VIETNAM HACKATHON 2024

ONCHAIN NAMES & IDENTITY

THE WINNING PROJECTS

The winning Projects

01. LMail - LANN Team

The First Prize Topic: “Building secured Email System” (1)

02. MoonMail - To The Moon Team

The Second Prize Topic: “Building secured Email System” (2)

03. 0xDead Email - 0xDead Team

The Third Prize Topic: “Building secured Email System” (3)

04. DoMail - Code Is Bug Team

The Fourth Prize Topic: “Building secured Email System” (4)

05. BlueSe DAO - Bluess Team

The First Prize Topic: “SocialFi Apps & Footnote & Identity-eKYC” (5)

06. Hearing Bundles - TechTack Team

The Third Prize Topic: “SocialFi Apps & Footnote & Identity-eKYC” (6)

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Namelayer namebase TS29 LoadPipe dWeb Foundation SkyInclude

VIETNAM

HACKATHON

ONCHAIN NAMES AND IDENTITY

1ST PRIZE

60.000.000 VND

Topic: "Building secured Email system"

LANN Team

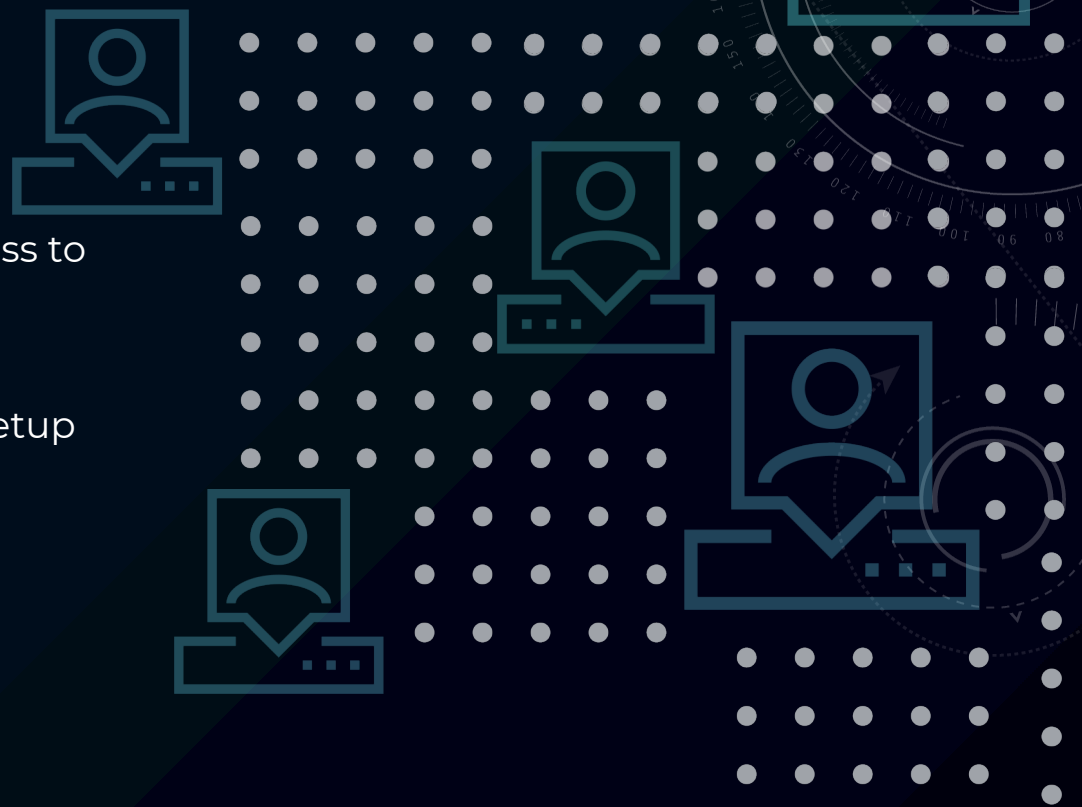
LANN Team

Welcome to LMail

SEcure self-hosted email server with hns domain

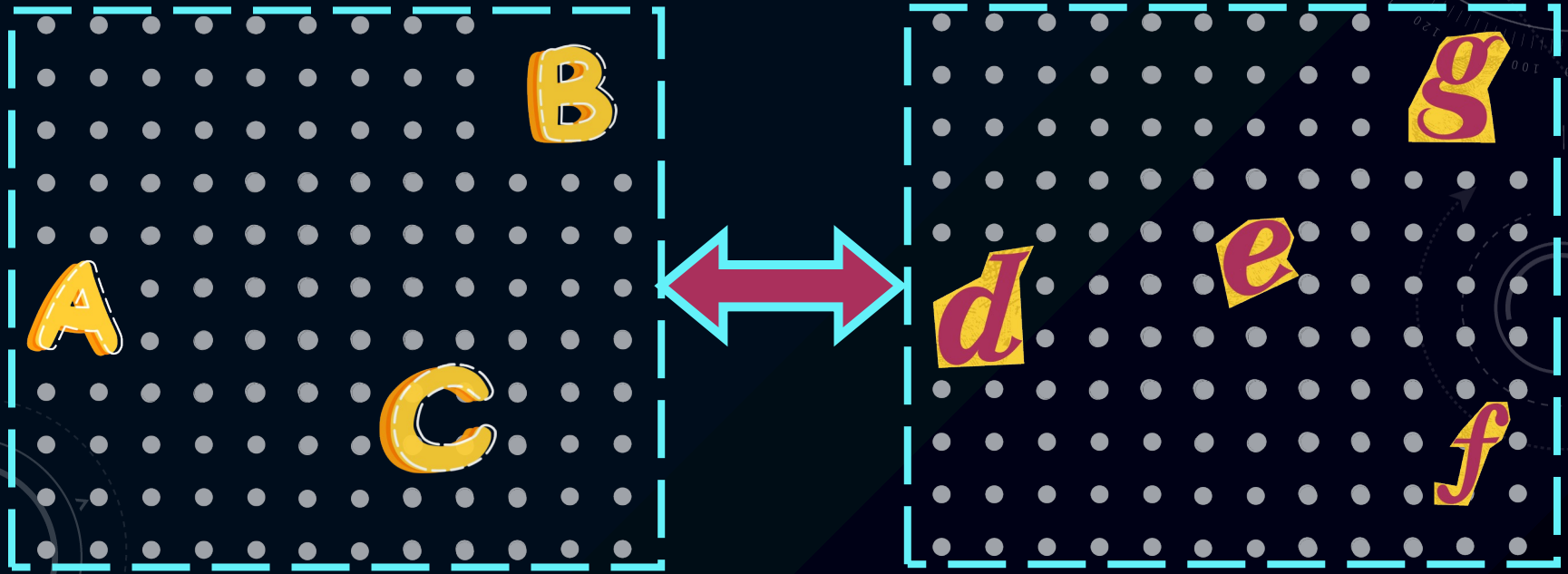
About LMail's objectives

- To use HNS domain as email address to send and receive mails
- To provide the self-hostability
- To provide easy and comfortable setup instructions
- To ensure maximum privacy for all communications



our Design (1)

- One admin can host a mail server with his/her own handshake domain
- Email accounts with the same/different TLDs can send or receive email to/from each other



our design (2)

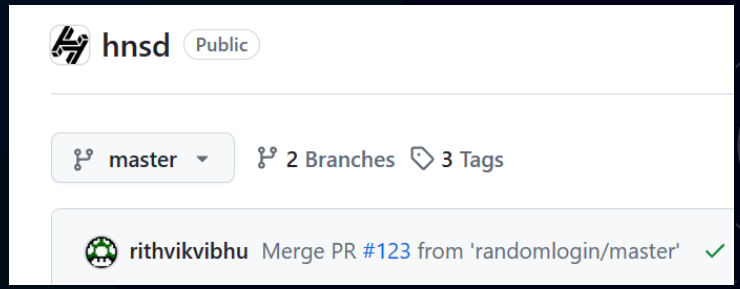
4 main components of Email server and client solution

- An user-friendly interface for managing email accounts, composing, sending, and receiving emails
- Sending and receiving emails using the SMTP (Simple Mail Transfer Protocol) and IMAP (Internet Message Access Protocol) protocols
- Storing user account information, email metadata, and cryptographic keys securely and locally
- Securing emails with end-to-end encryption (Future Development)

our Design (3)

open sources

- Modoboa WebMail Server - be self-hostable, easily used within handshake domains
- HNS resolution (HNSD) - support the server finding Handshake domains



How?

Requirements

- A linux server (virtual or physical) with a static IP address
- Port 25 of the server should be open to the Internet

Quick setup

- Allowing users to deploy a Modoboa email server with just one single command
- $ sudo ./autorun.sh

Manual setup

- Following remaining steps in our instruction to set up HNSD and things

Applications & Advantages

- Each organization/company/community or a group of people can have their own mail server corresponding to their handshake domain

- Therefore, each employee/student/member can have their own user account, provided by the company/organization/school

conclusion

- Now, we have shown the whole ideas for a secure and private email solution with end-to-end encryption for handshake domain users
- Using our email server, customers or organizations can host their own mail server which is designed for comfortable and secured communication with partners
- Moreover, this email server also brings useful applications for organizations or communities

Reference

- onchain-names-hackathon/messaging/email.md at main · Nathanwoodburn/onchain-names-hackathon (github.com)
- https://learn.namebase.io/
- https://github.com/modoboa/modoboa
- https://github.com/handshake-org/hnsd

THANK YOU FOR LISTENING

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ONCHAIN NAMES AND IDENTITY

2ND PRIZE

25.000.000 VND

Topic: "Building secured Email system"

To The Moon Team

EMAIL-WALLET AS A SERVICE

WITH HANDSHAKE DOMAIN

MOONMAIL by To The Moon Team

CONTENT

01 PROBLEMS

02 OUR SOLUTIONS

03 FEATURES IN FUTURE

PROBLEMS

E2E Encryption

VERIFY MAIL DOMAIN

PROBLEMS

PRIVACY ON-CHAIN

TRANSFERING ON BLOCKCHAIN

PROBLEMS

HARD to protect wallet

HARD to setting an email-system on HandShake domain..

OUR SOLUTIONS

PRIVACY

Native 2E2

EASY TO CONNECT TO WEB 3

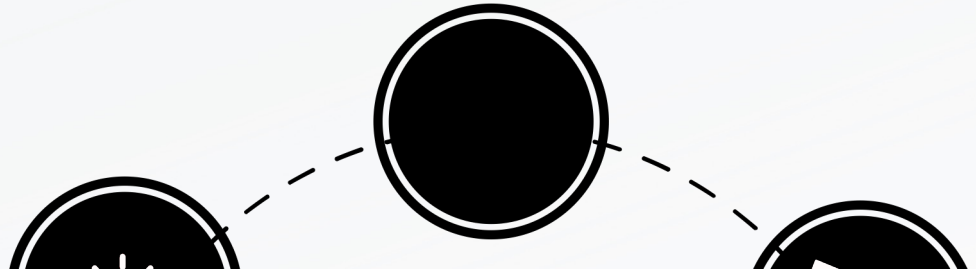
We have a native wallet base on Zk Email wallet.

Now, users

- can transfer their tokens
- can execute with smartcontracts
- can swap by using uniswap3
- a dapp in mail-app - same idea like TON

Privacy transaction

Dont worry about reveal indentity when transfer your token.



OUR SOLUTIONS

ONCHAIN DKIM

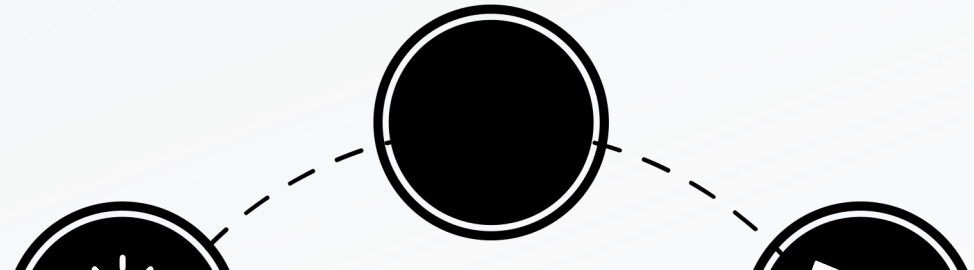
To specify which domains are communicated with the relayer
Using ICP to store.

EASY TO USE

We build fully Docker containerizered

ABTRACTION ACCOUNT

Using abtraction account - EIP 4337 to create wallet for user.



FLOW WORK

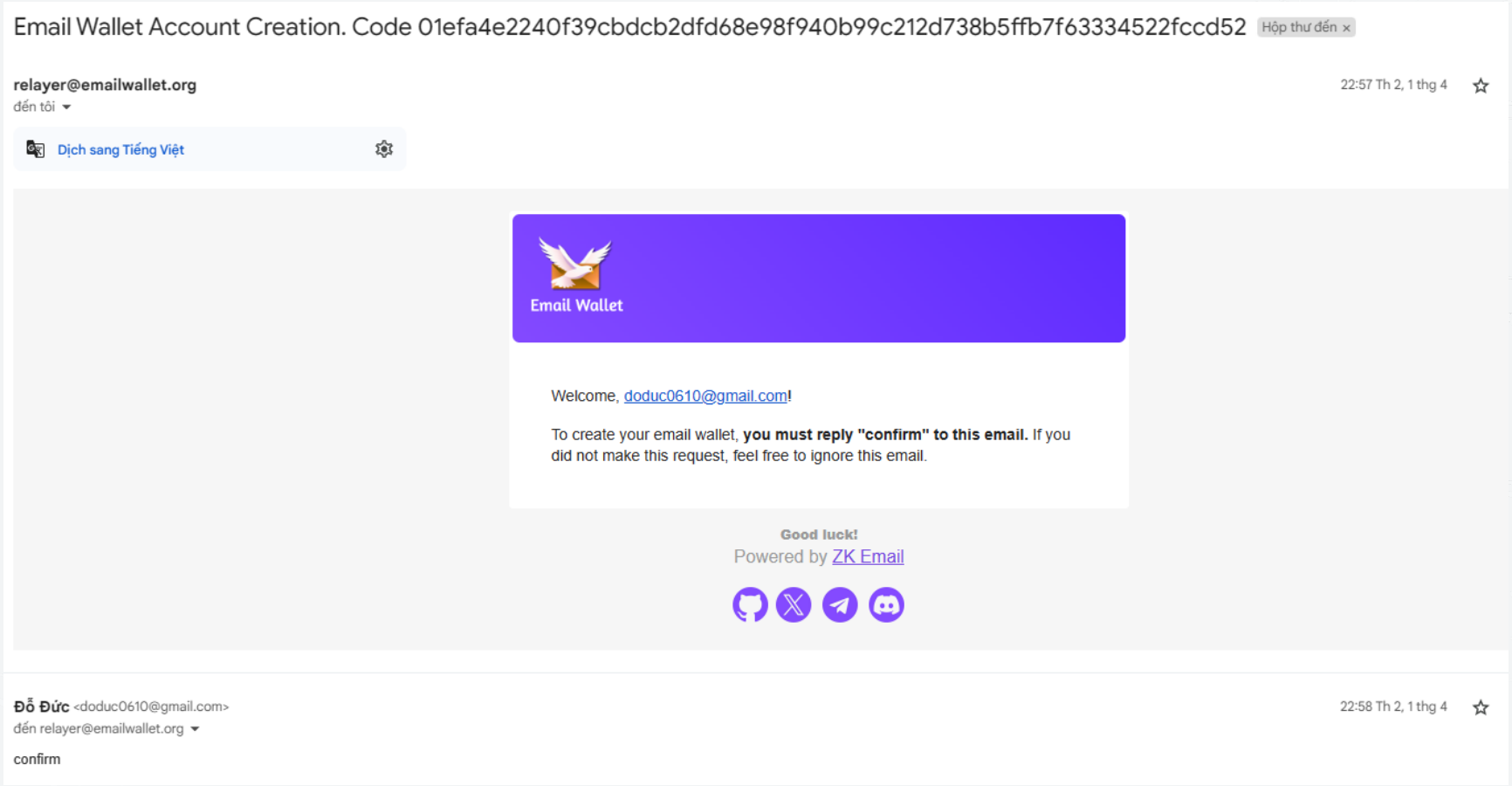
Basically, the flow works like this:

- Users send an email to a "Relayer" server with their intent in the email subject. For example “Send 1 ETH to someone@handshake.org”

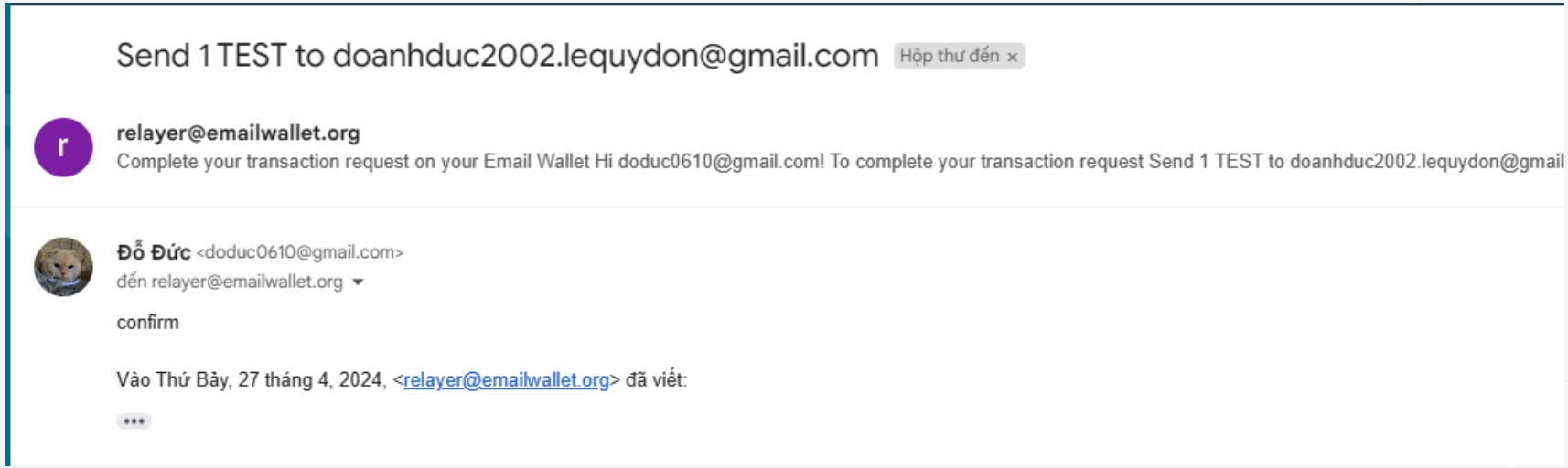
- The relayer creates the ZK proof of the mail and calls the Core contract with proof of email and parameters extracted from the subject.

- The Core contract validates the proof, ensures that extracted parameters match the actual signed subject, and executes the operation on the account contract.

Creating wallet



Send Token


Send 1 TEST to doanhduc2002.lequydon@gmail.com
Hộp thư đến ×
r
relayer@emailwallet.org
Complete your transaction request on your Email Wallet Hi doduc0610@gmail.com! To complete your transaction request Send 1 TEST to doanhduc2002.lequydon@gmail
Đỗ Đức <doduc0610@gmail.com>
đến relayer@emailwallet.org
confirm
Vào Thứ Bảy, 27 tháng 4, 2024, <relayer@emailwallet.org> đã viết:
•••

Your Email Wallet transaction is completed. Hộp thư đến ×

relayer@emailwallet.org
đến tôi

23:33 Th 7, 27 thg 4 (10 giờ trước)

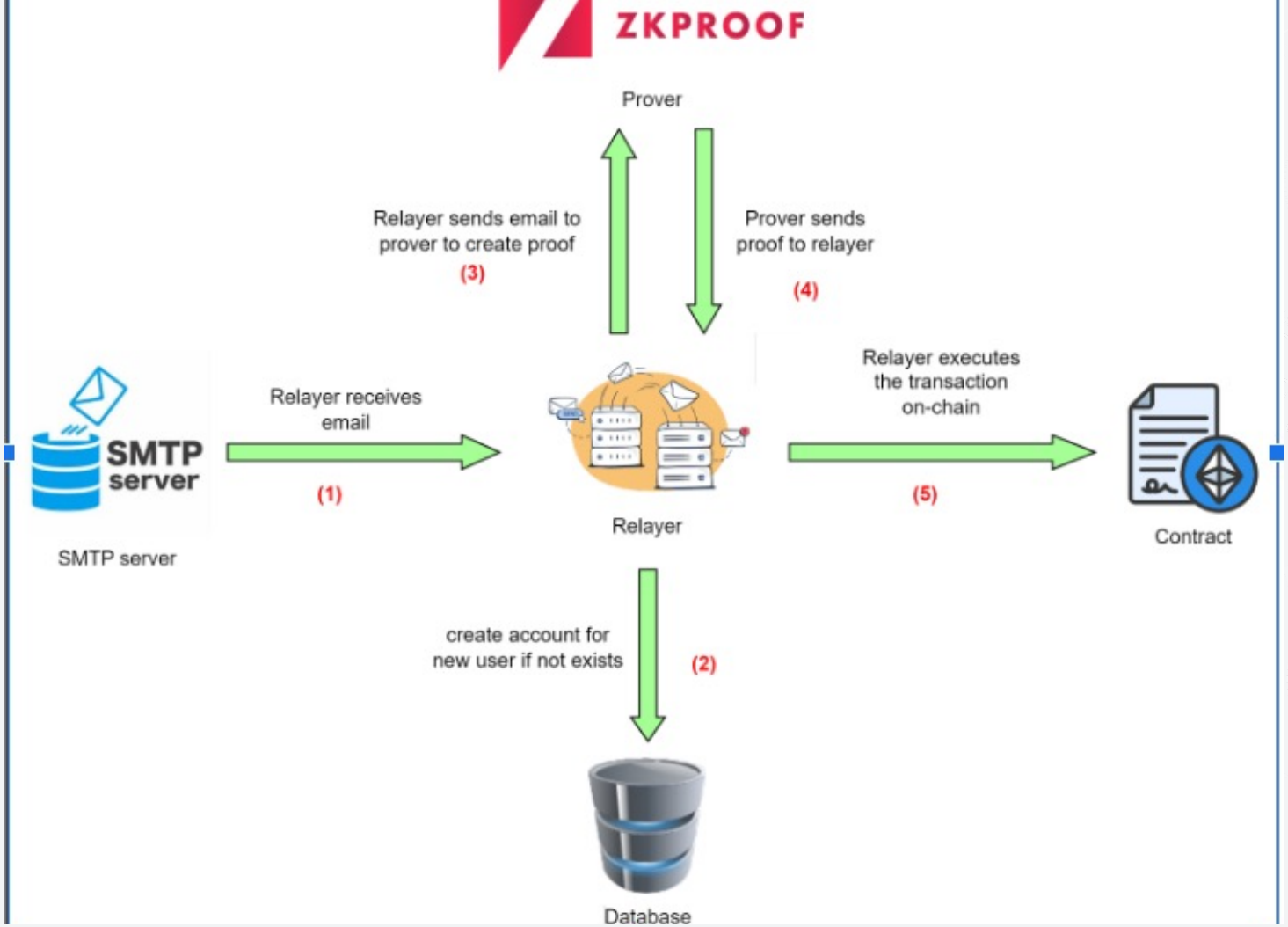
Email Wallet

Hi doduc0610@gmail.com!

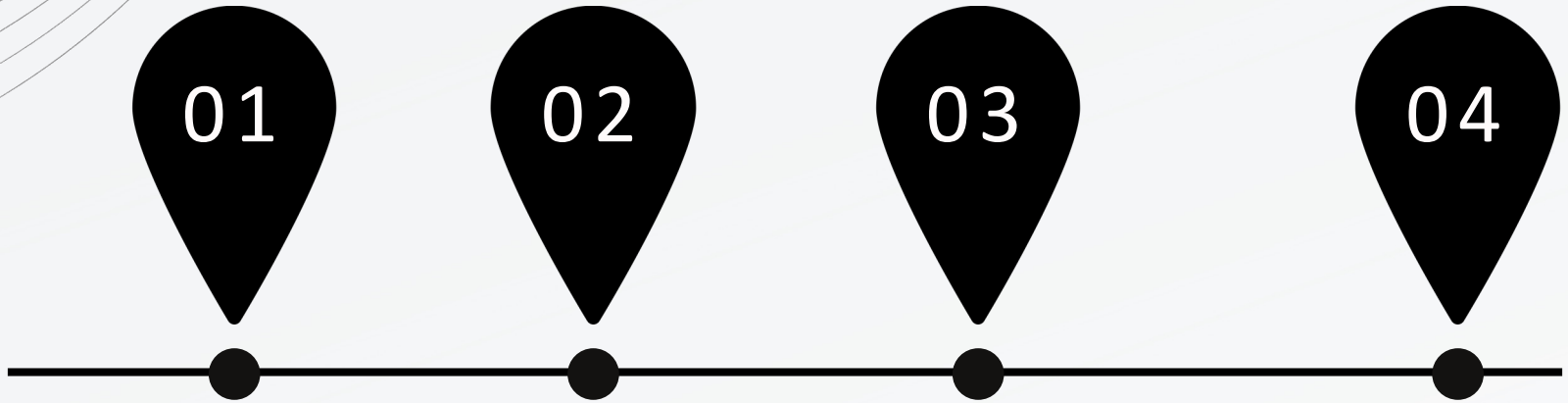
Your transaction request ***Re: Send 1 TEST to doanhduc2002.lequydon@gmail.com*** has been completed in this transaction. Thank you for using Email Wallet!

View Wallet on Explorer
Check the transaction

Good luck!
Powered by ZK Email


ZKPROOF
Prover
Relayer sends email to prover to create proof
(3)
Prover sends proof to relayer
(4)
SMTP server
Relayer receives email
(1)
Relayer
Relayer executes the transaction on-chain
(5)
Contract
SMTP server
create account for new user if not exists
(2)
Database

PROJECT TIMELINE



NOW

EMAIL - E2E

By using Maillu.
we have an email e2e

IN DEVERLOPING

EMAIL- WALLET
Working on Sepolia

IN DEVELOPING

EMAIL-WALLET on OP

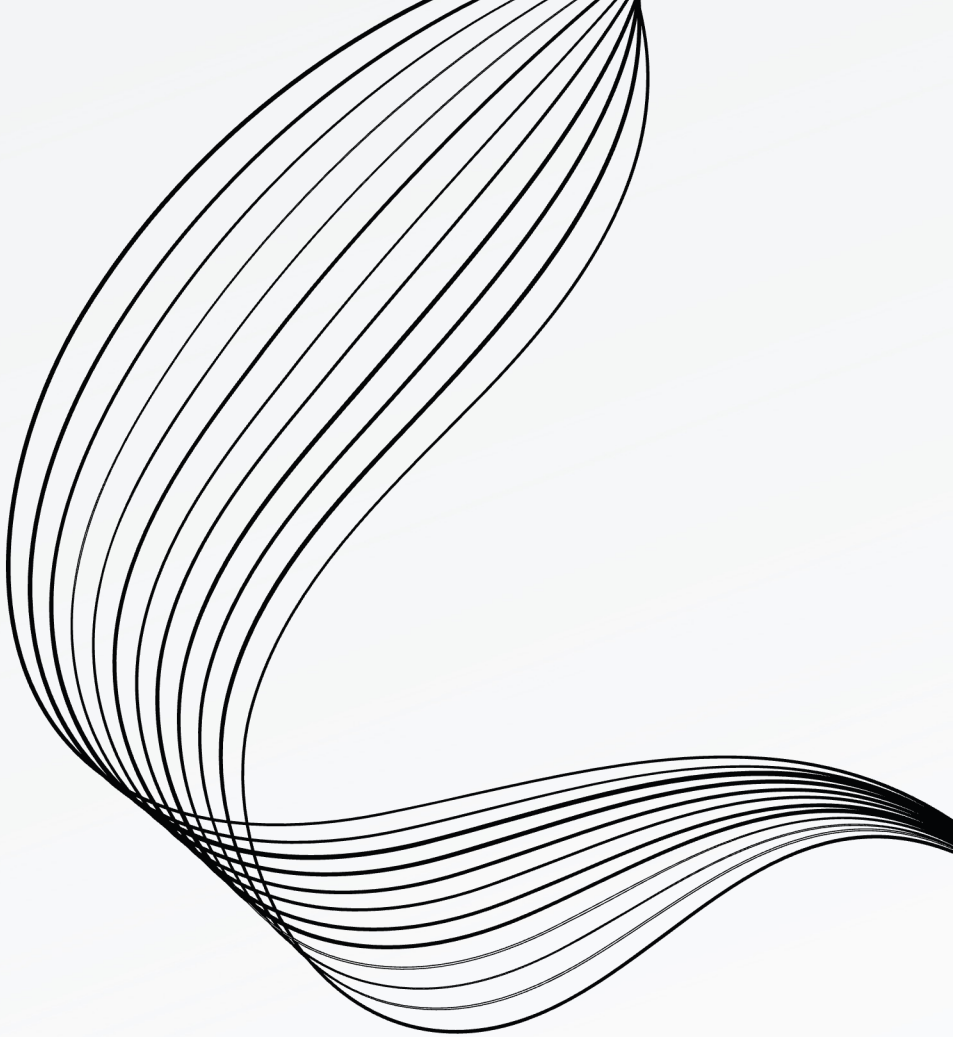
to interact with handshake SmartContracts

MESSAGING APP

EASY

- to interact with web3.
- to protect your transaction info.

THANK'S FOR WATCHING



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ONCHAIN NAMES AND IDENTITY

3RD PRIZE

15.000.000 VND

Topic: "Building secured Email system"

0xDeAd Team

0XDEAD EMAIL SYSTEM

Team: OxDeAd

CONTENT

01 PREFACE

02 ARCHITECTURE

03 DECENTRALIZATION

04 ENCRYPTION

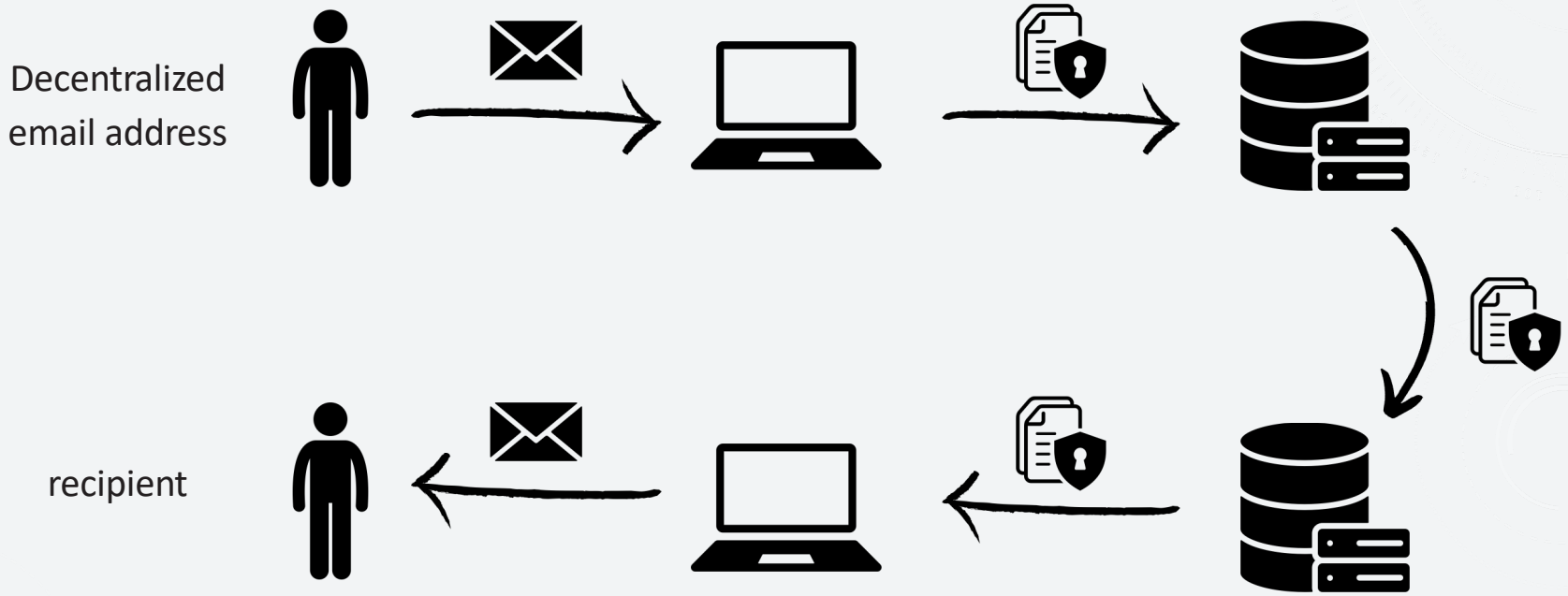
05 FEATURES

06 DEMO

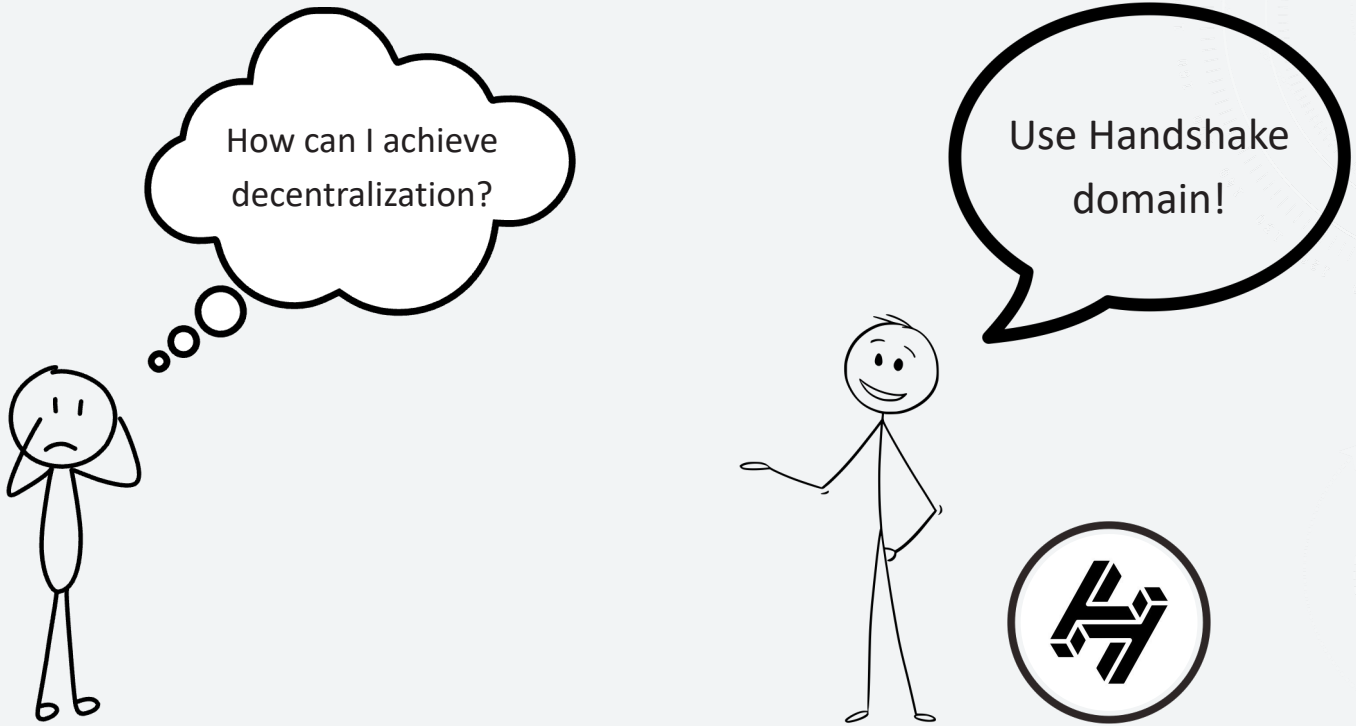
PREFACE

1. Lack robust encryption
2. Centralized control
3. Surveillance

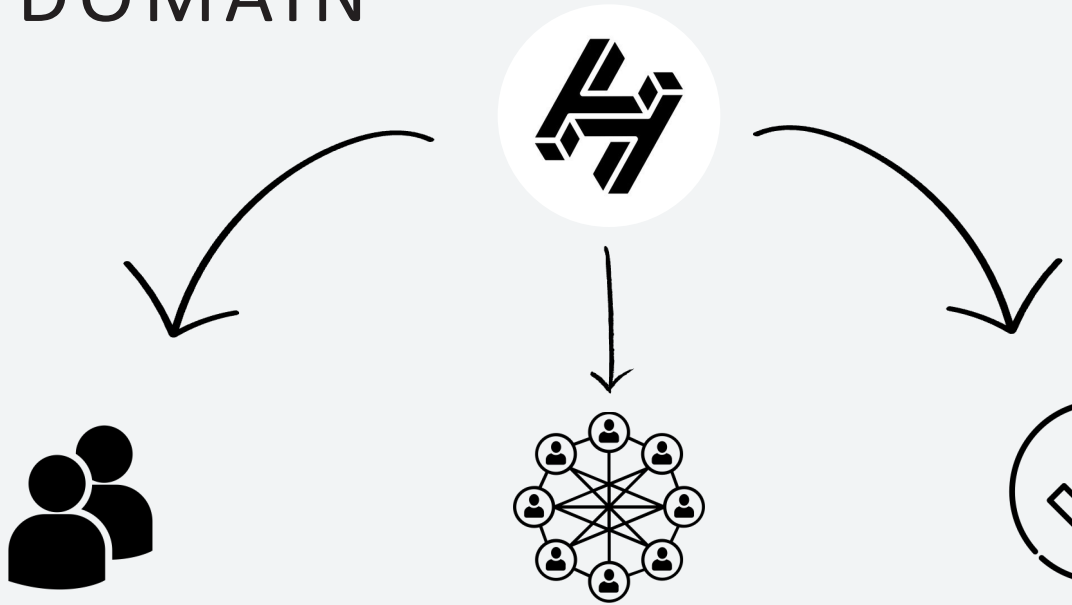
ARCHITECTURE



DECENTRALIZATION



HANDSHAKE DOMAIN



NAMING PROTOCOL (TLD)

DECENTRALIZED

PERMISSIONLESS

DNS RESOLUTION

HNSD

Fingertip

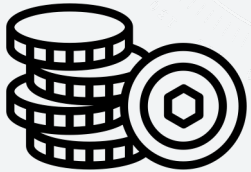
ENCRYPTION

E2E encryption

OUR PRODUCT FEATURES

SEND/RECEIVE
ENCRYPTED EMAILS

SOCIAL
NETWORK



EMAIL
WALLET

SEND/RECEIVE EMAILS

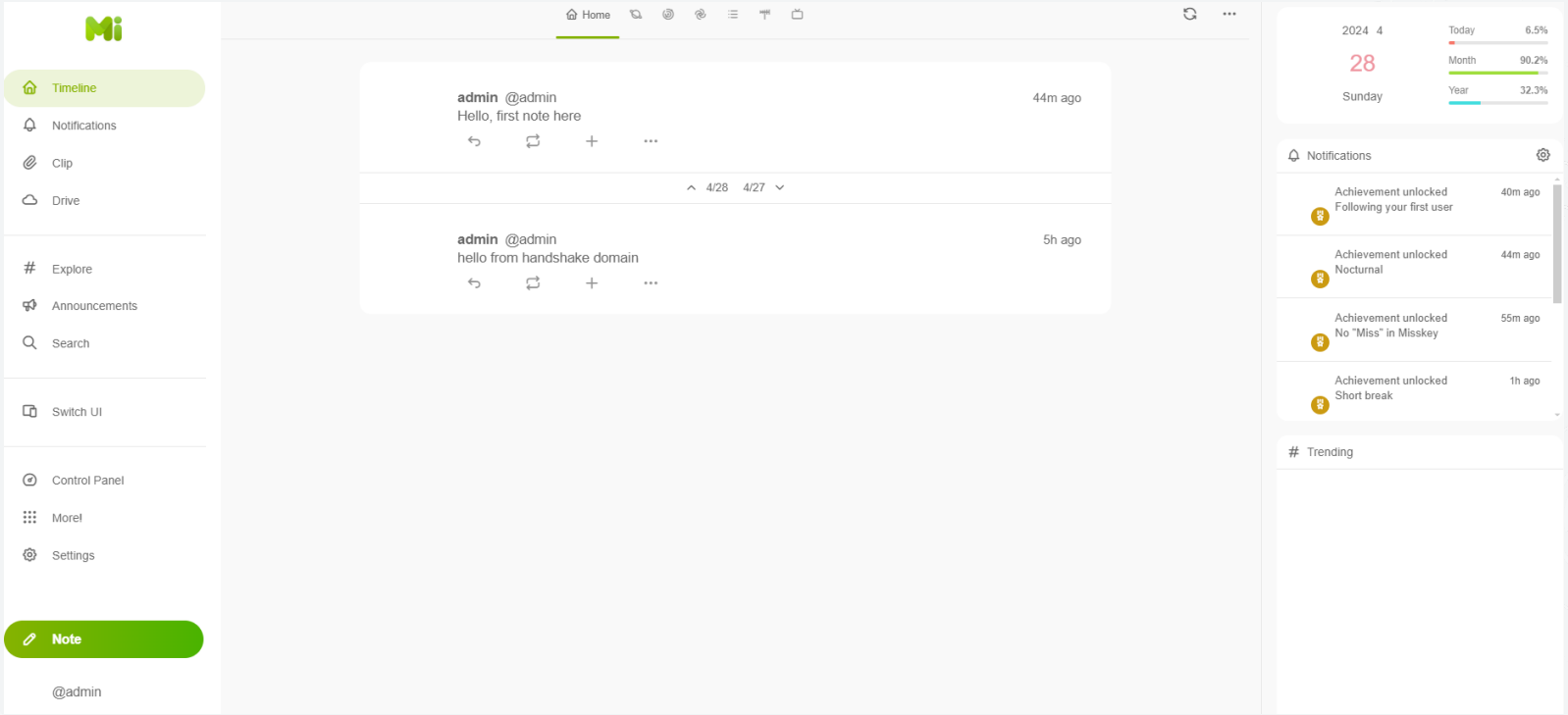
- 0xDeAd: a mail server using Handshake domain.
- Mails transferring using Handshake email addresses.
- Users can choose to encrypt their emails with some encryption steps.

SOCIAL NETWORK

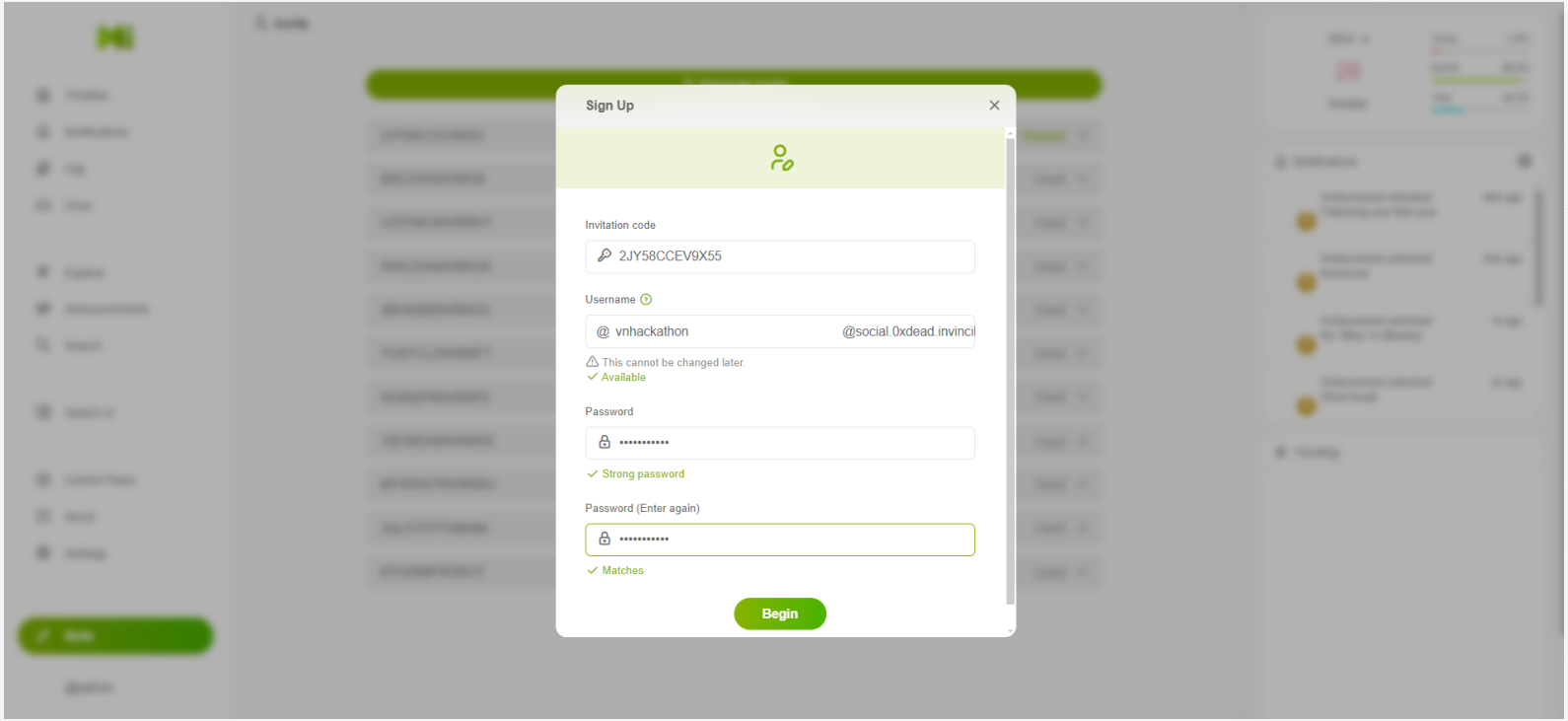
- Use your Handshake email to log in the social network.

- Features like normal social networks: Twitter, Facebook,...

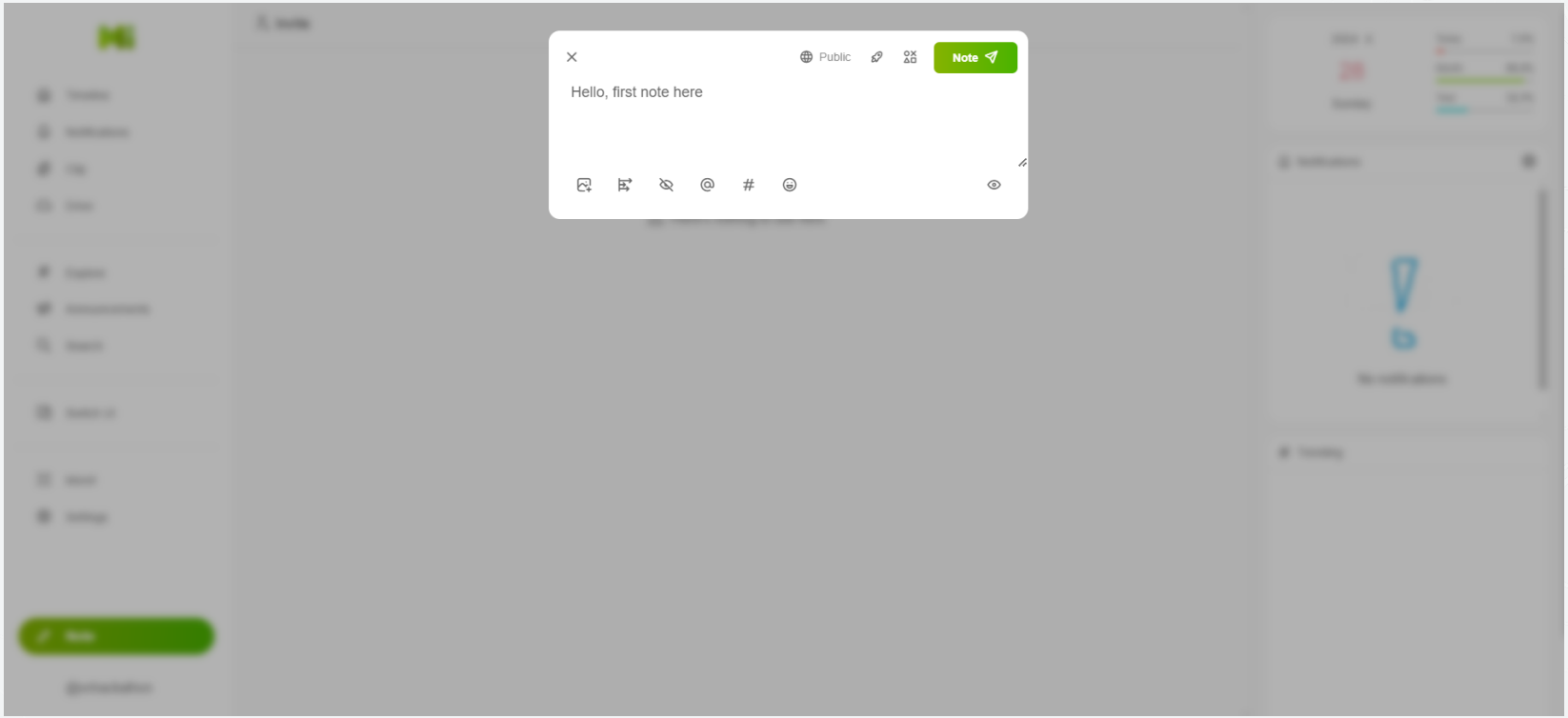
WEB INTERFACE



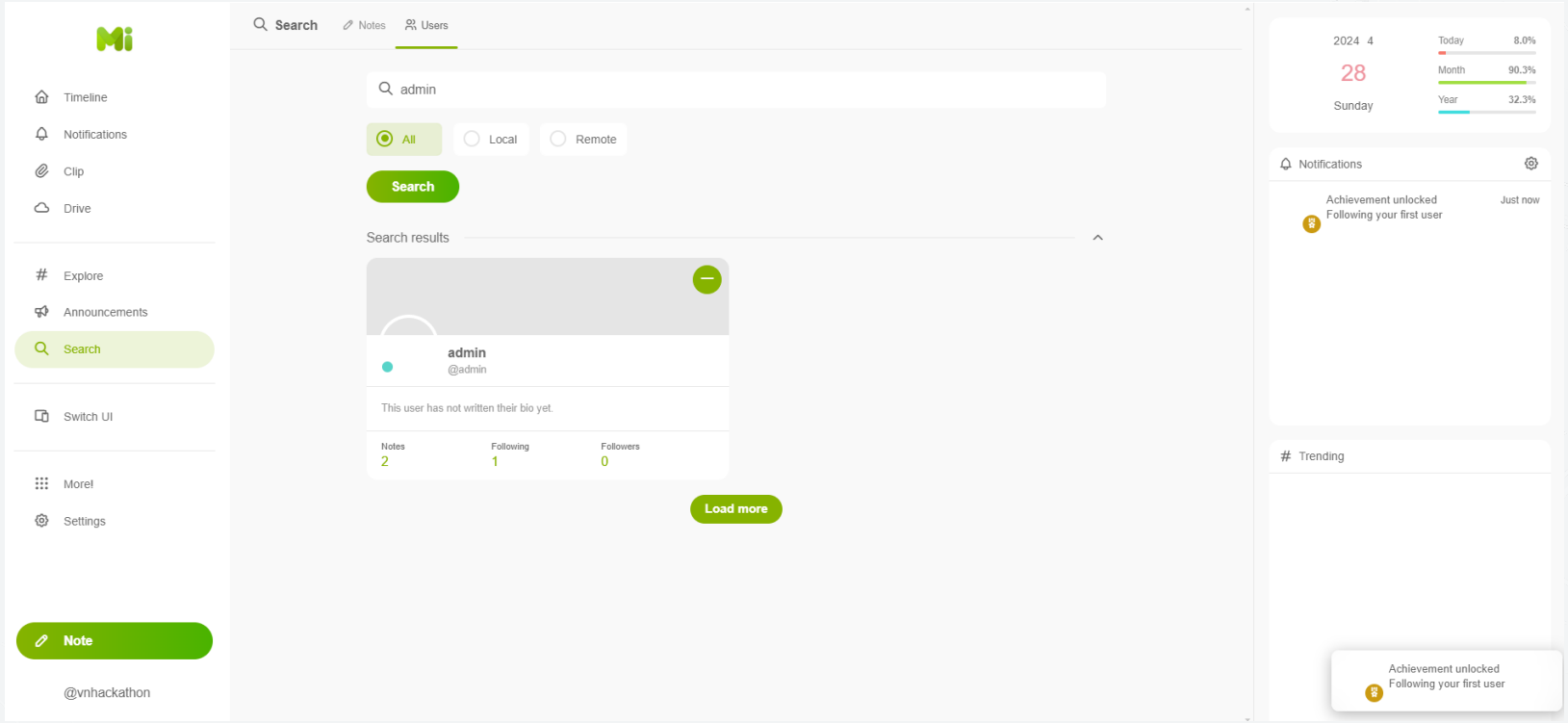
ACCOUNT REGISTRATION



POST A NOTE



FOLLOW USERS

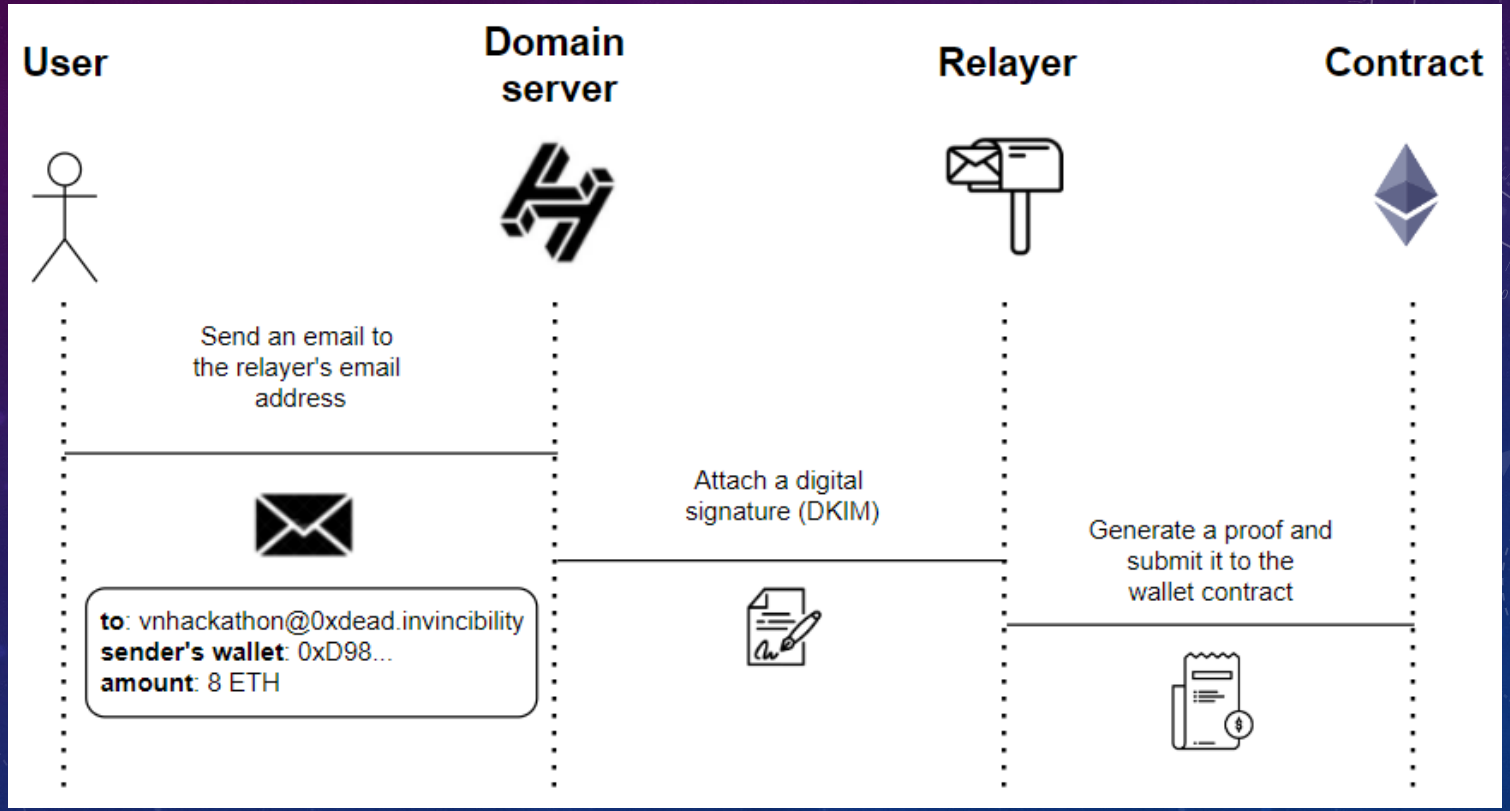


EMAIL WALLET

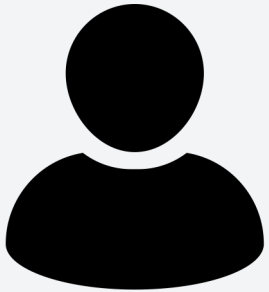
- Enable users to send tokens using recipient email instead of verbose wallet address.

- Leverage ZKP, use Bonsai network and RISC Zero zkEVM.

System Architecture



Sender



Log into mail address, connect wallet

Recipient mail address

Token amount

0xDeAd Pay

powered by 0xDeAd

0xD982••••1758

Send Claim

Send

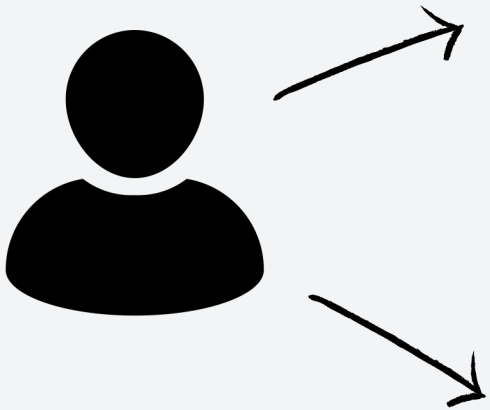
khoikhtn2109@oxdead.invi

5 ETH

Send

Only accounts with HNS are supported.

Recipient



Log in mail address

Choose wallet to receive tokens

0xDeAd Pay

powered by 0xDeAd

0xD982••••1758

Send Claim

1: Connect Wallet **2: Sign In** 3: Prove & Claim

Sign in to your account

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HACKATHON

ONCHAIN NAMES AND IDENTITY

4TH PRIZE

5.000.000 VND

Topic: "Building secured Email system"

Code La Bug Team

DOMAIL
PROTOTYPE & DEMO

Presentator: Hieu Minh Le - CLB Team

CONTENTS

1. Our Expectation
2. Ideas
3. Prototype
4. What have we done ?
5. What’s next ?

OUR VERY FIRST EXPECTATIONS

Secured

Useful

Decentrialized

BUT,

How can the service be completely independent ?

How can we make sure the data is safe all the time ?

How the heck can it be both but still user-friendly ?

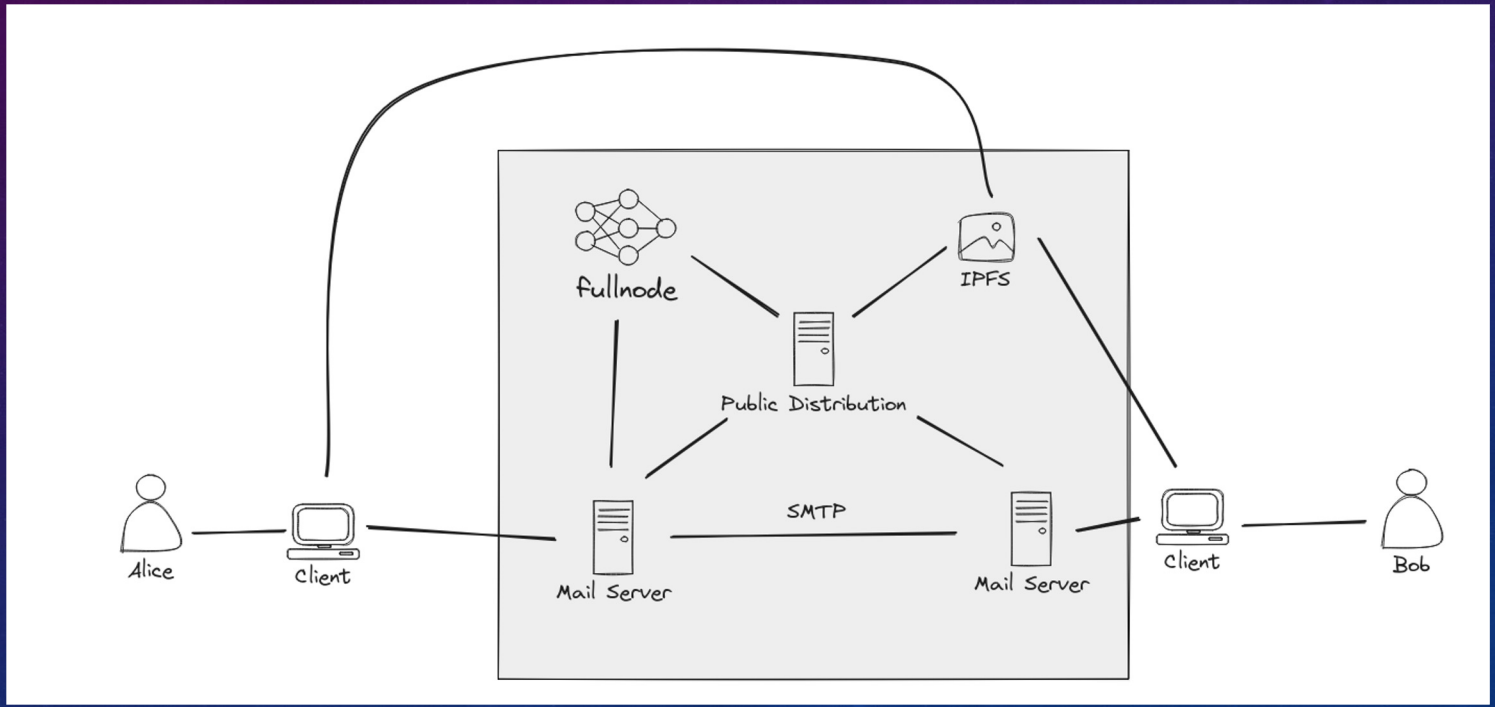
etc...

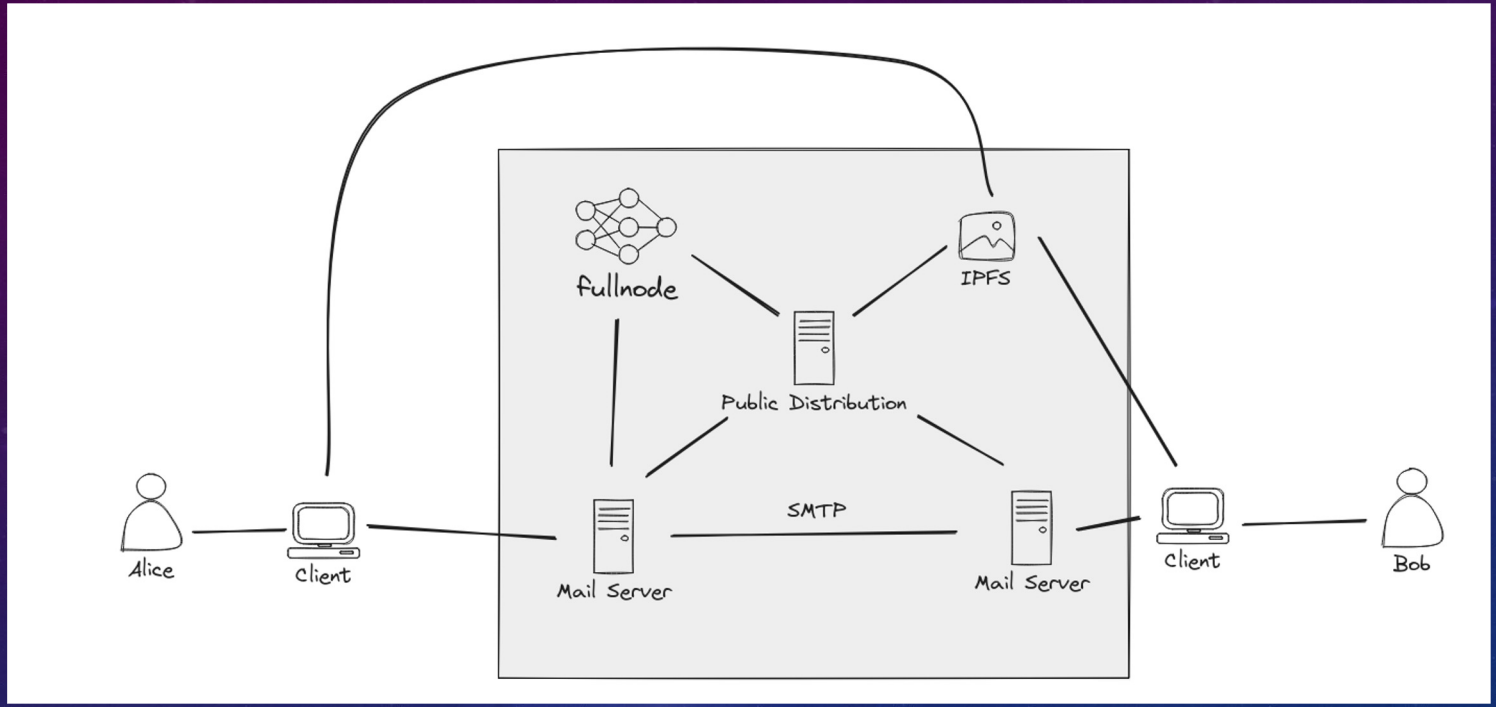
SO WHAT WERE THE IDEAS ?

A server which does authen, transfer, backup all based on blockchain.

A client which does encryption, encryption, encrytion

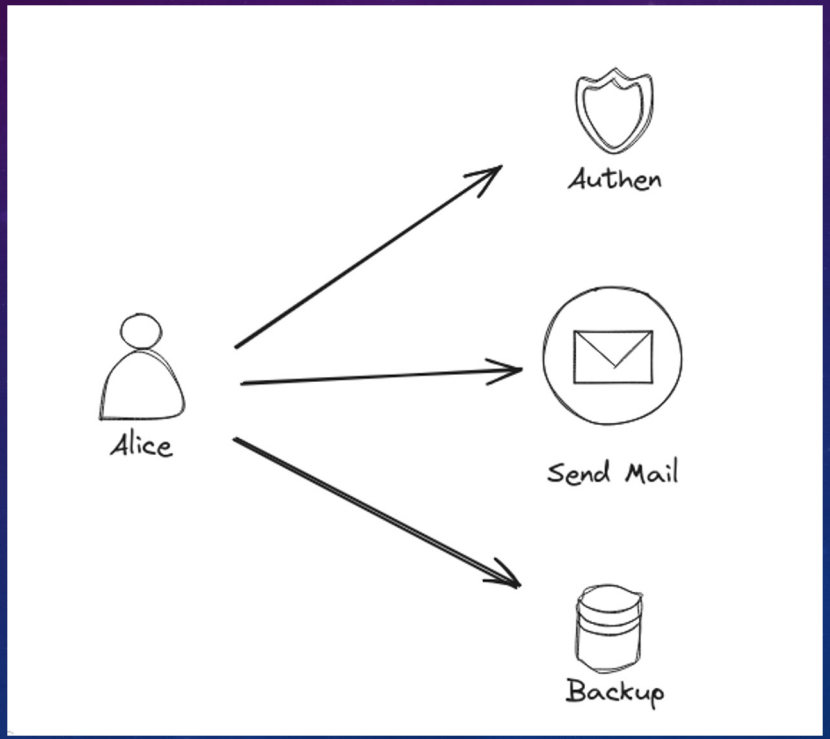
PROTOTYPE


fullnode
IPFS
Public Distribution
Alice
Client
SMTP
Mail Server
Mail Server
Client
Bob

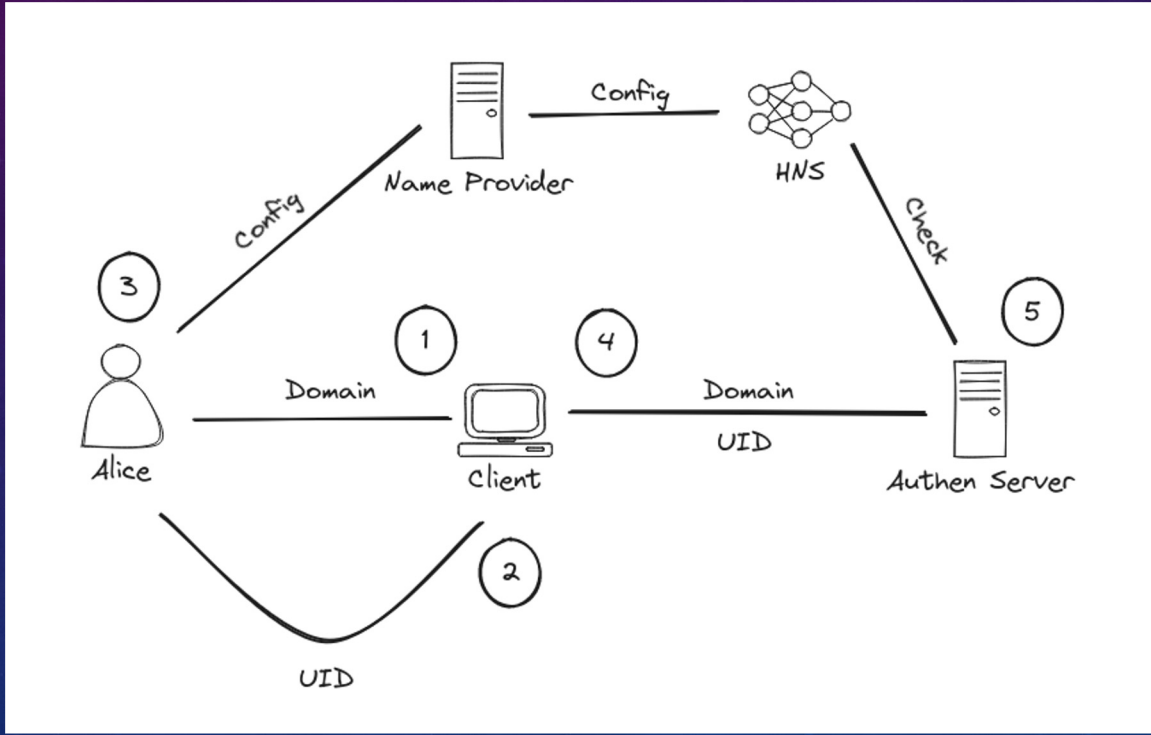


All encryptions and decryptions happen in client

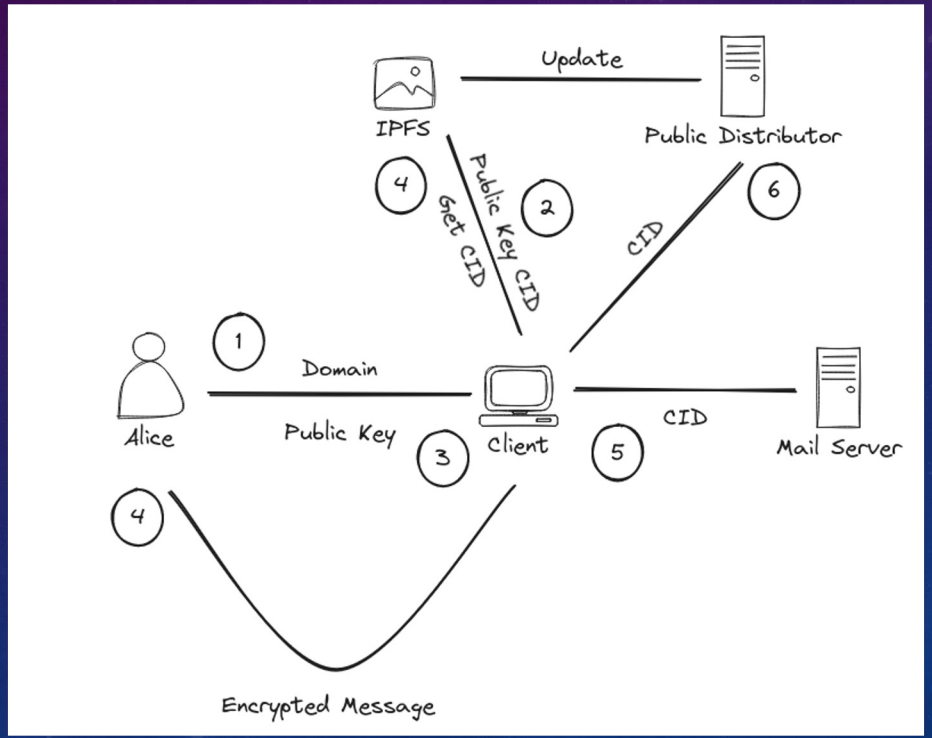
Let’s dive deeper!



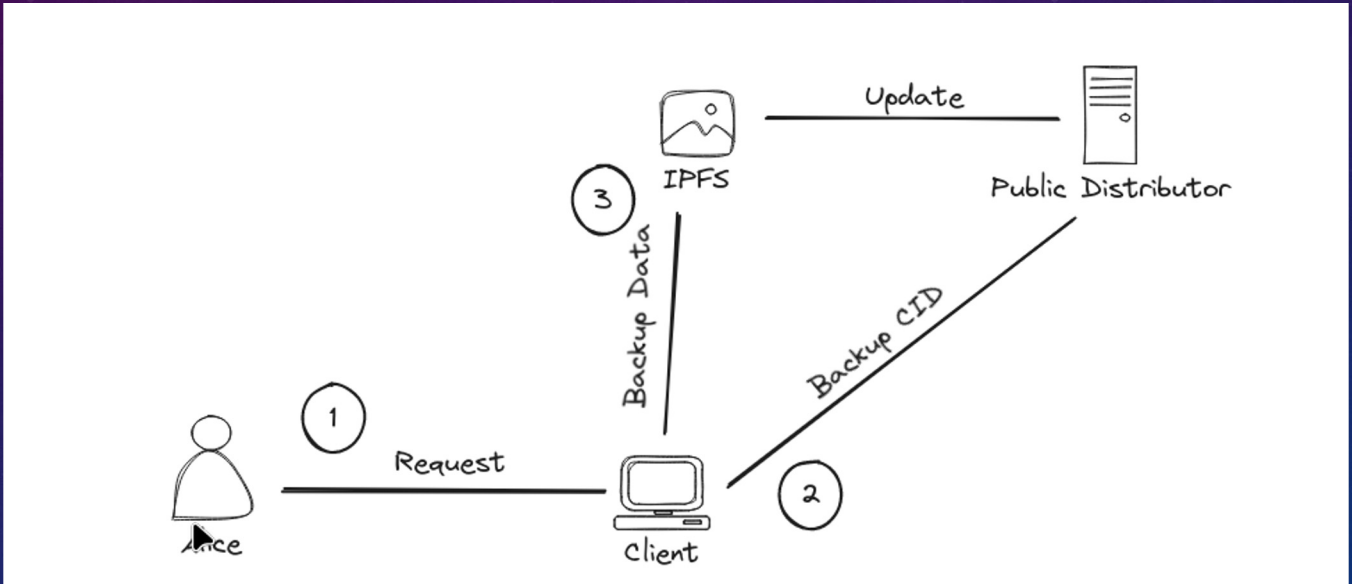
Authen service



Send Mail


Update
IPFS
Public Distributor
4
Public Key CID
Get CID
2
CID
6
1
Domain
Alice
Public Key
3
Client
5
CID
Mail Server
4
Encrypted Message

Backup


Update
IPFS
Public Distributor
3
Backup Data
Backup CID
1
Request
2
Client

WHAT HAVE WE ARCHIEVED ?

WHAT'S NEXT ?

Fully Decentrialized

Config Service

THANK YOU FOR LISTENING

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GOLD SPONSOR

namebase TS29

SILVER SPONSOR

LoadPipe dWeb Foundation SkyInclude

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HACKATHON

ONCHAIN NAMES AND IDENTITY

1ST PRIZE

25.000.000 VND

Topic: "SocialFi Apps & Footnote & Identity-eKYC"

Bluess Team

BlueSe - DAO integrated with ENS domain

Bluess Team

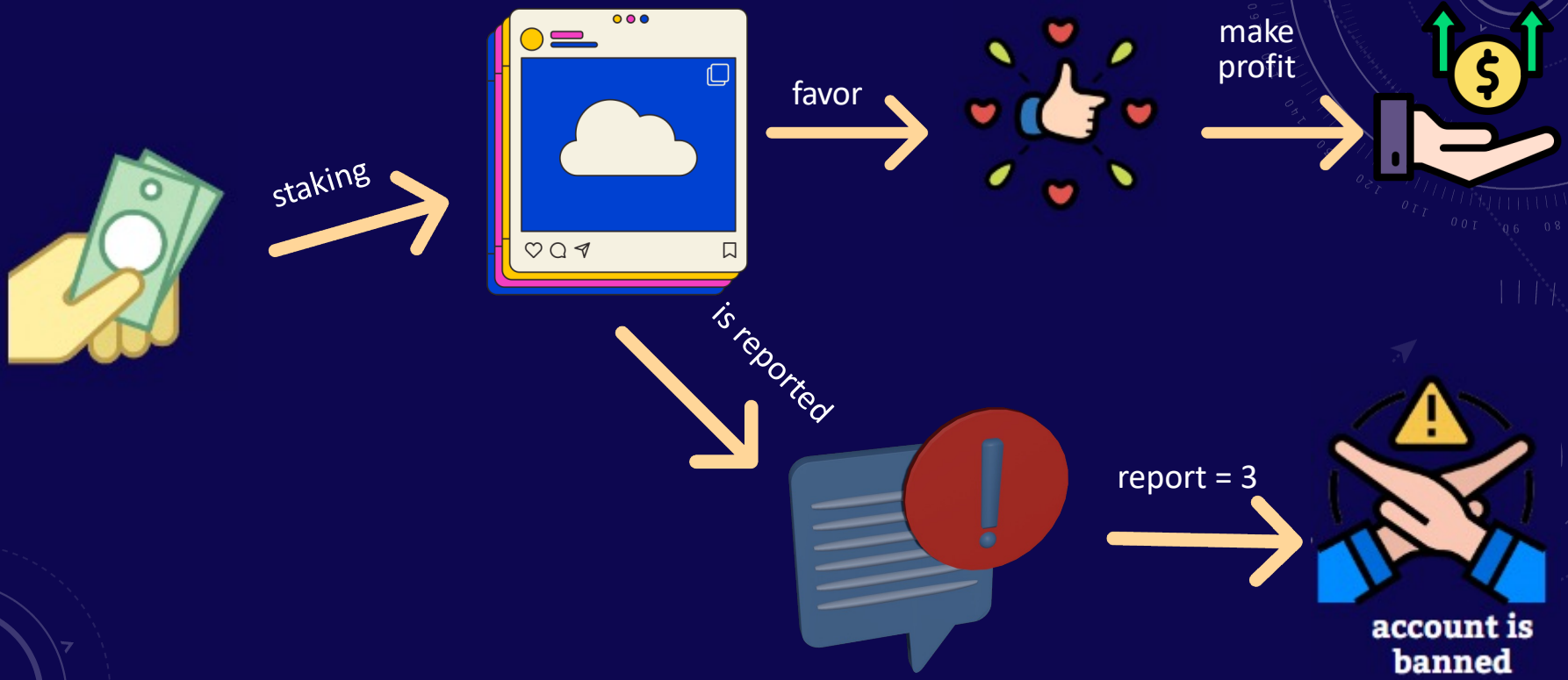
Problem

The current security level of social networking platforms is not enough to ensure the security of users' personal information. This creates indirect opportunities for hackers to commit illegal acts such as infiltrating and stealing our information for the purpose of illegal use.

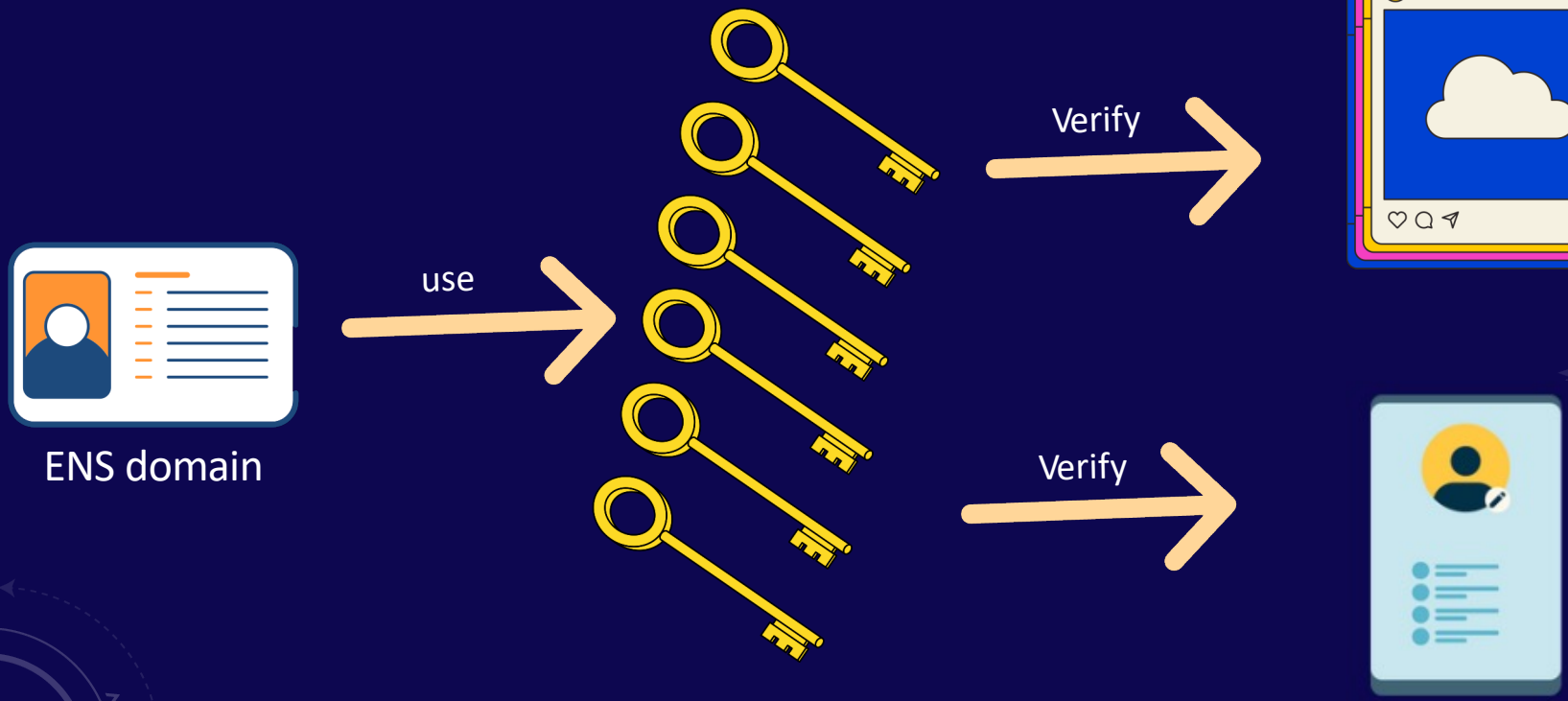
Solution

- Integrate Blockchain with social networking applications to increase security and transparency in protecting personal information
- Integrate ENS domain to turn hard-to-read data strings into easy-to-read addresses, creating convenience for activities and interactions between users on BlueSe
- Integrate staking fee mechanism in interactive activities on BlueSe
- Integrate Secret key cluster associated with ENS name to increase security in accessing and interacting on BlueSe

Integrate staking fee mechanism



Integrate Secret key cluster



Comparison to other Social Daos

	Secret key cluster	Integrated ENS domain	Integrated Blockchain	Integrated Staking Fee
BlueSe	✓	✓	✓	✓
Boredapeya chtclub	✗	✗	✓	✗
Seedclub	✗	✗	✓	✗

My product feature

01

Using 6 secret key to edit profile

02

Using 6 secret key to create post

03

Like/Quit like post

04

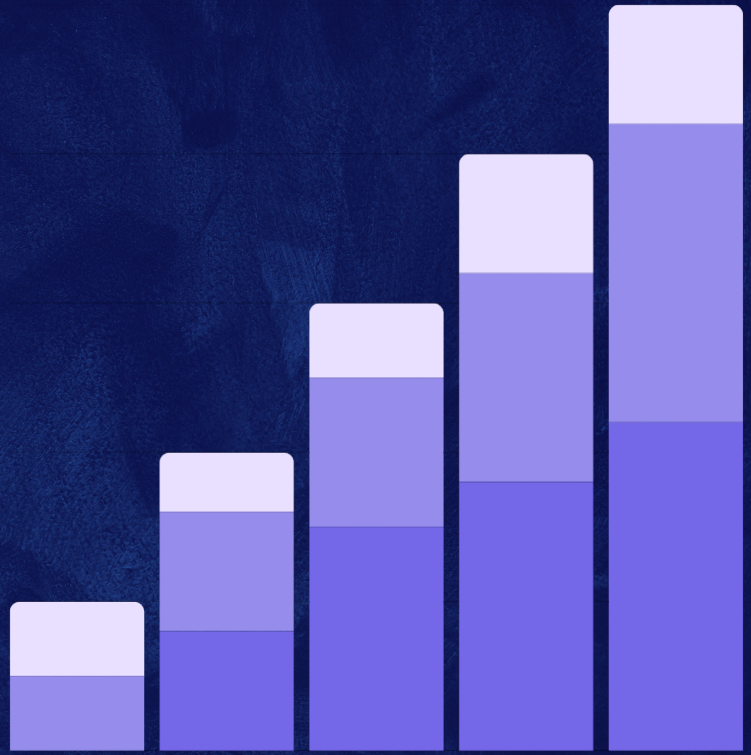
Comment and report post

05

Add Friends

Business

- Profit from transaction fees in interactive way
- Profit from selling premium packages
- Profit from staking fee



Thank you for watching!

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VIETNAM

HACKATHON

ONCHAIN NAMES AND IDENTITY

3RD PRIZE

5.000.000 VND

Topic: “SocialFi Apps & Footnote & Identity-eKYC”

Tech Tack Team

TECHTACK

HEARING BUNDLES

Document bundling at its best!

TEAM INFORMATION

Team name

TECHTACK

Team member information

- Ngo Tuan Anh (Team leader)
- Truong Tan Thanh
- Vo Tin Du
- Tran Chien Thang

Contact

tuananhngo.contact@gmail.com
+84 931 681 164

Table of contents

1 PAIN POINTS

2 SOLUTIONS

3 KEY FEATURES

5 DESIGN OVERVIEW

PAIN POINTS

Ensure document integrity

THE PROBLEM IS THAT DOCUMENTS CAN BE EDITED BY WEBSITE ADMINISTRATORS OR HACKERS.

Disorganization Dilemma

EVER FELT THE FRUSTRATION OF HUNTING THROUGH SCATTERED DOCUMENTS FROM DIFFERENT SOURCES, STRUGGLING TO PIECE TOGETHER A COHERENT BUNDLE?

Clock Ticking Loudly

PICTURE THE NERVE-WRACKING EXPERIENCE OF MANUALLY BUNDLING DOCUMENTS, EACH PASSING SECOND AMPLIFYING THE PRESSURE AS DEADLINES LOOM.

Lonely Battle

IMAGINE THE ISOLATION OF WRESTLING WITH DOCUMENT PREPARATION, THE LACK OF SEAMLESS COLLABORATION MAKING EVERY STEP FEEL LIKE AN UPHILL BATTLE.

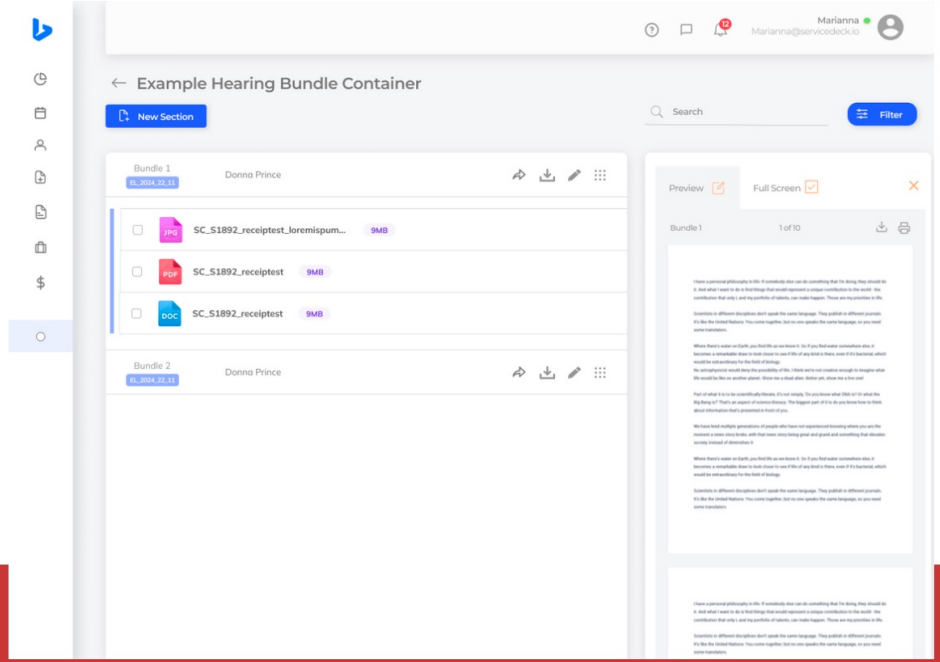
Our Solution - Seamless document bundling

HEARING BUNDLES

OVERVIEW

HEARING BUNDLES REVOLUTIONIZES THE WAY YOU HANDLE DOCUMENTS. IT'S A CUTTING-EDGE SOLUTION DESIGNED FOR SEAMLESS DOCUMENT BUNDLING, ENSURING EFFICIENCY, ORGANIZATION, AND SIMPLICITY.

WITH **HEARING BUNDLES**, YOU CAN TRANSFORM A CHAOTIC COLLECTION OF DOCUMENTS FROM VARIOUS SOURCES INTO A METICULOUSLY ORGANIZED AND STRUCTURED BOOKLET IN A MATTER OF MINUTES.



KEY FEATURES

DOCUMENT BUNDLING

Gather documents from diverse sources effortlessly, eliminating the hassle of dealing with scattered files.

QUICK ORGANIZATION

Experience the power of rapid organization, where documents are neatly numbered, indexed, and sectioned, saving you valuable time.

VERSIONS CONTROL

Handle documents of any size with version control, tracking changes and updates efficiently.

EKYC

Handle documents of any size with ease, using eKYC to authenticate the identity of document editors.

INSTANT READINESS

Once bundled, your documents are instantly ready for saving, sharing, or printing, ensuring prompt action on your part.

BLOCKCHAIN

Once documents have been merged together, with blockchain technology the documents cannot be edited by anyone in the system.

DESIGN OVERVIEW

1. Architecture & Technology

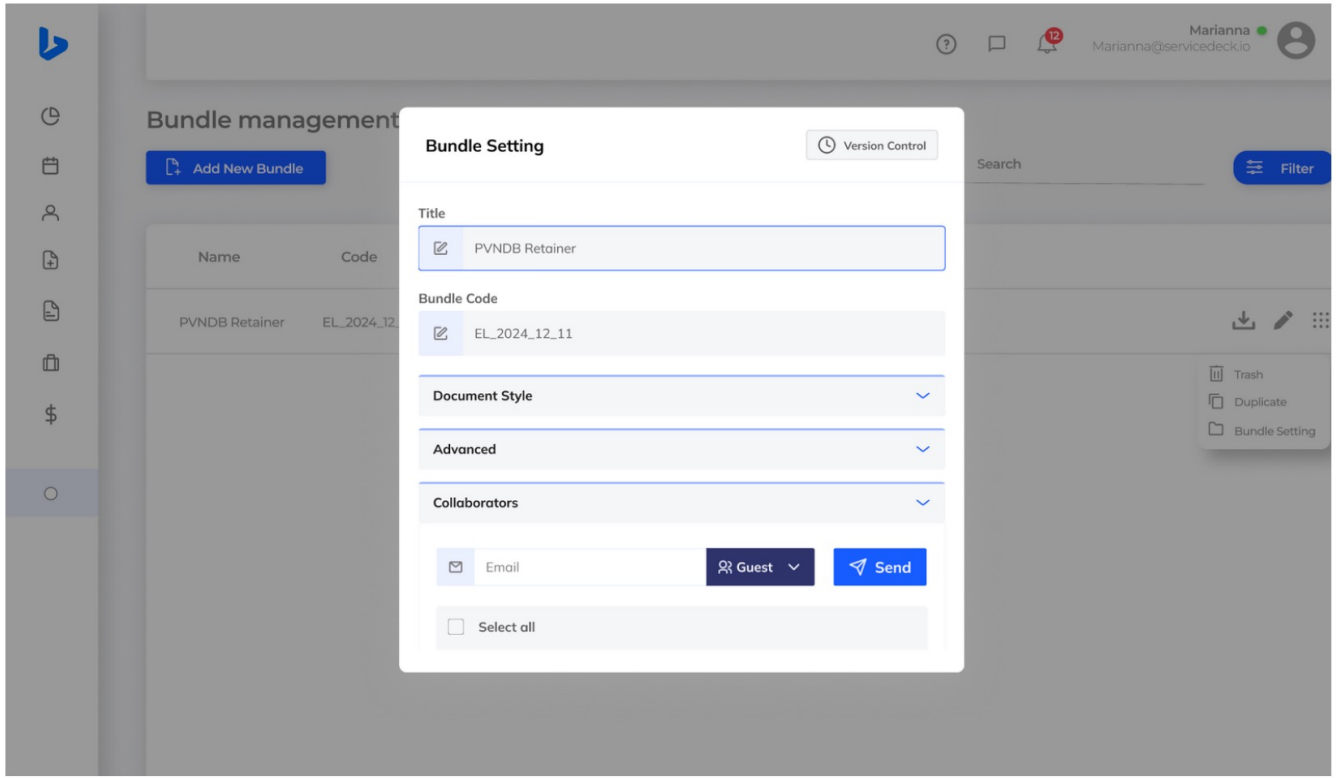
2. UI Demo

1. ARCHITECTURE & TECHNOLOGY

To create a Web3 application, we plan to use a few of the following technologies:

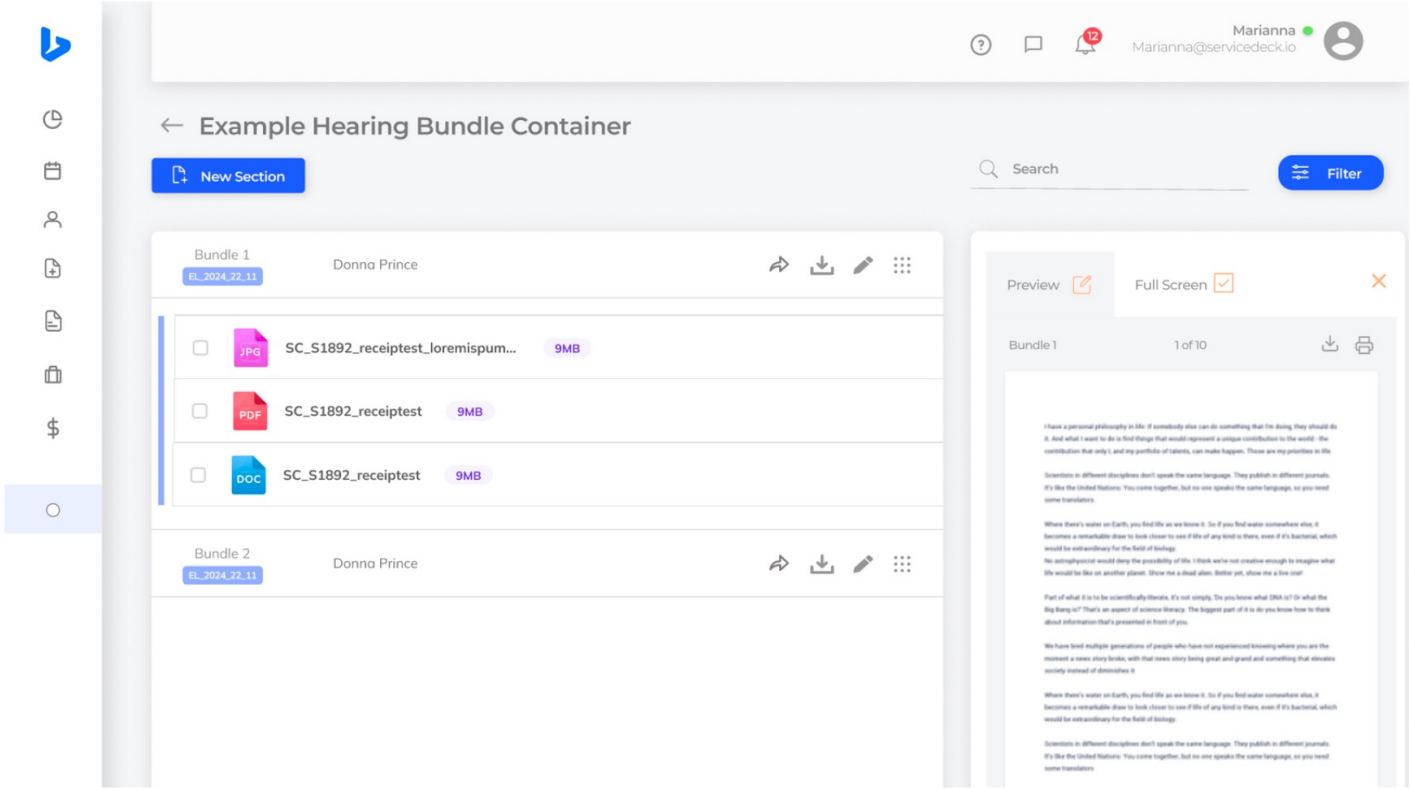
- NextJS, Web3.js, Redux, MUI to build the user interface
- Python, NodeJS to handle backend tasks
- To handle blockchain related tasks: Solidity, ORC, Handshake domain, etc...

2. DEMO



Demo Screen

2. DEMO



Demo Screen

THANK YOU