

INTRODUCTION

This project was developed as a part of our coursework.

Our team consists of four sophomores from IIITH, with Bhavyajeet Singh as our student mentor and Mr. Venkata Madala as our advisor from the client side.











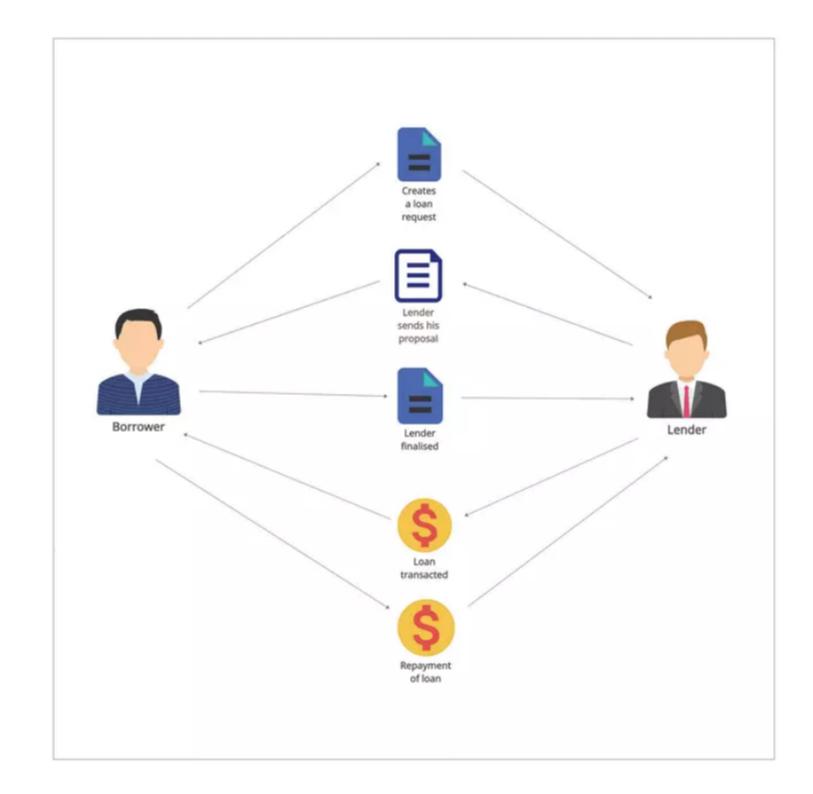
- Provide a platform for farmers to avail cheap microfinanced loans.
- Deploy native cryptocurrencies which enables Decentralised Financing.
- Launch a DAO and create a community of Lenders and Borrowers.
- Create an intuitive and easy to use Web 3.0 Application which enables these transactions.

PRODUCT DESIGN

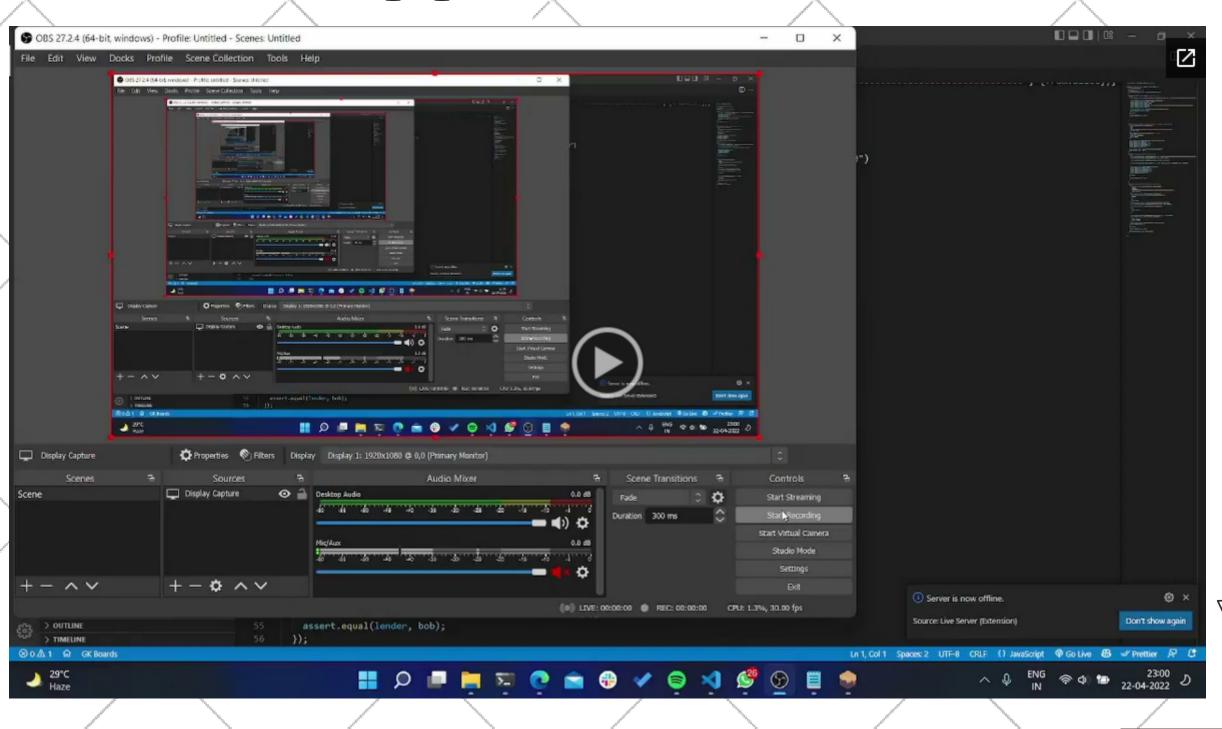
On the user's side, the working of our product is quite simple, it consists of six steps.

Borrower Borrower selects the All the lenders creates a loan send their loan best deal request proposals. presented to him/her. Loan Transaction Details about Repayment nappens when the collateral is transferred to of Ľoan borrower the lender. accepts

On the backend, we have deployed solidity contracts to our blockchain network which handle all these transactions autonomously. The confirmation of these requests is done via the users' metamask wallets.



Demonstration of our Web 3.0 App:







REASSURANCE FOR THE LENDER

Providing collaterals made easy and entirely online.

• Borrowers can create their loan proposal with the amount they want, their favourable repayment due date and CID of their mortgage uploaded on IPFS. As of now we are using a decentralised public IPFS gateway.



LENDERS DECIDE THEIR OWN TERMS

Verified borrowers, freedom on choosing rate of interest and loan duration.

- Lender's can verify the borrower's data and send their proposal with their favourable interest rate. All this happens just at a click of a button.
- After the repayment date has passed, borrower cannot repay the loan and their mortgage will be revoked and auctioned off.



POWER TO THE BORROWERS

Say goodbye to exploitation by moneylenders.

- Borrowers can choose from multiple lenders of their interest and competitive offers from lenders ensure that the interests are reasonable.
- Borrower can repay the loan anytime they want before the due date and amortized loan will be transacted.



TECHNOLOGIES, LIBRARIES AND PACKAGES USED



- Ethereum
- Solidity
- Truffle
- MetaMask
- JavaScript
- Ganache
- Web3.js
- jQuery



 Ethereum is a decentralized, open-source blockchain with smart contract functionality.





- An object-oriented, high-level language for implementing smart contracts. Smart
- contracts are programs
- which govern the behaviour of accounts within the Ethereum state.

 Development environment, testing framework and asset pipeline for blockchains using the Ethereum Virtual Machine (EVM)

METAMASK

 MetaMask is a software cryptocurrency wallet used to interact with the Ethereum blockchain. It allows users to access their Ethereum wallet through a browser extension or mobile app

GANACHE

• Ganache is a personal blockchain for rapid Ethereum and Corda distributed application development. It enables us to develop, deploy, and test your dApps in a safe and deterministic environment.

WEB3.JS

web3.js is a collection
 of libraries that allows
 us to interact with a
 local or remote
 ethereum node using
 HTTP, IPC or
 WebSocket.

UPCOMING FEATURES

Below are some other features and functionalities we are planning to incorporate by the next release:

- Incorporate KYC into the application to further improve on the security and usage of the application.
- Provide a mechanism which enables the lenders and borrowers to communicate with each other, this would further allow the community to build and flourish.
- Provide the farmers a tool in which they can justify the requirements of loan in their native language.

