

ICHNOS

Government Fund Allocation And Fund Distribution Tracking With Blockchain Technology

Project Work III: CSE 350

Supervised By

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A. WHAT ARE OUR GOALS?

Our goal is to implement an blockchain based system for the government that will track fund/budget allocated by the government .The proposed system will secure the whole transaction process at each and every layer wherever it goes by keeping proof of transactions/data in a ledger and exhibiting them in front of of the mass people.

- Immutability: The immutability feature of blockchain will benefit the users with high levels of security because what is once stored in the blocks will never be overwritten or changed. There will never be an incident like hacking, stealing or manipulating dataset/information because the concepts behind the blockchain technology makes it nearly impossible to hack into a blockchain. So, guaranteed full security of data/transaction is one of the main features of our system.
 Distributed Ledger: Every data will be distributed through blockchain ledger. Any change of data/transaction can be seen by anyone in the blockchain ledgers. So, every copy of the transaction will be stored into every ledger. So, no chance of losing any data.
- ☐ Permissioned Access: Only permissioned blocks/users can access this network. So, no chance of an unknown/invalid entrance.
- □ Validation Process: Our validation process will be unique as the validators will be unknown in the system. They can detect

- any malfunction and reject any block. So there will be less corruption in fear of losing work.
- ☐ Interactive Platform: There will be a user friendly interface for the system users .
- ☐ Transparency: The whole transaction system will be visible to mass people through a GOV web-site. So,accountability of the GOV to mass people will be increased

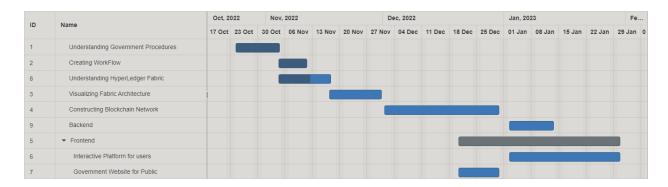
B. Our Task Milestones And Roles:

- Understanding The working architecture of GOV: We will be researching about the whole system process of government like how budgets/funds are being passed and transferred from GOV to different levels, the role of different sectors into this matter, how tender/work will be given among companies etc.
- Making a project flowchart: After understanding the working architecture of GOV, we will draw our project flowchart according to our goal. This flowchart will help us to implement technical and non technical feature into this project
- Establishing The Blockchain System Architecture: Now we will create a sample system architecture which is the simply understandable representation of how the whole system will be running based on blockchain. Different roles and their functions will be added there.

- Constructing Blockchain Networks: According to our architecture we will build the whole blockchain network using HyperLedger Fabric.
- Backend: We will be using Node Js for backend and CouchDB, MongoDB for database part
- Fronted:
 - 1. Interactive platform for User
 - 2. GOV website for public

In this part, We will make a graphical interface for both users and the viewers.

Milestone	Deadline	Roles
Understanding The working architecture of GOV	24 Oct - 4 NOV ,2022	Redwanur Rahman Akanda
Making a project flowchart	04 Nov-11 Nov,2022	Both
Establishing The Blockchain System Architecture	17 Nov - 30 Nov,2022	Both
Constructing Blockchain Networks	1 Dec - 30 Dec,2022	Both
Backend	2 Jan- 13 Jan,2023	Redwanur Rahman Akanda
Interactive Platform for users	2 Jan - 30 Jan,2023	Muhit Mahmud
GOV website for Public	20 Dec - 30 Dec,2022	Muhit Mahmud



Stakeholders:

- System Developers
- Admin
- Auditor
- Validator
- Project Lead
- Tender Party

C.Showcasing Project Achievements:

Dates:

- 22 Nov ,2022
- 5 Dec, 2022
- 14 Dec, 2022
- 31 Jan, 2023