PROGRESS SO FAR...

Presented By : 320

PROJECT OVERVIEW

Project Objectives: Creating a blockchain-based aircraft maintenance system to enhance its transparency, increased security, and integrity for a streamlined process.

Timeline:

1. Wrote smart contracts using solidity
2. We are developing a front-end model of the website.
3. Deployment of smart contract using remix IDE(as of now)

FEATURES AND ANALYSIS

1. **Add aircraft to the existing list:** We added aircraft as a struct data type in solidity smart contracts, which takes brand installation date, last Maintenance date, and next maintenance date as parameters.

2. **Create Maintenance:** We used the same approach to add maintenance details and it gets triggered when we click on check maintenance details.

3. **Complete Maintenance:** It is a function that checks whether the maintenance of an aircraft has been done or not if it isn't then it marks it done

VALUE TO STAKEHOLDERS

1. **Data Security:** Enhanced security measures provided by blockchain technology.

2. **Cost Savings:** By the use of IPFS we will save gas fees for processing blocks by storing the aircraft images in this way.

3. **Aftermarket Service:** Gives authentic proof for the maintenance records.

SCALABILITY

1. Eliminate the need for third-party apps for authentication and login process.

2. International recognition and standard for the aircarfts maintenance

3. Real Time 3D model view of the currently under maintenance airplane parts.

CHALLENGES AND MILESTONES

Challenge 1

Integrating between different tech stacks.

Challenge 2

Deploying blockchain on a local host.

Milestone 1

Successfully written the smart contracts that form the core of the ethereum development.

Milestone 2

Teamwork and successful collaboration to figure out the solutions to our problems.