DECENTRALIZED APPLICATION(DAPP): TOKEN DEVELOPMENT AND TOKENOMICS

BLOCKCHAIN BASED FUND ALLOCATION AND MONEY MANAGEMENT PLATFORM FOR ENTERPRISES

<u>AUTHORS</u>

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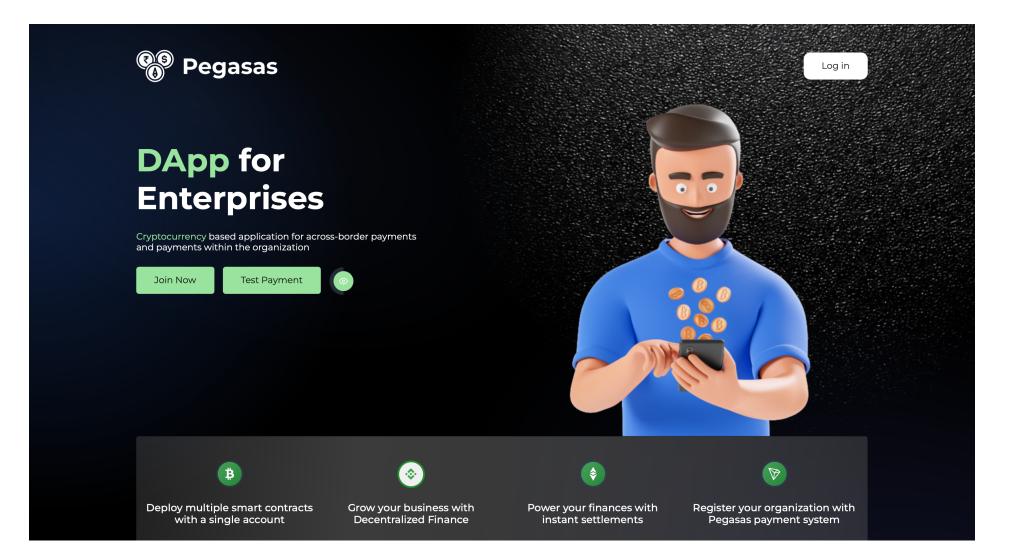
AFFILIATIONS

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INTRODUCTION

In traditional finance, clean audit trails can be difficult to procure at times, which have led to severe economic losses in the past due to negligent behaviour or malicious actors. Blockchain makes auditing easier and simplifies the fund allocation method. Everything is transparent over blockchain network so it reduces chances of fraud.

An enterprise level fund allocation software is designed for inter/intra departmental transactions as well as third party services using smart contracts on Ethereum blockchain network.



RESULTS

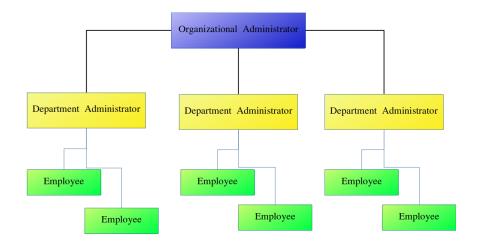
- Decentralised

 application is created
 using ethereum
 blockchain network
 where fund allocation
 and money flow can
 be smoothly
 monitored.
- The fund allocation can be either inter department or intra department.
- A robust user authentication and authorisation is created.

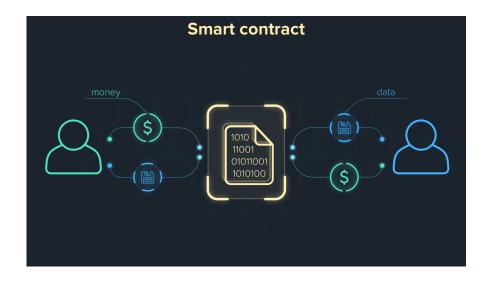
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APPLICATION STRUCTURE

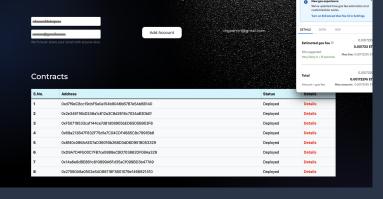
Every account contains an organizational administrator who could add department administrator. The department administrator in turn could add multiple employees in his/her department. Each employee of the organization had different authority for invoice process.

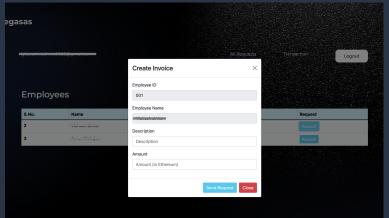


METHODOLOGY



We used python based development ethereum framework, brownie to compile smart contracts and our our application generated binary interface (abi), and we used this abi to facilitate the communication between deployed contracts and our javascript application.





FUTURE WORKS

- The tokenomics of custom token can be customized as per the business model.
- The custom token can replace the rinkbey token for transactions and verification.