PROJECT UPDATE-4

— Group 4 —

Members

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Ahanf Akib Ahmed(2312304642)

This week I was working with the frontend and backend. I created the login part. And a dashboard. I face difficulties in API calls. So the backend and frontend are not connected. So this login part shows some errors. I used to brainstorm about how to add new features and a full roadmap to complete the whole project. Ai implementation is the core concept of this brain storming. Hopefully we will be done both frontend and backend this week. After that we will integrate some features and Ai.

Mohammad Zonayet Hassan Polok(2031267642)

This week, I focused on building the first version of our security layer. spent time learning about blockchain concepts and successfully created a basic, custom blockchain proof-of-concept in our backend code. I built the Block and Blockchain structure, which are now correctly hashing and linking our data together. This allowed us to create the main University Block and three mock student certificate records that are fully secure. I did run into technical error when trying to make the new code talk to the server, so I wasn't able to fully demonstrate the live verification yet.

Sumya akter(21119133642)

This week, smart contracts AsureCore and AsureNFT were developed for record management and NFT issuance. The deploy.js script was configured for multi-network deployment, and asure.test.js validated core functionalities like issuing, verifying, and revoking records. QRGenerator.js was added for blockchain-based QR verification. Overall, the project backend is fully functional and ready for frontend integration.

Tasmia Rashed Ramisha(2312131042)

Overview:
The frontend of Asure is designed to provide a smooth and user-friendly interface for certificate, product, and medicine authenticity verification. It simulates how users will interact with the blockchain-based backend of the system.
This interface has been built using HTML, CSS, and JavaScript to create a simple yet functional demonstration of the project idea.

Features Implemented:

User Registration Section:Users can enter their institution or company name and email to simulate registration.

Authenticity Verification Section:Users can input a certificate or product code to check whether it is verified.
Example: entering the code “ASURE123” shows a green “Verified” message.
Any other code displays a red “Not Found” message.

Design:The interface layout and design have been styled using CSS for a clean and modern appearance.

Functionality:JavaScript provides dynamic interactions and simulates blockchain verification responses.

Next Steps:
In the future, this frontend will connect with the MongoDB database, Node.js backend, and Solidity blockchain smart contract to enable real-time, secure, and tamper-proof verification.

Conclusion:
This prototype demonstrates the user interface and logic flow of the Asure verification system. It reflects how users will register, enter codes, and verify authenticity using blockchain in the complete project.