



DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECT PROPOSAL

PROJECT TITLE

Web3 community based crowdfunding platform with block-chain transactions

In an era where technology shapes our interactions, transactions, and collaborations, the convergence of web3, community dynamics, and blockchain technology is revolutionizing the crowdfunding landscape. Welcome to the forefront of innovation, where a seamless fusion of cutting-edge technologies propels the creation of a dynamic and transparent crowdfunding ecosystem.

The "Web3 Community-Based Crowdfunding Platform with Blockchain Transactions" presents a groundbreaking leap into the next generation of crowdfunding.

PROJECT SCOPE

We are embarking on the creation of a cutting-edge, comprehensive web3 community-based crowdfunding platform that seamlessly integrates blockchain transactions. This project merges the strengths a dynamic community interaction app, a web3 crowdfunding platform driven by blockchain for secure transactions. The resulting platform will empower users to participate in crowdfunding campaigns within a vibrant and secure online community.

The primary objectives and scope of the project are as follows:

- **User Authentication and Wallet Integration:**
Implement a robust user authentication system using Clerk and integrate MetaMask for a secure Ethereum wallet connection.
Enable users to log in using email/password or social logins and link their Ethereum wallets for transactions.
- **Community-Centric Interface:**
Develop an engaging user interface using React and Next.js 13 that combines the aesthetics of the community interaction platform and the crowdfunding platform.
Design the homepage to showcase the latest crowdfunding campaigns and

- community interactions, fostering engagement.
- **Blockchain Integration and Smart Contracts:**
Integrate the Ethereum blockchain using the Web3 library to enable secure transactions for campaign contributions.
Develop and deploy Solidity smart contracts that manage crowdfunding campaigns' logic, funds distribution, and immutably record campaign details.
 - **Campaign Creation and Management:**
Allow users to create and manage crowdfunding campaigns with funding goals, descriptions, and images.
Implement campaign progress tracking, displaying funds raised, supporters, and time left for each campaign.
 - **Community-Based Communication:**
Enable campaign creators to interact with supporters through threaded discussions/conversations.
Implement real-time event listening using webhooks to provide instant updates on campaign activities.
 - **Responsive Design and User Experience:**
Ensure a responsive design that works seamlessly across devices using Tailwind CSS and ShadCN components.
Focus on enhancing the user experience by providing clear navigation and intuitive interaction.
 - **Transparent Transactions and Immutability:**
Highlight the immutability of blockchain data by pairing each transaction with a GIF, showcasing the uniqueness of the platform.
 - **Deployment and Sharing:**
Deploy the application to the Ethereum network, making it accessible to users for interaction and exploration.
Encourage users to share their campaigns, participate in discussions, and experience the enthusiasm of a wider web3 community.
 - **Community Engagement and Learning:**
Foster a community of learners and enthusiasts by incorporating features for liking, commenting, and sharing campaigns.
Provide a platform for users to showcase their skills, engaging potential employers and clients.

REQUIREMENTS

☐ Software Requirements

Languages: HTML, CSS, JS, React, Node, Express, Next, Typescript, Tailwindcss, Solidity, Smart Contracts

Databases used: MongoDB

Software used:

Etherscan - It is a blockchain explorer for the Ethereum network. The website allows you to search through transactions, blocks, wallet addresses, smart contracts, and other on-chain data.

ThirdWeb - It enables users to add features such as NFTs, marketplaces, and social tokens to their Web3 projects without writing a line of code.

Ethereum's Robson - test network will be used for testing.

Auth Platform used - Clerk

Payment Gateway - Meta Mask, Transactions in crypto

Note: The technology stack and Softwares used in this project are kept open to changes and can be evolved as per project requirements.

STUDENTS DETAILS

Name	UID	Signature
Arpit Yadav	21BCS8916	
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APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)
Ms. Bhavna Nayyar	Web3 Community Based - Crowd Funding Platform with Blockchain Transactions	

