A new citizen is awarded 100 CTZ which go into the current account.

The salary received from an employer is spread as follows: 10% for unemployment insurance, 10% for health insurance, 10% for retirement insurance and the remaining 70% into the current account.

Video Demo Link (1-2min long)

Link your video and mail or send a message on slack too.

Screenshots of the project

Link your screen shots and mail or send a message on slack too.