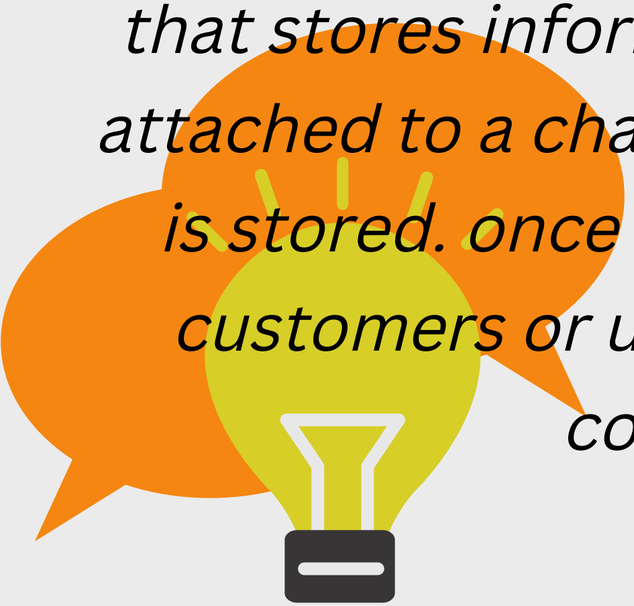
FUTURE TEAM

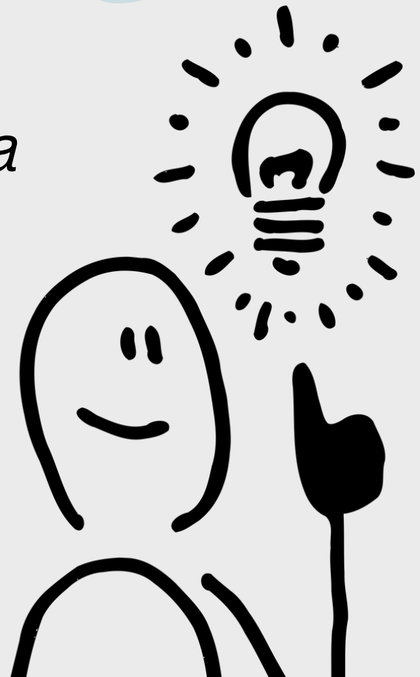
Buidl for Web3 - Hack Delhi

2022

From where the idea came from

In recent years, counterfeiting has played an important role in product manufacturing. affects company name, sales, business profit. So we decided to create an app that helps identify real products and detect fake products using new technologies. Blockchain technology is a distributed, decentralized digital ledger that stores information about transactions in the form of blocks attached to a chain. Blockchain technology is immutable, i.e. data is stored. once it's on chain, it can't be hacked or modified, so customers or users don't have to rely on third-party users to confirm the product's authenticity.

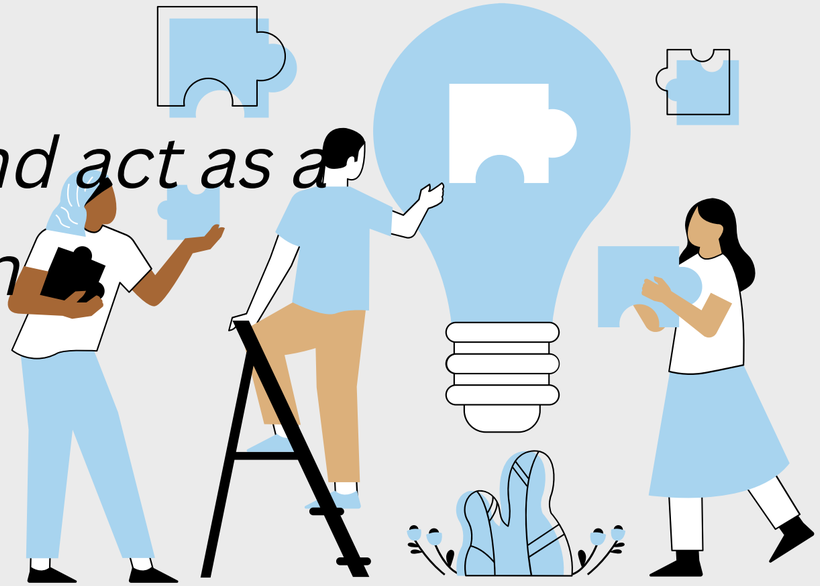




Problem statement

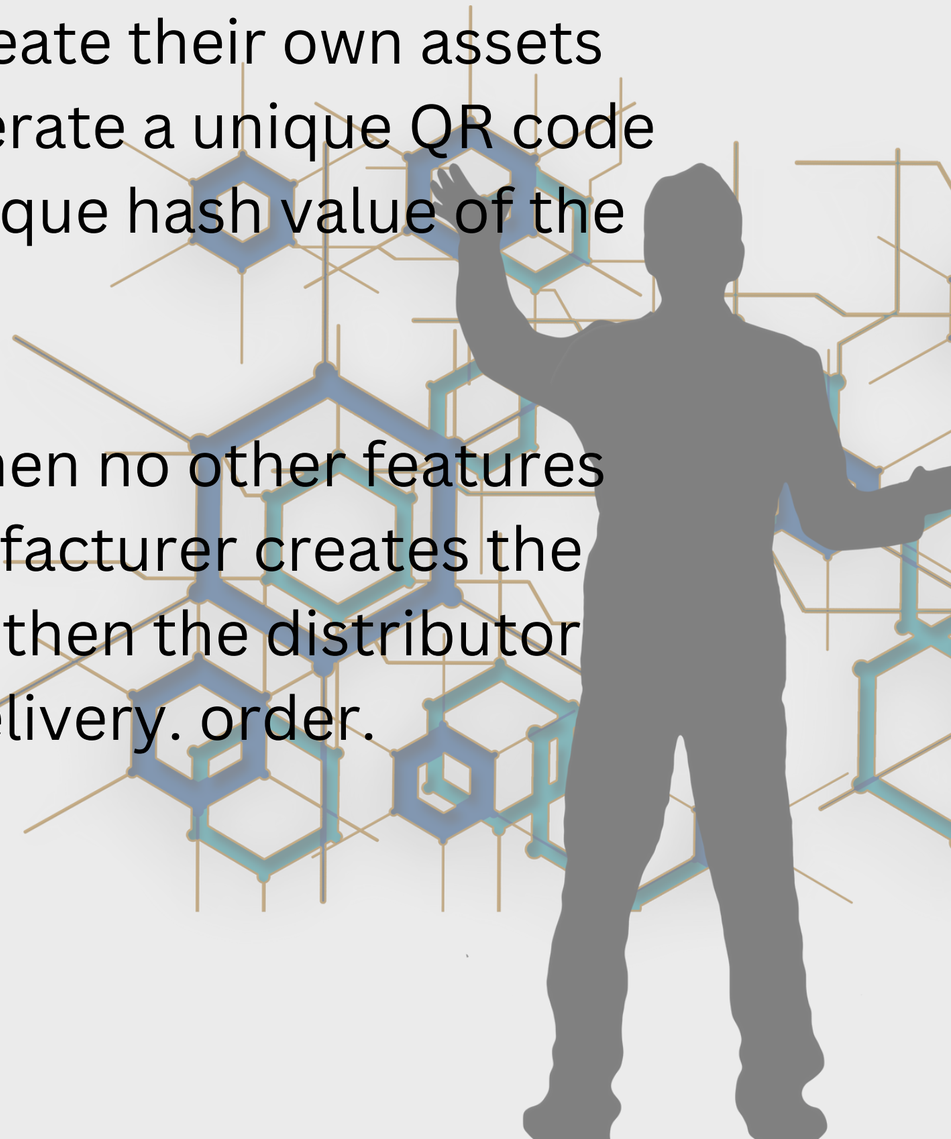
Counterfeit product identification systems can be long overdue, an imperative factor for failure, and more than one counterfeiting of counterfeit products due to middlemen makes it difficult for consumers to determine whether a product is genuine or not.

Our goal is to preserve product authenticity and act as a single point of product authentication between consumers.

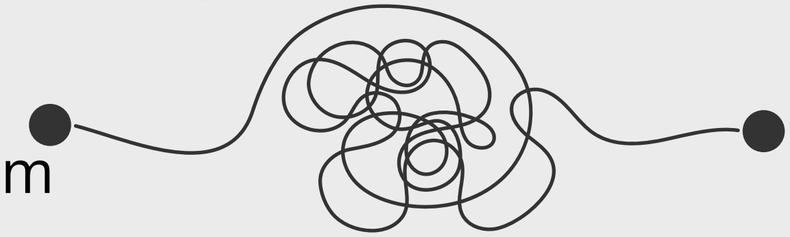


Blockchain is a new technology that works in a decentralized manner, making it easy to reach consensus. Our team decided to work on a project that gives manufacturers the right to create their own assets that return a unique cryptographic hash and generate a unique QR code that contains the details of the asset and the unique hash value of the asset.

The distributor simply logins on the platform, then no other features are delivered to the distributor, after the manufacturer creates the asset, they assign a registered distributor to it, then the distributor receives an email regarding the same delivery. order.



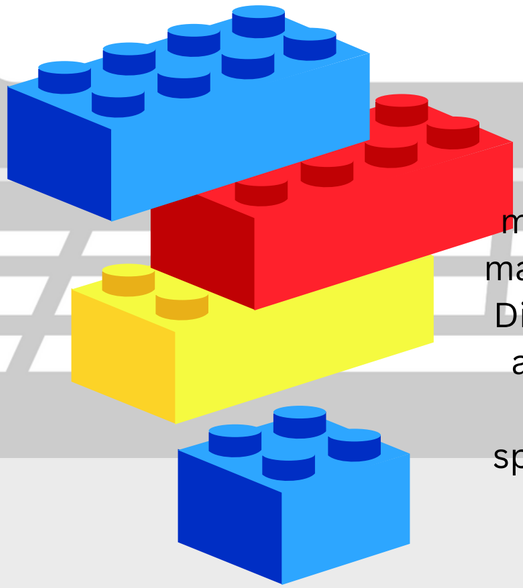
We might face some challenges



We struggled along the way because we had to start from scratch because we didn't know anything about ReactJs. Learn the basics of React Js along the way. Additionally, we needed to display smart contracts on the XDC network, but lacked solid language skills. As a result, we had to spend extra time learning about the fort. Various materials were used, but Udemy and YouTube received the most attention. React was mostly used for front-end development, while Solidity smart contracts were used for back-end development. We used the WEB3 plug-in to connect the backend and frontend. After extensive study, we learned how to link a Metamask account to deploy our smart contract.

How to build

After going through several methodologies and techniques used in the market to ensure the authenticity of the product. We have come up with a decentralized solution to verify the authenticity of products whether they are real or fake. One of the reasons to opt for a decentralized system is that it is immutable so there is no chance of data manipulation and it is public so there is no such thing as secrecy. Because it will provide complete transparency to users, manufacturers, sellers and others.



Next, we studied the supply chain to find the requirements and decide on the workflow from the manufacturer to the customer. then we created a structure of smart contracts that will create a single manufacturer that will accept multiple distributors and will consist of different entities: -Manufacturer -Distributor -Customer. The contract deployer will be the manufacturer and the rest will be distributors and customers. Metamask was then integrated with the website and based on the metamask contact address, the nature of the user is decided. The manufacturer part can only be opened by the user specified by the user's contact address, while anyone can access the distributor and customer parts of the site.

challenges

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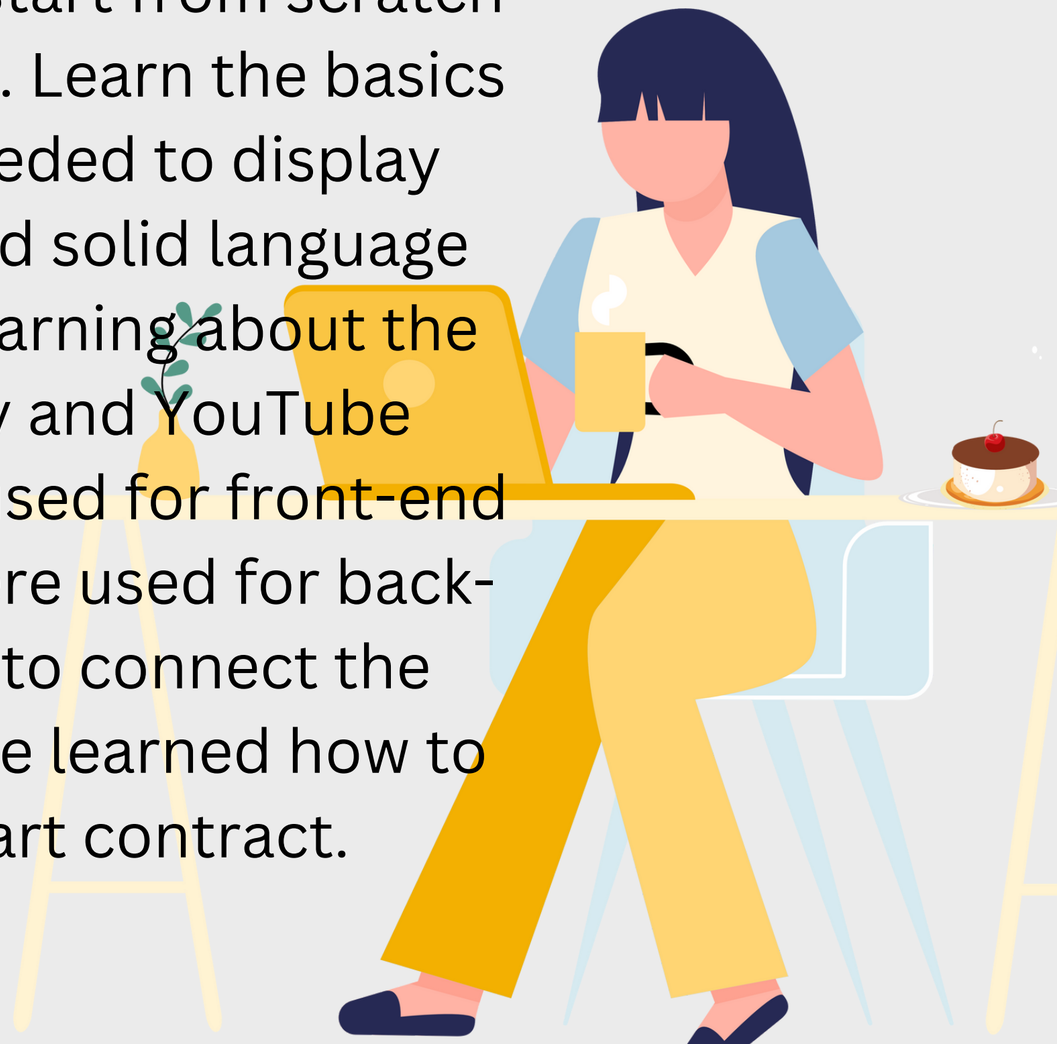
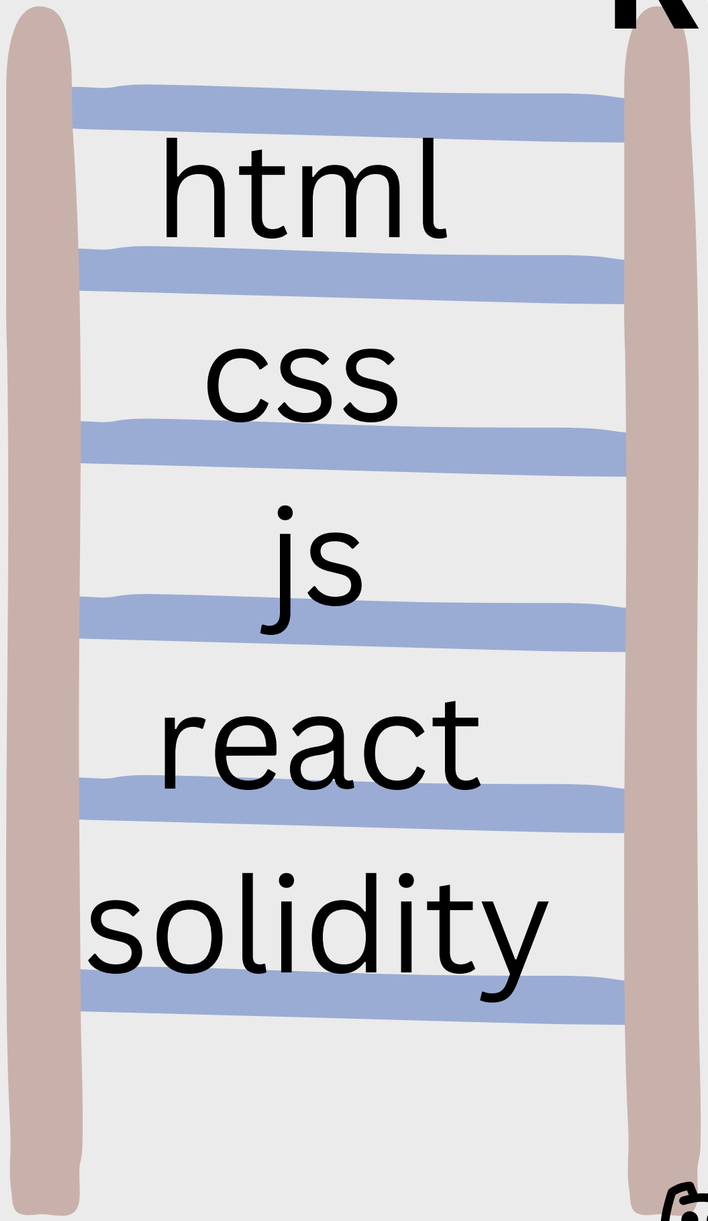
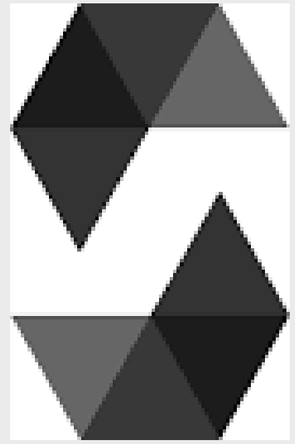


Requirments



HTML



JS

CSS

https://github.com/shreyasingh2003/A-Fake-Product-Identification-System

Team member

Thank you!

AMAN

DEV

SHREYA