Abstract: Decentralized Crowdfunding Platform for Poverty Alleviation

Introduction

Poverty remains a pervasive global issue, with millions of individuals lacking access to basic resources such as food, shelter and education. While traditional crowdfunding platforms have provided a means to address such issues, they often lack transparency, making it difficult for contributors to trust that their donations are being utilized effectively. To tackle this challenge, we propose a decentralized crowdfunding platform powered by blockchain technology, designed specifically to support initiatives aligned with the United Nations' Sustainable Development Goal of eradicating poverty.

Objective

The platform aims to:

1. Provide a transparent and decentralized system for fundraising.
2. Empower NGOs to create campaigns focused on poverty alleviation.
3. Enable users to contribute to or request support from campaigns with trust and accountability.
4. Leverage Web3 technology to ensure secure, immutable, and transparent transactions.

Key Features

1. **NGO Module:**
   - Allows NGOs to apply for approval to run campaigns.
   - Enables monitoring of campaign status (e.g., approved, rejected, or pending).
   - Facilitates fund withdrawal once campaign goals are met.
2. **Admin Module:**
   - Admins can review and approve or reject campaign applications based on predefined criteria.
   - Provides tools to monitor platform activities and ensure compliance.
3. **User Module:**
   - Users can browse and contribute to active campaigns.
   - Individuals can request help from specific campaigns by detailing their needs.
   - Offers real-time tracking of contributions and fund utilization.

Technology Stack

1. **Blockchain Technology:**
   - **Ethereum** or **Polygon** network for deploying smart contracts.
   - Ensures transparency, decentralization, and tamper-proof transactions.
2. **Frontend Development:**
   - Built using **React.js** or **Next.js** for a user-friendly interface.
3. **Decentralized Storage:**
   - **IPFS** or **Filecoin** for storing campaign details, media, and other assets.

4. **Wallet Integration:**
    - **MetaMask** or **WalletConnect** for user transactions and authentication.
5. **Smart Contracts:**
    - Handles campaign creation, fund distribution, and withdrawal processes.

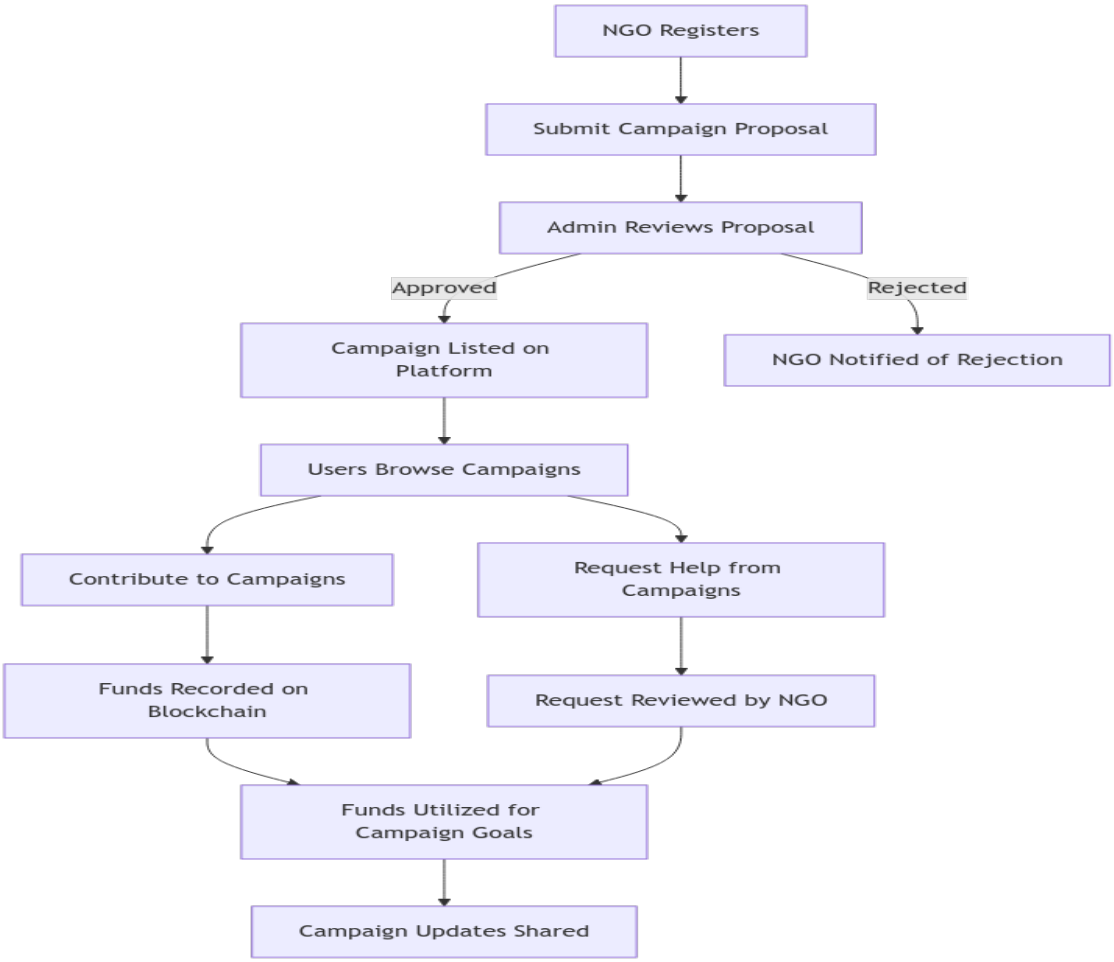
Transparency and Trust through Web3

Web3 technology lies at the core of the platform, ensuring:

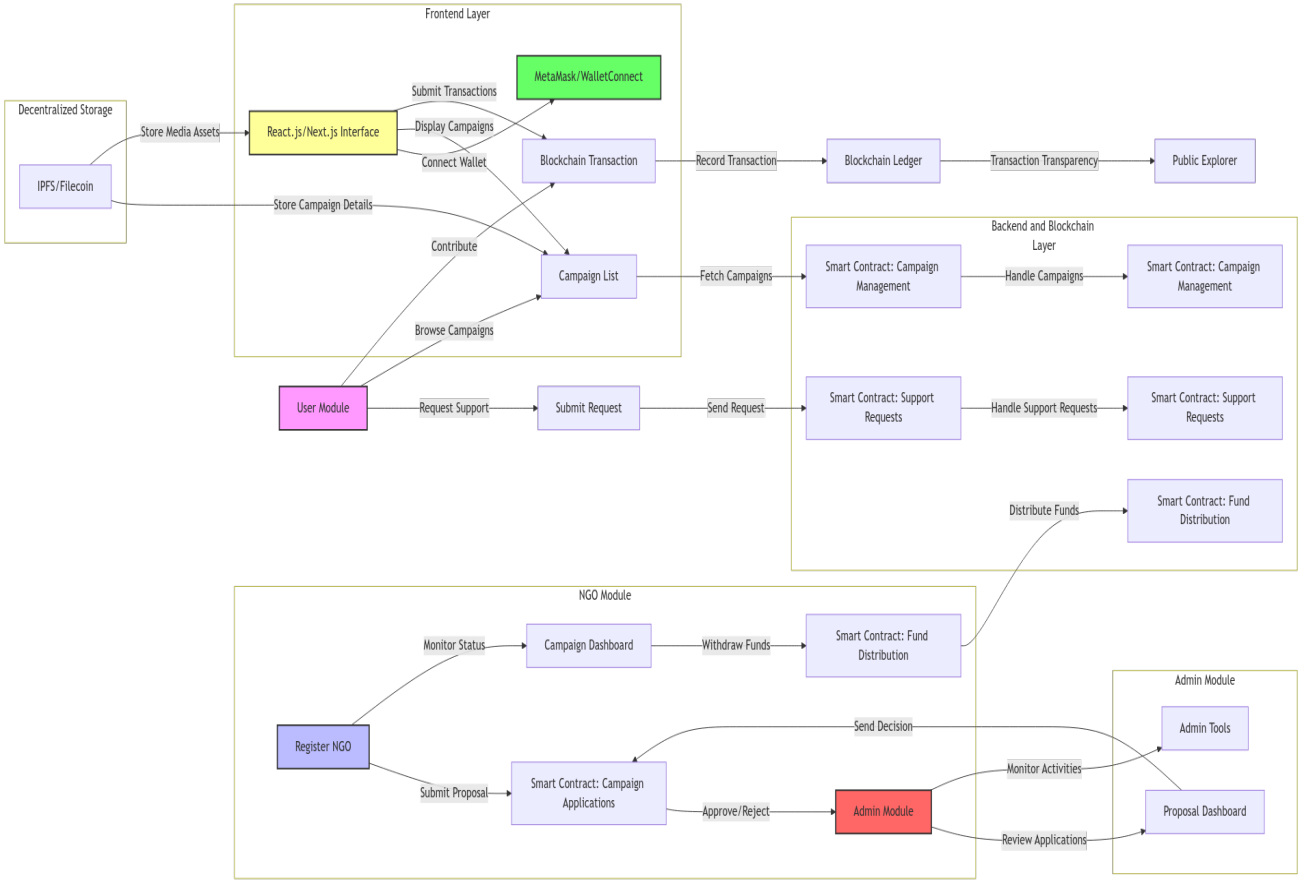
- **Transparency:** All transactions are recorded on the blockchain, enabling contributors to track how their funds are used.
- **Security:** Decentralized infrastructure minimizes risks of fraud or data breaches.
- **Trust:** Smart contracts automate processes, eliminating the need for intermediaries and ensuring that funds are released only when campaign goals are met.

Flow of Operations

1. NGOs register on the platform and submit a campaign proposal.
2. Admins review the proposal and approve or reject it based on predefined criteria.
3. Approved campaigns are listed on the platform for users to view and contribute to.
4. Contributors donate to campaigns via blockchain-based transactions, ensuring transparency.
5. Individuals in need can request support from specific campaigns, detailing their requirements.
6. Funds are released to NGOs or beneficiaries only when the goals and conditions set in the smart contract are met.



System Architecture



Benefits

- **For NGOs:** Access to a transparent platform to raise funds and build credibility.
- **For Users:** Confidence in contributing to campaigns with real-time tracking of fund usage.
- **For Society:** A focused effort towards eradicating poverty with measurable outcomes.

Conclusion

This decentralized crowdfunding platform aims to revolutionize the way funds are raised and utilized for poverty alleviation. By leveraging blockchain technology, it fosters trust, transparency, and accountability, ensuring that every contribution makes a tangible impact in the fight against poverty. The integration of Web3 principles empowers individuals and communities, creating a sustainable and transparent system for global change.