Fake Product Identification Using Blockchain

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Overview

Aim

To develop a solution for the counterfeiting of products in the market.

Recent progress

- Explored Web3, blockchain and solidity.
- Completed the project's frontend.

Biggest risk

The most significant risk to this project lies in potential security vulnerabilities and breaches within the blockchain system.

Objectives

- Provide a user-friendly interface for consumers, enabling them to independently verify product authenticity.
- Establish a comprehensive and secure system to track products from production to sale, enhancing supply chain transparency.
- Contribute to the ongoing discourse on leveraging blockchain technology to combat counterfeit products and improve consumer protection.

Literature Survey

Finding 1

- In a Blockchain based system the data is stored on each node, then the nodes exchange information with each other over the network.

Finding 2

- The limitations in the existing systems are that brands used QR codes on products to prove the validity of the product.But the QR code can be copied and used to label counterfeit products.

Problem Formulation

- **Browser Compatibility**: Compatibility across different web browsers posed challenges, as the project relied upon specific features of metamask extension that behaved differently across browsers.
- **Performance**: Ensuring that the frontend operates efficiently and responds promptly to user interactions, even when interacting with the blockchain, was a concern. Slow loading times or lag in transactions can deter users.
- **Security**: Implementing security measures in the frontend to protect user data and private keys was critical. Failing to do so could expose users to risks like unauthorized access and data breaches.

Work Done

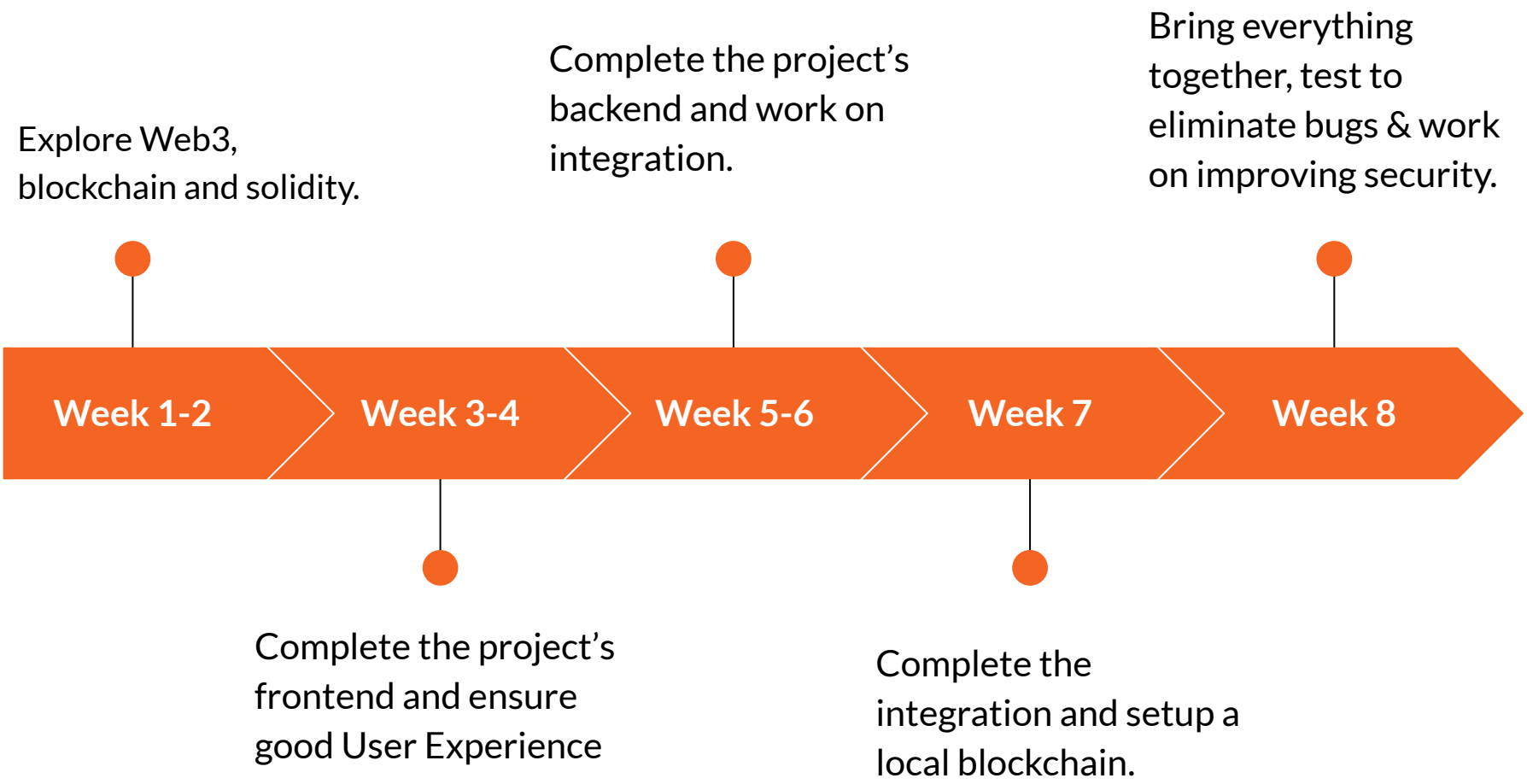
Week 1-2

- Explored Web3, blockchain and solidity. Discussed the findings and after laying out a road map, distributed the work among ourselves.

Week 3-4

- Completed the project's frontend and moved back and forth between development and testing phases to ensure best User Experience.

Schedule


Explore Web3, blockchain and solidity.
Complete the project's backend and work on integration.
Bring everything together, test to eliminate bugs & work on improving security.
Week 1-2
Week 3-4
Week 5-6
Week 7
Week 8
Complete the project's frontend and ensure good User Experience
Complete the integration and setup a local blockchain.

References

- https://www.itm-conferences.org/articles/itmconf/pdf/2022/04/itmconf_icacc2022_03015.pdf
- Detection of Counterfeit Products using Blockchain

THANK YOU
ANY QUESTIONS?