MAKE ANONYMOUS PAYMENT WITH CRYPTO

submitted by

GOPINATHAN A R (1P20MC015)

in partial fulfillment of the requirements for the award of the Degree of

Master of Computer Applications from Bharathiar University, Coimbatore.

under the internal supervision of

Dr. G. Pandiyan, M.Sc., M.Phil., B.Ed., Ph.D.,

Associate Professor

School of Computer Studies,

Department of MCA

Rathnavel Subramaniam College of Arts and Science (Autonomous),

Sulur, Coimbatore – 641 402.

July 2021 - November 2021.

RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS AND SCIENCE

(AUTONOMOUS)

Sulur, Coimbatore-641 402

Department of Computer Applications (MCA)

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This is to certify that this a *bona fide* record of work done by Mr / Ms .....……..

Register No. …..... during the academic year 2021 - 2022 and submitted for the End Semester Project viva voce held on …….

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INTERNAL EXAMINER **EXTERNAL EXAMINER**

Certificate

CERTIFICATE

This is to certify that the dissertation entitled **MAKE ANONYMOUS PAYMENT WITH CRYPTO**, submitted to the School of Computer Studies, Rathnavel Subramaniam College of Arts and Science in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications is a record of original project work done by **GOPINATHAN A R** during the period July 2021- November 2021 of their study on MCA in the Rathnavel Subramaniam College of Arts and Science, under my internal supervision and the dissertation has not formed the basis for the award of any Degree/Diploma/Associate ship/Fellowship or other similar title to any candidate of any University.

Internal Supervisor

Declaration

DECLARATION

We, **GOPINATHAN A R**, hereby declare that the dissertation, entitled **MAKE ANONYMOUS PAYMENT WITH CRYPTO**, submitted to the School of Computer Studies, Rathnavel Subramaniam College of Arts and Science, in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications is a record of original project work done by we during the period July 2021 – November 2021 under the internal supervision of **Dr. G. Pandiyan, Associate Professor**, Department of Computer Applications and it has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or other similar title to any candidate of any University.

Signature of the Candidate

Acknowledgements

ACKNOWLEDGEMENTS

We express our sincere thanks to our Managing trustee **Dr. K. Senthil Ganesh MBA (USA)., MS (UK)., Ph.D.,** for providing us with the adequate of faculty and laboratory resources for completing my project successfully.

We take this as a fine opportunity to express our sincere thanks to **Dr. T. Sivakumar M.Sc., M. Phil., Ph.D., Principal,** Rathnavel Subramaniam College of Arts and Science (Autonomous) for giving me the opportunity to undertake this project.

We express our sincere thanks to **Dr. D. Francis Xavier Christopher., M.Sc. (CS)., M.Phil., Ph.D., Director (Administration), Department of Computer Science** for the help and advice throughout the project.

We express our sincere thanks to **Dr. S. Yamini., M. Sc (CC)., M. Phil., Ph.D., Director (Academic), Department of Computer Science** for her valuable guidance and prompt correspondence throughout the curriculum to complete the project.

We express our sincere thanks to **Mrs. C. Grace Padma., MCA., M.Phil., MBA., Head of the Department** for her support and advice throughout the project.

We express our gratitude to **Dr. G. Pandiyan, M.Sc., M.Phil., B.Ed., Ph.D.,** for his valuable guidance, support, encouragement and motivation rendered by his throughout this project.

Finally, We express our sincere thanks to all other staff members and my dear friends, and all dear and near for helping me to complete this project.

GOPINATHAN A R

MAKE ANONYMOUS PAYMENT WITH CRYPTO

Abstract

ABSTRACT

Cryptocurrencies have emerged as important financial software systems. They rely on a secure distributed ledger data structure. Cryptocurrencies lack a central authority to mediate transactions because they were designed as peer-to-peer systems. Cryptocurrency, and Bitcoin especially, has a reputation for being a completely anonymous form of payment, free from tracking and interference. This project presents extensive process of transfer, receive and earn cryptocurrencies anonymously.

Frontend Tools/ Technology: Flutter

Backend / Database Technology: Firebase

Website link:

Mobile App link:

Git repository link: https://github.com/GOPINATHAN-AR/case_study.git

INDEX

Introduction

INTRODUCTION

The project objective is to deliver the make anonymous payment with crypto currencies into ANDROID and IOS platform. This project was made for a client, it is an online money transfer system with anonymously. A cryptocurrency is a form of digital asset based on a network that is distributed across a large number of computers. Now a days most of the people want to make their crypto payment via smartphones. So, we are developed these applications. Experts believe that blockchain and related technology will disrupt many industries, including finance and law. The advantages of cryptocurrencies include cheaper and faster money transfers and decentralized systems that do not collapse at a single point of failure.

This project is not only for transfer and receive cryptocurrencies. We are added some interesting features to earn small to large number of crypto currencies. You can store your points and crypto with your online wallet with plaid integration.

Plaid is a financial services company based in San Francisco, California. ... It allows consumers and businesses to interact with their bank accounts, check balances, and make payments through different financial technology applications.

Before I mentioned some interesting features to earn crypto's, that's not only earning, you can create or participate with an event like walking and running. Whenever who complete the event first, they can win the particular event crypto.

We are not predicting your steps. we are counting your steps with Google fit and Apple HealthKit. So, the user can check their status with their application or their fitness account.

Module Description

MODULE DESCRIPTION

Create wallet

User can create their account here with unique twelve digit of words and that's called seed and also copied to user's clipboard, they can store that seed in a save place for import.

Import wallet

If user already have an account, they can import their account here with their unique seed.

Send

User can transfer their crypto to another person with entering or scanning their unique address.

Receive

User can receive crypto from another person with displaying or share their unique address.

Earn

User can connect plaid wallet from here to manage their crypto with particular account.

Transaction

User can check the transaction details here.

Create challenges

User can create a challenges and host that challenges from here.

Recent winners

User can saw who win recently in challenges, it can display all kind of challenges.

Join challenges

User can saw number of available challenges and join a one or more challenges from here.

My challenges

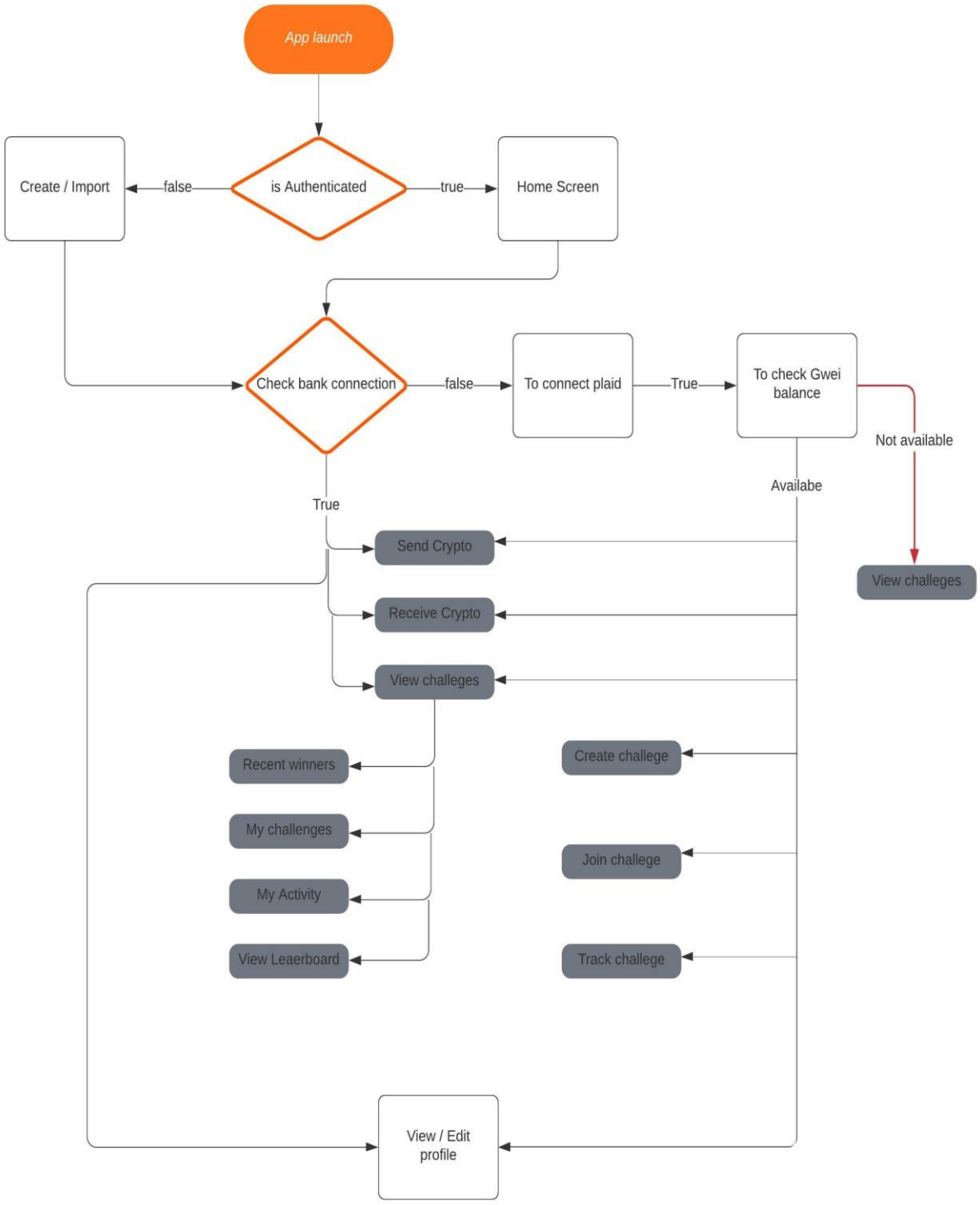
User can check how many challenges created themselves and check that current status.

Leaderboard

User can saw who is the leading in all challenges and their details here.

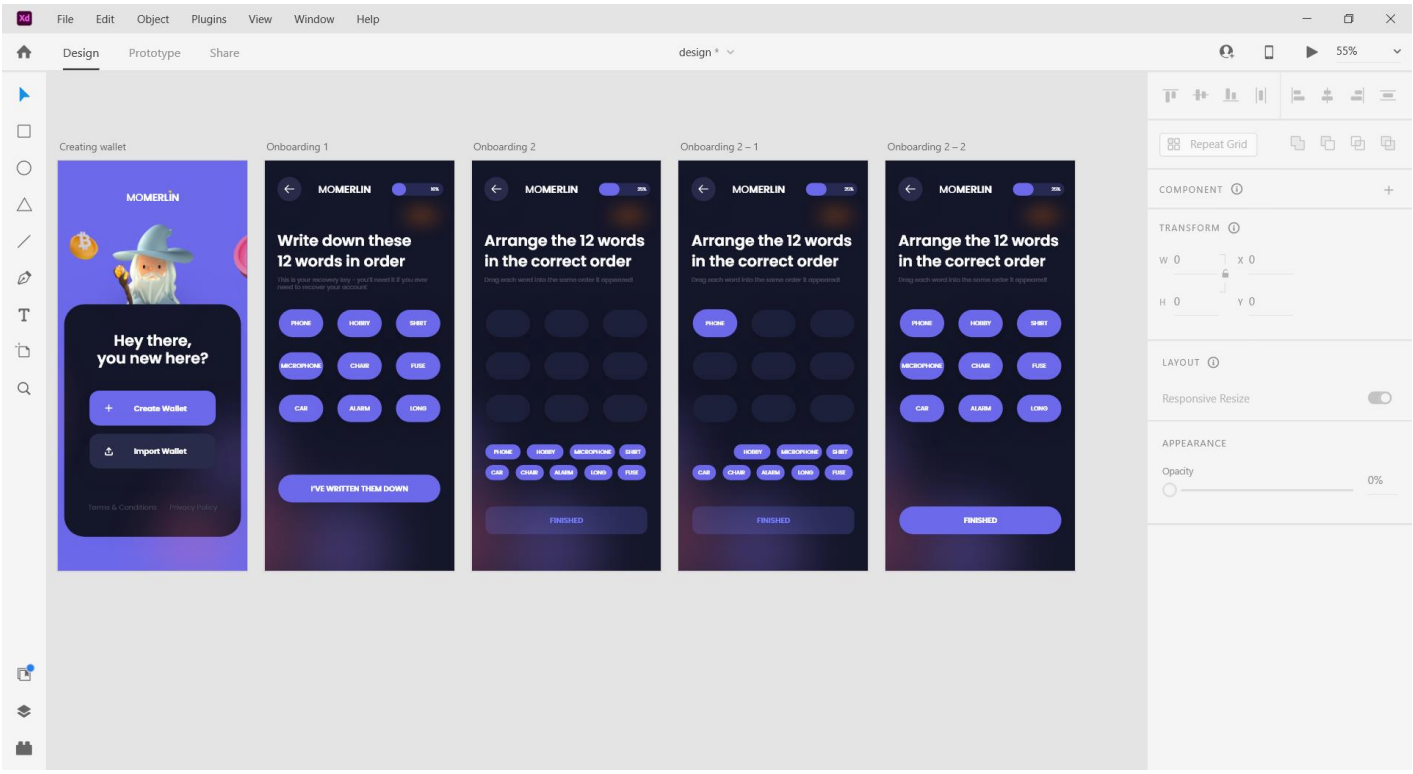
Use cases diagrams

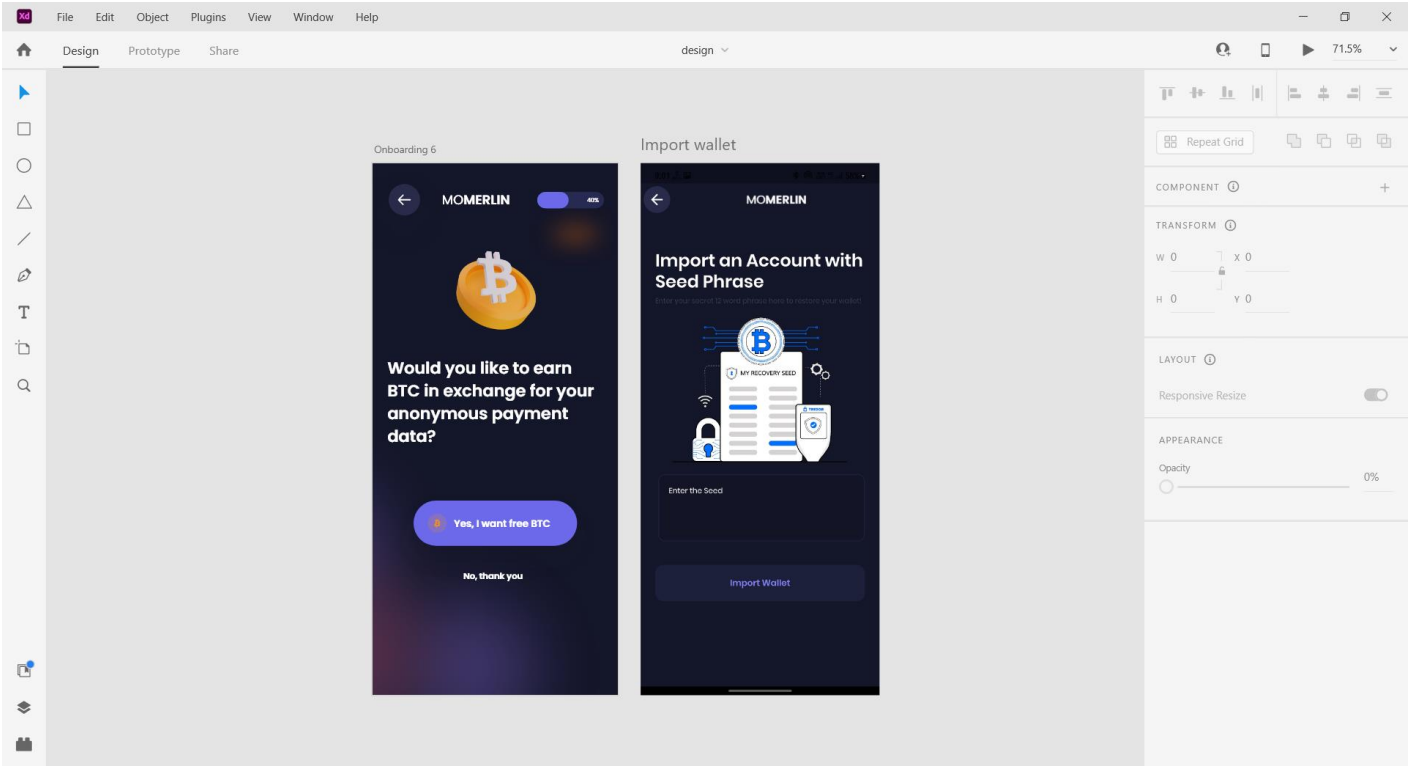
USE CASES DIAGRAM

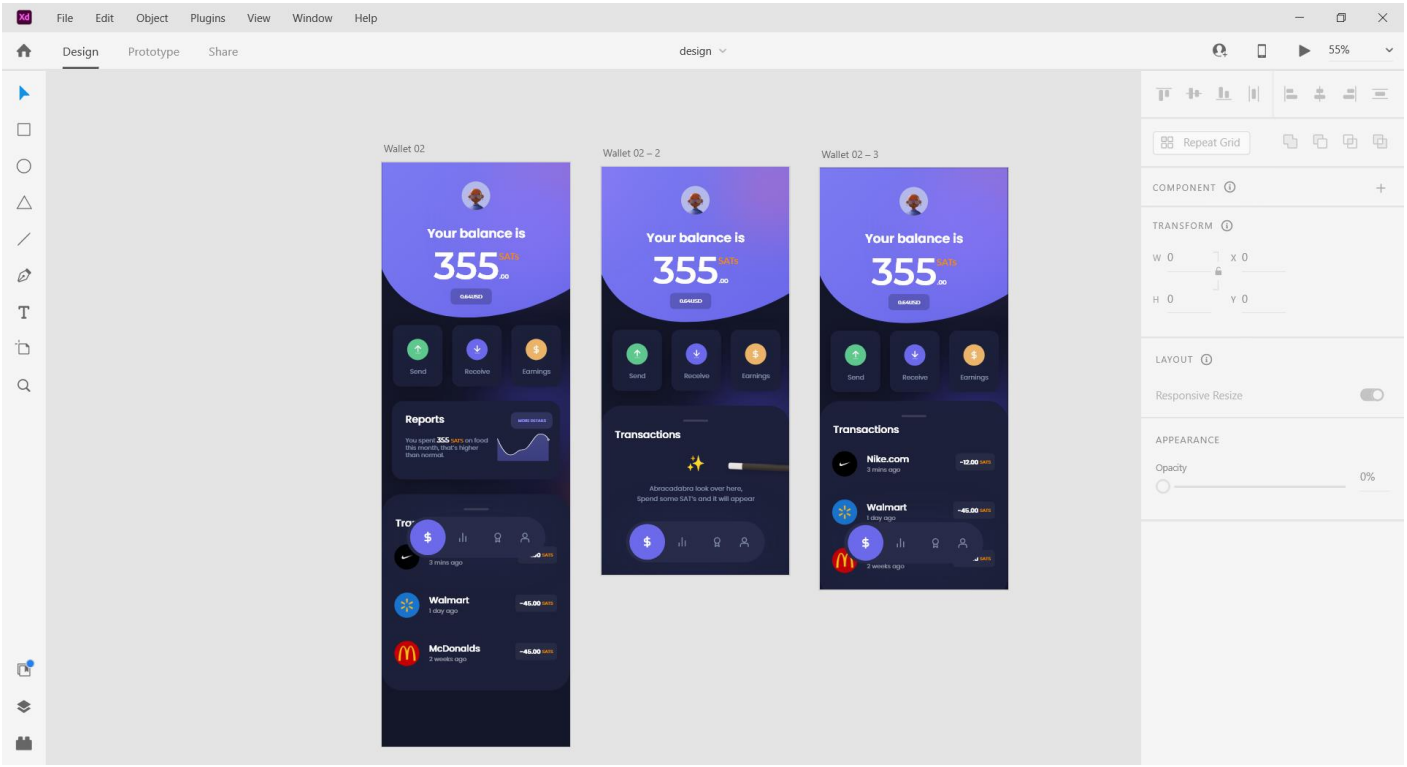


Figma Designs

FIGMA DESIGNS



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Wallet 02
Wallet 02 – 2
Wallet 02 – 3
Your balance is
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Send
Receive
Earnings
Reports
Transactions
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McDonalds
Nike.com
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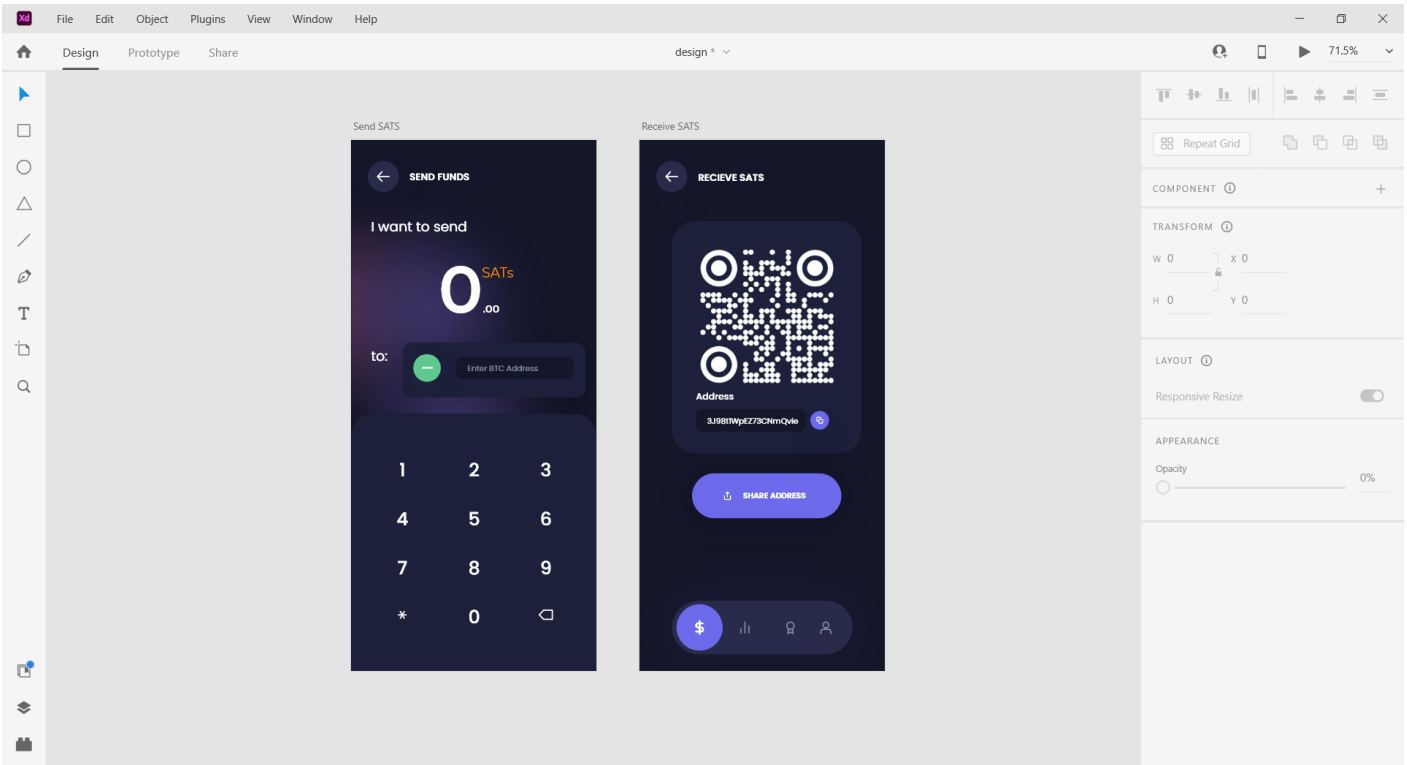
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Send SATS
Receive SATS
SEND FUNDS
I want to send
0 SATs .00
to:
Enter BTC Address
1 2 3
4 5 6
7 8 9
* 0
RECIEVE SATS
Address
3J98t1WpEZ73CNmQviecrnyiWrnqRhWNLy
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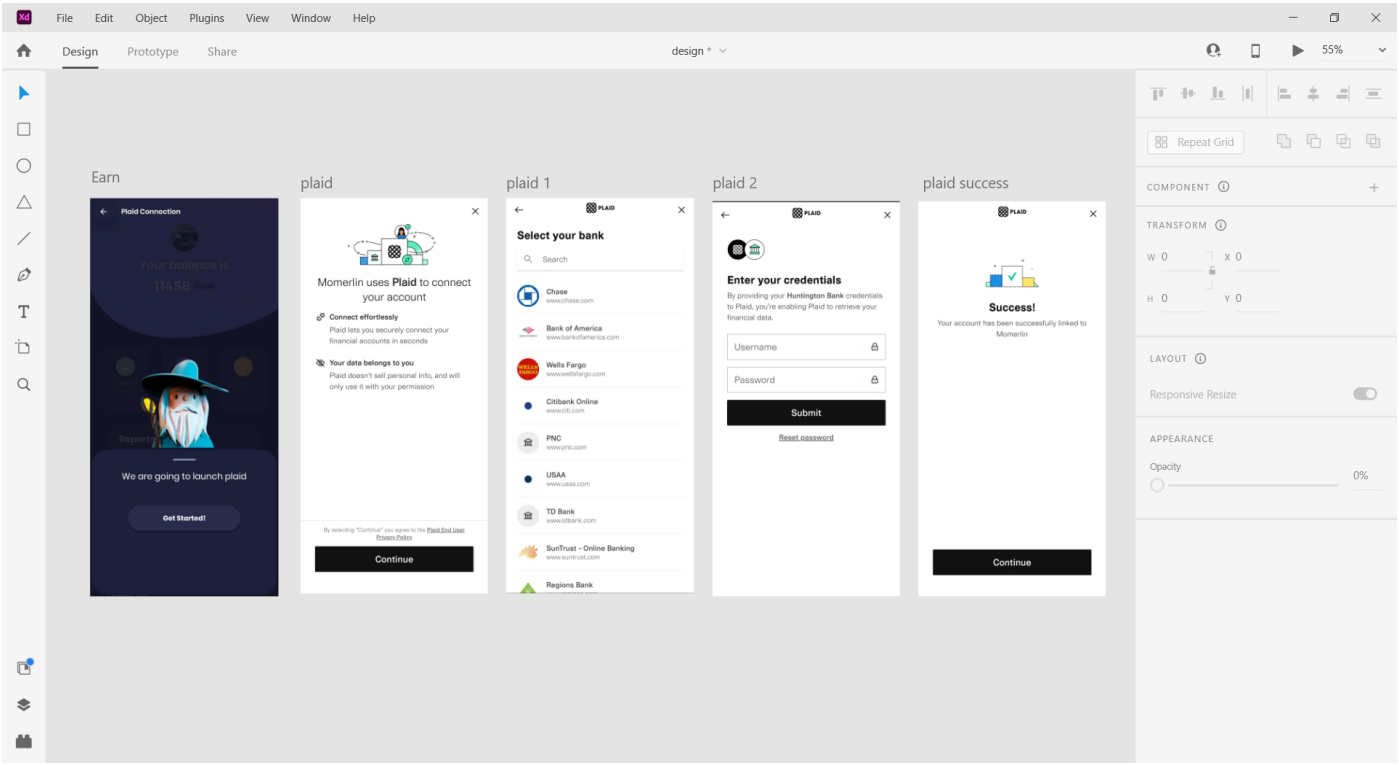
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Earn
plaid
plaid 1
plaid 2
plaid success
Plaid Connection
We are going to launch plaid
Get Started!
Momerlin uses Plaid to connect your account
Connect effortlessly
Your data belongs to you
Continue
Select your bank
Search
Chase
Bank of America
Wells Fargo
Citibank Online
PNC
USAA
TD Bank
SunTrust - Online Banking
Regions Bank
Enter your credentials
Username
Password
Submit
Reset password
Success!
Continue
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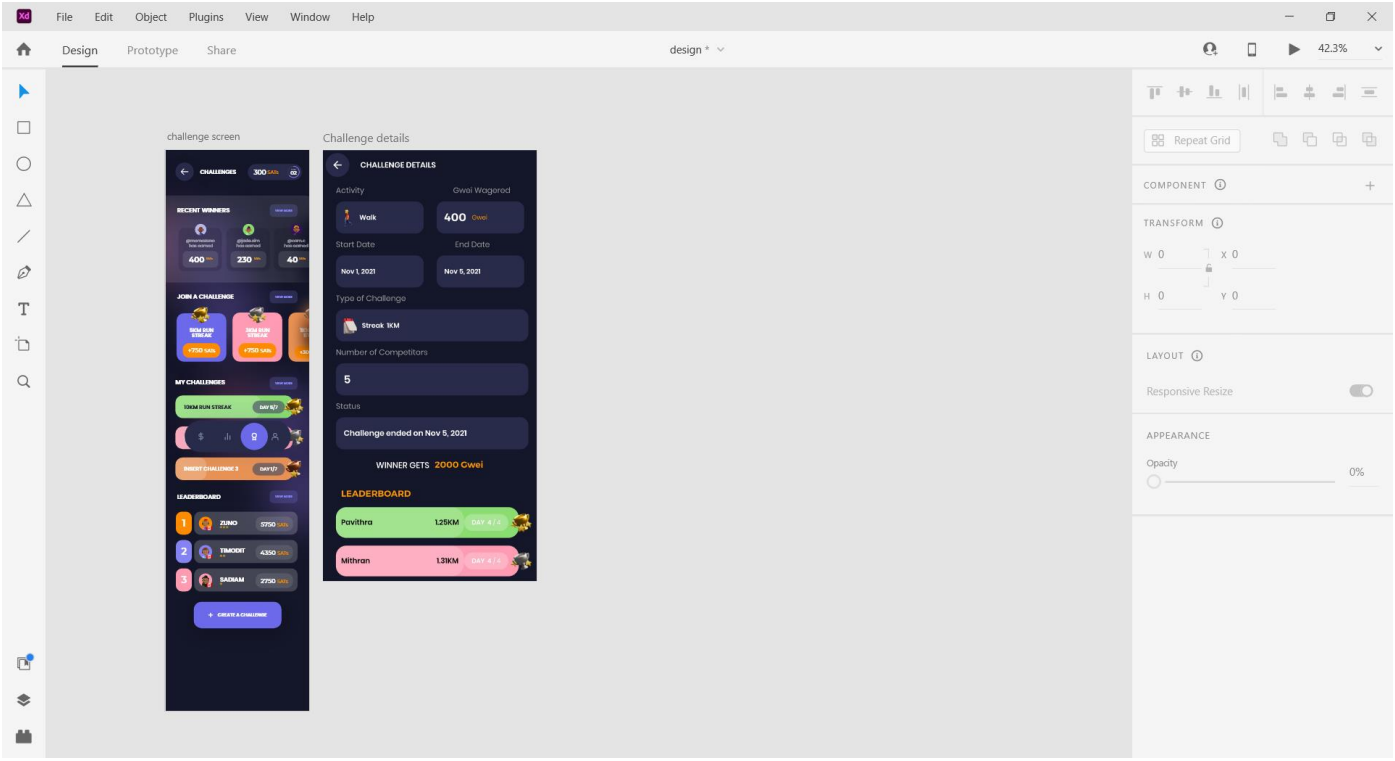
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challenge screen
Challenge details
CHALLENGES
RECENT WINNERS
JOIN A CHALLENGE
MY CHALLENGES
LEADERBOARD
CREATE A CHALLENGE
CHALLENGE DETAILS
Activity
Gwei Wagered
Walk
400
Start Date
End Date
Nov 1, 2021
Nov 5, 2021
Type of Challenge
Streak 1KM
Number of Competitors
5
Status
Challenge ended on Nov 5, 2021
WINNER GETS 2000 Gwei
LEADERBOARD
Pavithra
1.25KM
Mithran
1.31KM
Repeat Grid
COMPONENT
TRANSFORM
LAYOUT
Responsive Resize
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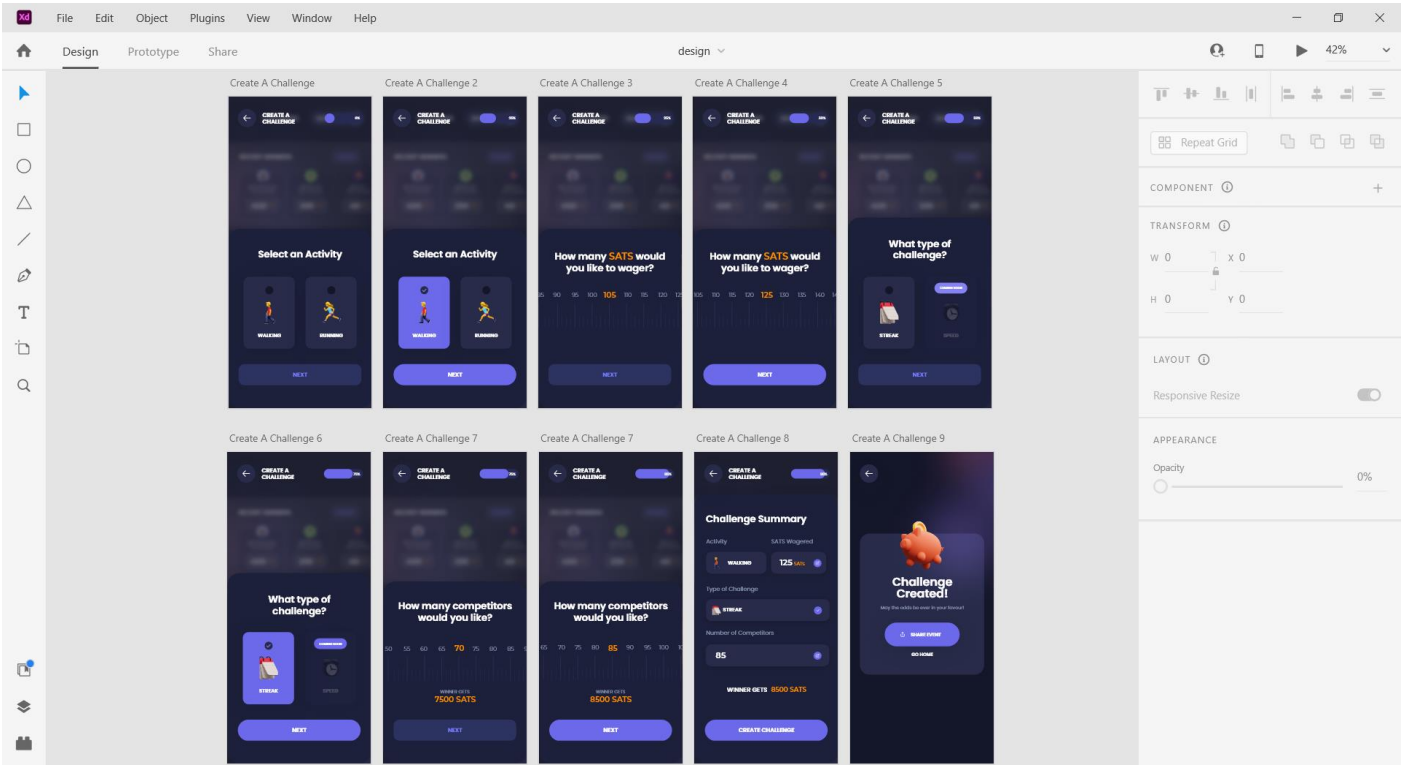
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Create A Challenge
Create A Challenge 2
Create A Challenge 3
Create A Challenge 4
Create A Challenge 5
Select an Activity
How many SATS would you like to wager?
What type of challenge?
Create A Challenge 6
Create A Challenge 7
Create A Challenge 7
Create A Challenge 8
Create A Challenge 9
What type of challenge?
How many competitors would you like?
Challenge Summary
Challenge Created!
NEXT
CREATE CHALLENGE
Repeat Grid
COMPONENT
TRANSFORM
LAYOUT
Responsive Resize
APPEARANCE
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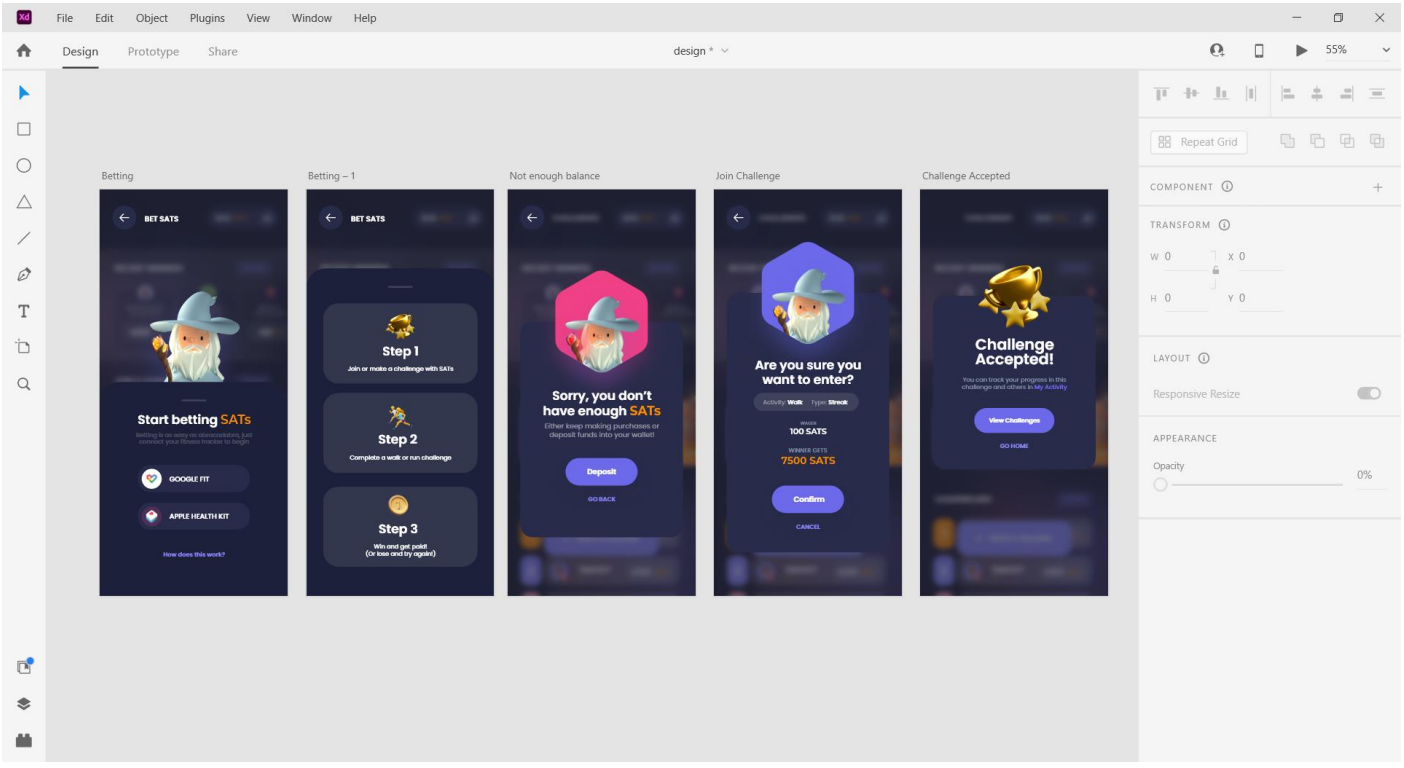
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Betting
Betting – 1
Not enough balance
Join Challenge
Challenge Accepted
BET SATS
Start betting SATs
GOOGLE FIT
APPLE HEALTH KIT
How does this work?
Step 1
Join or make a challenge with SATs
Step 2
Complete a walk or run challenge
Step 3
Win and get paid!
(Or lose and try again)
Sorry, you don't have enough SATs
Either keep making purchases or deposit funds into your wallet!
Deposit
GO BACK
Are you sure you want to enter?
100 SATS
7500 SATS
Confirm
CANCEL
Challenge Accepted!
View Challenges
GO HOME
Repeat Grid
COMPONENT
TRANSFORM
LAYOUT
Responsive Resize
APPEARANCE
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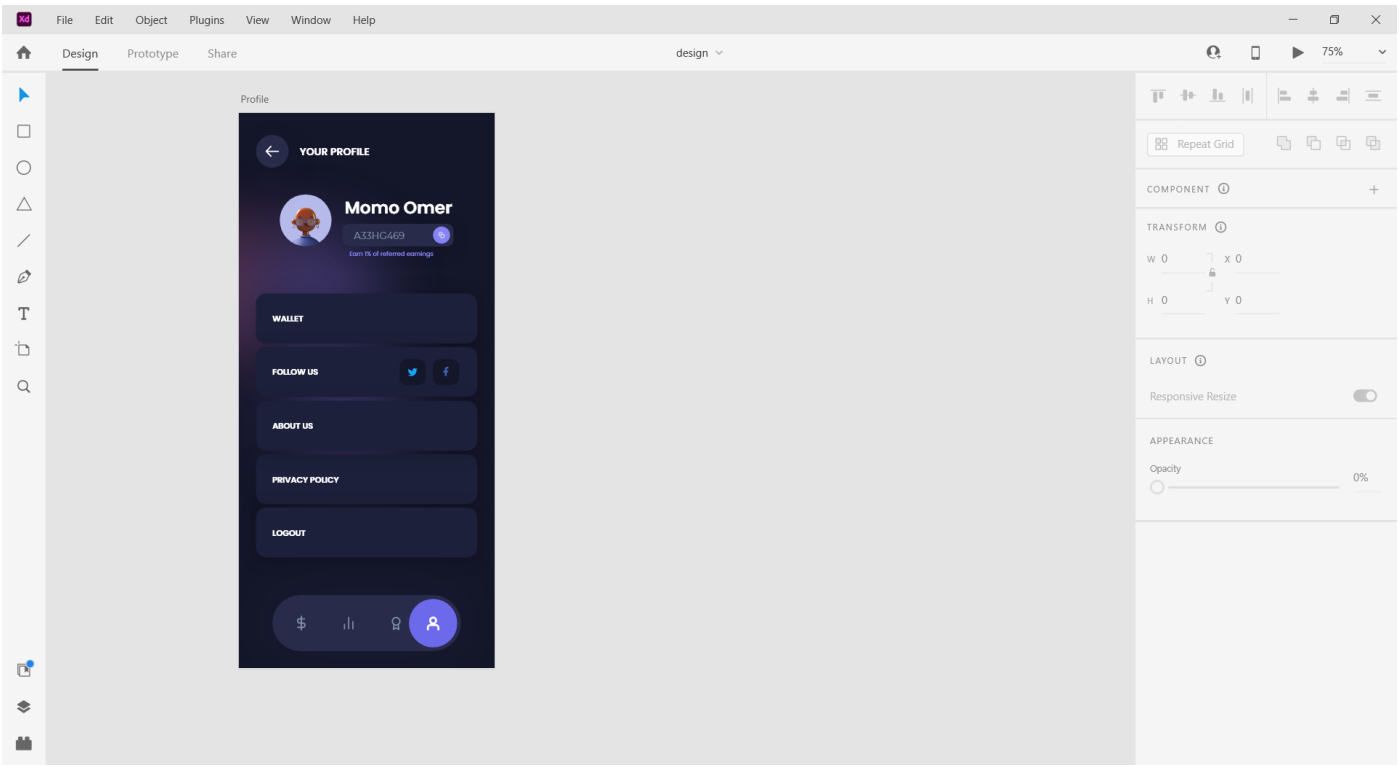
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YOUR PROFILE
Momo Omer
A33HG469
WALLET
FOLLOW US
ABOUT US
PRIVACY POLICY
LOGOUT
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Scheme(s) for the App

SCHEME(S) FOR THE APP

The Firebase Realtime Database is a cloud-hosted database. Data is stored as JSON and synchronized in real-time to every connected client. When you build cross-platform apps Flutter & Firebase, all of your clients can share one Realtime Database instance and automatically receive updates with the newest data.

Realtime Database stores data as JSON, however enables you to access nodes of the data via a Database Reference. For example, if our data is stored as the following:

```
{
    "btcAddress":"654sdgfv6854fsgd6542",
    "ethAddress":"654sdf116s5dg4vsd68f54gcv1f6d53",
    "tronAddress": "6542s1dzxvc653421d6x5vc24sd16x5v",
    "seedEncrptd":"cxfdgvx54224ds52c45d1",
    "fullName": "raj",
    "password": "nothing"
}
```

```
{

 "users": {
  "123": {
   "name": "John"
  }
 }
}
```

- users: Creates a reference to the entire "users" object
- users/123: Creates a reference to the "123" user object
- users/123/name: Creates a reference to a property (with the value of "John")

Flutter and some flutter packages providing to easily handle the database. like store, read, update and etc. All data has stored like an object, it has an object ID with User ID provide to the user.

API for the App

API FOR APPLICATION

CREATE USER

API: https://api.momerlin.com/api/user

Method: POST

Description: This API creates a new user.

GET ALL USER

API: https://api.momerlin.com/api/users

Method: GET

Description: This API returns the list of all user.

GET PARTICULAR USER

API: https://api.momerlin.com/api/user/get?id=61ddc192ea0e4eb5dd59edfa

Method: GET

Description: This API will return a particular user's information.

CHECK NICKNAME

API: https://api.momerlin.com/api/user/checkName/:name

Method: GET

Description: This API will check and create a new nickname for the user.

CREATE CHALLENGE

API: https://api.momerlin.com/api/challenge/create

Method: POST

Description: This API will create a new challenge.

JOIN CHALLEGE

API:

https://api.momerlin.com/api/challenge/join?id=617f8c745b3f1d3b5e888ff6&challenge=617fe3c0b36f73564e507b4f

Method: PUT

Description: This API will help you to join a challenge.

GET CHALLEGES

API: https://api.momerlin.com/api/challenges?limit=10&page=1

Method: GET

Description: This API returns list of challenges we have.

GET MY CHALLEGES

API:

https://api.momerlin.com/api/user/challenges?id=615ae5d72ce0502630ee4207&limit=10&page=1

Method: GET

Description: This API returns the challenge list created by a particular user.

GET JOINED CHALLEGES

API: https://api.momerlin.com/api/challenge/joined/:id?page=1&limit=10

Method: GET

Description: This API returns the challenges that user 's have joined.

LEADERBOARD

API: https://api.momerlin.com/api/leaderboard

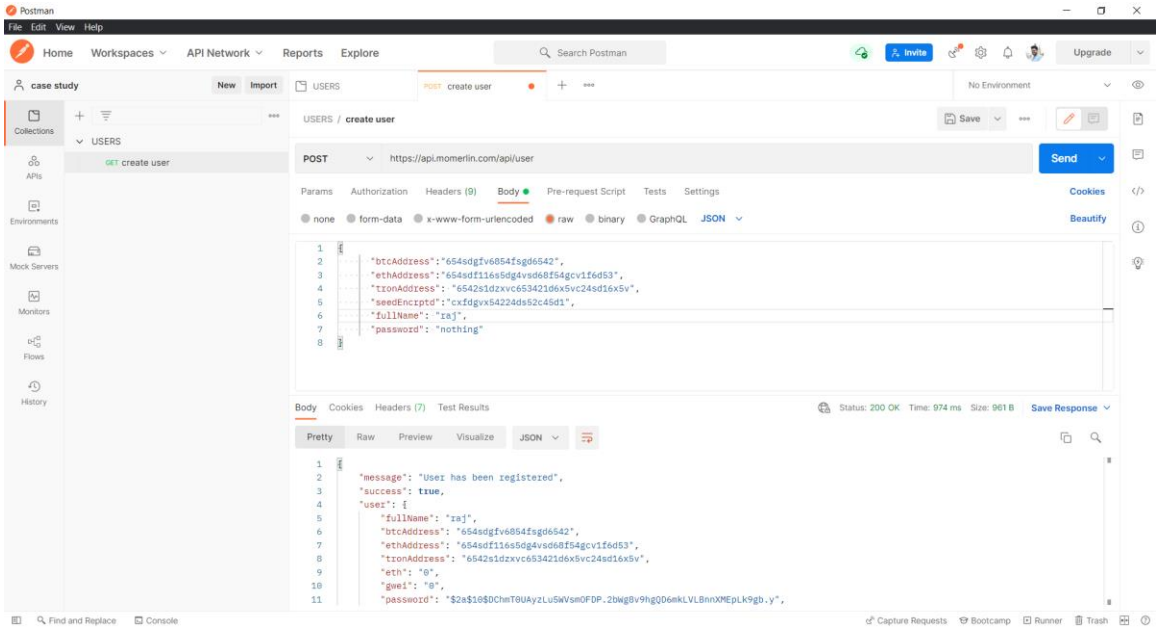
Method: GET

Description: This API returns list of leading users in all challenges.

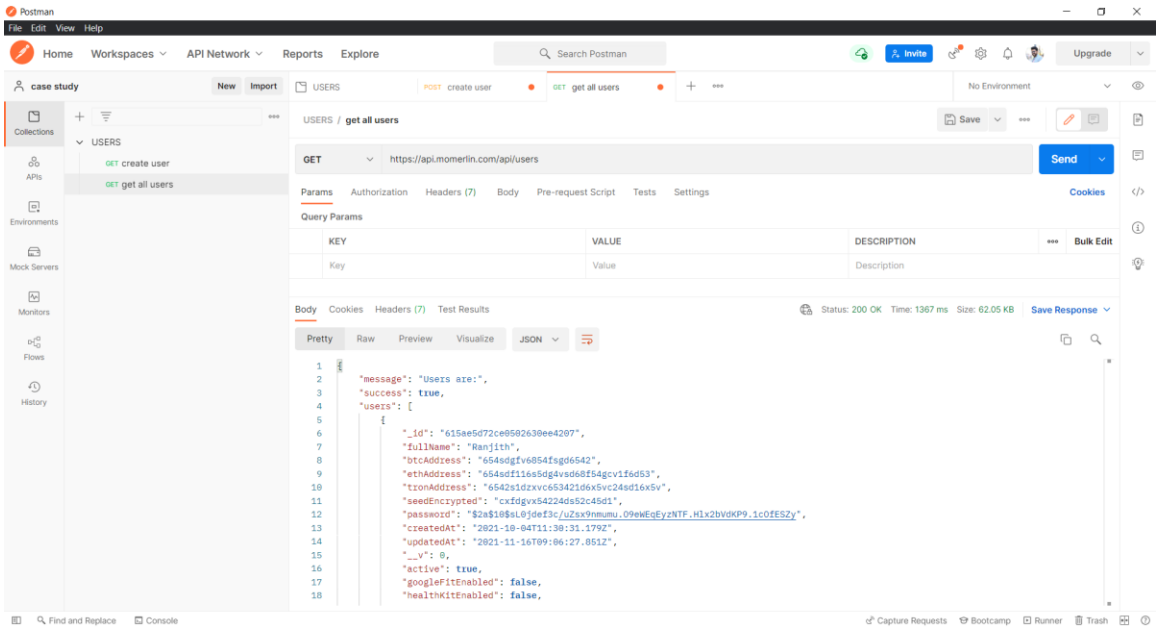
Testing of API

API TESTING SCREENS

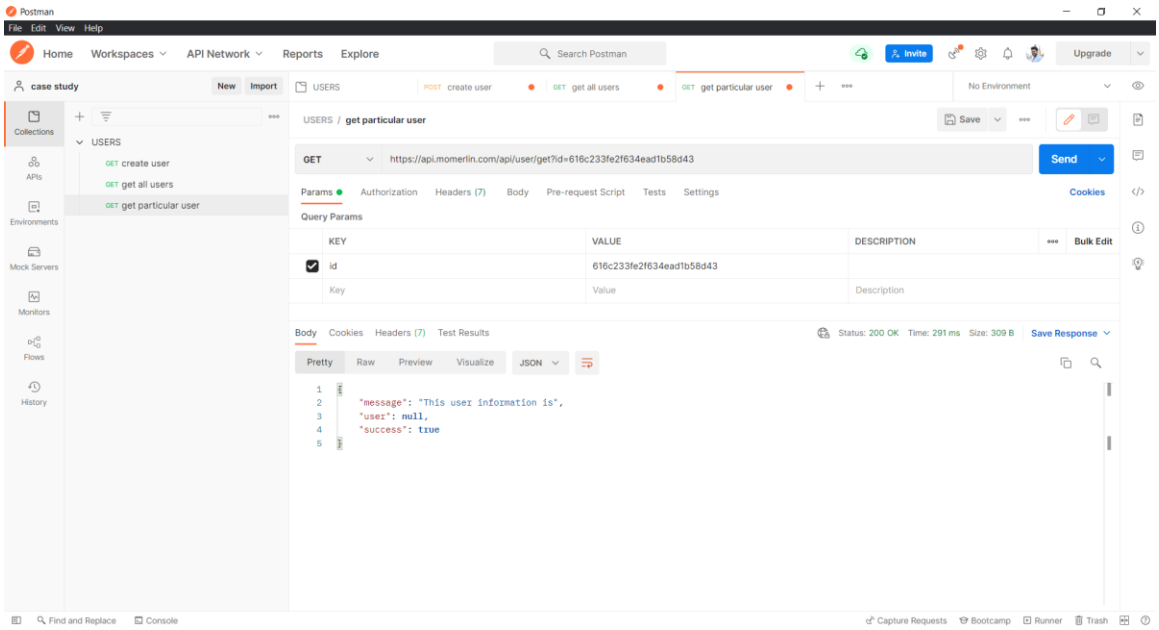
CREATING USER



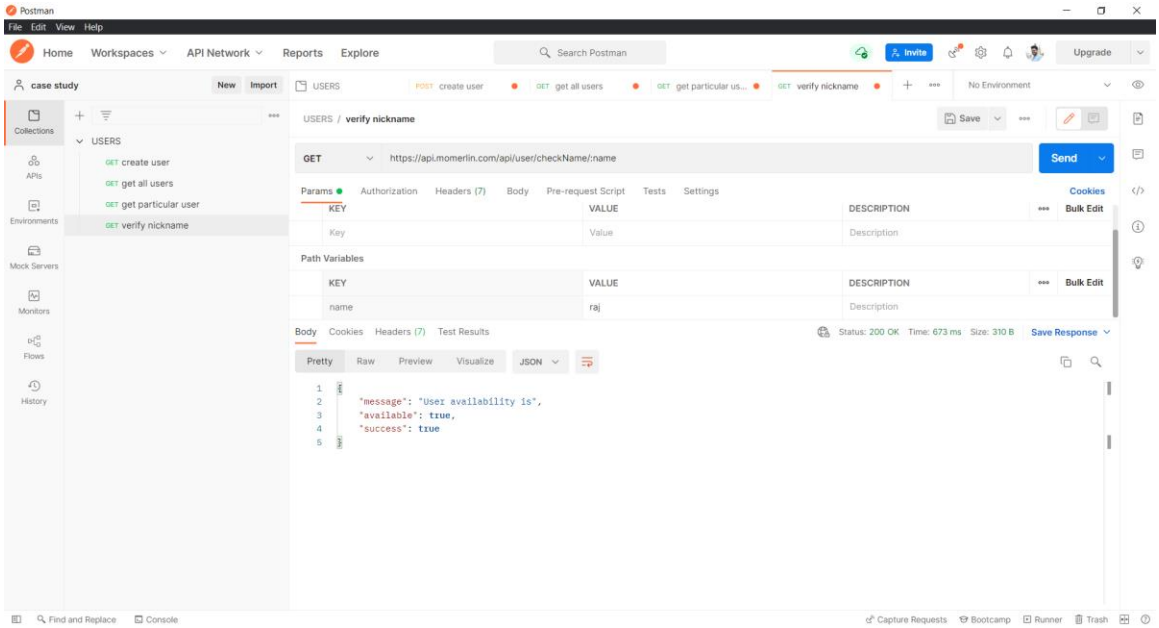
GET ALL USER



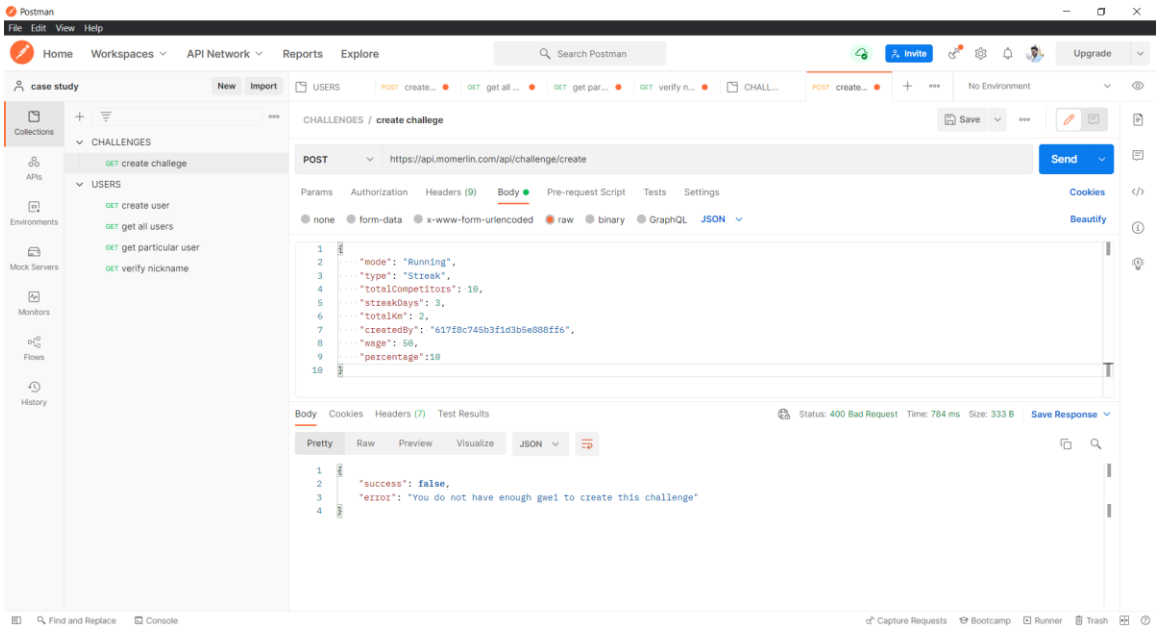
GET PARTICULAR USER

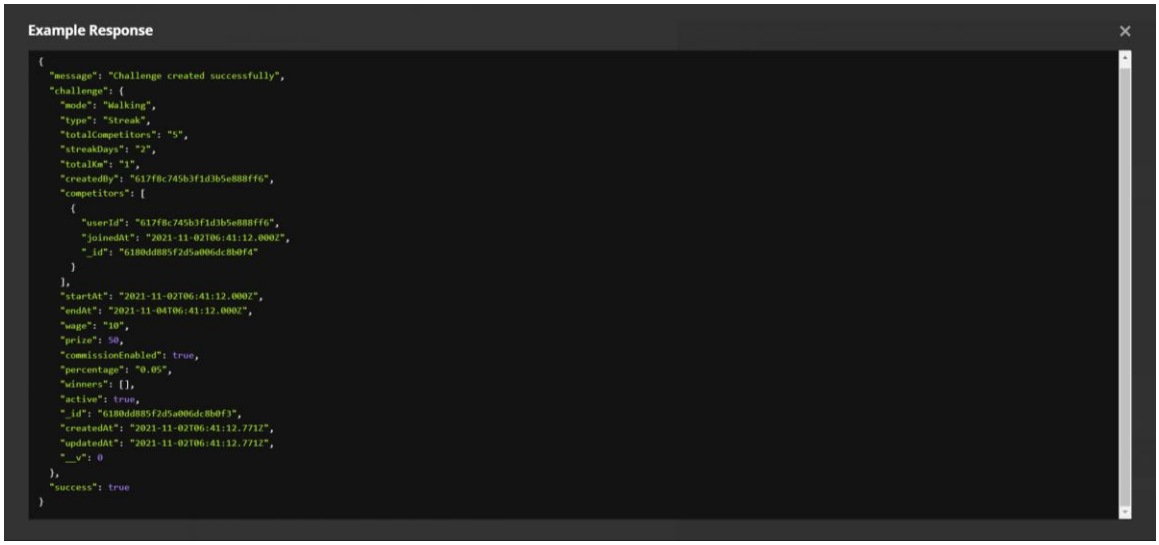


CHECKING NICKNAME

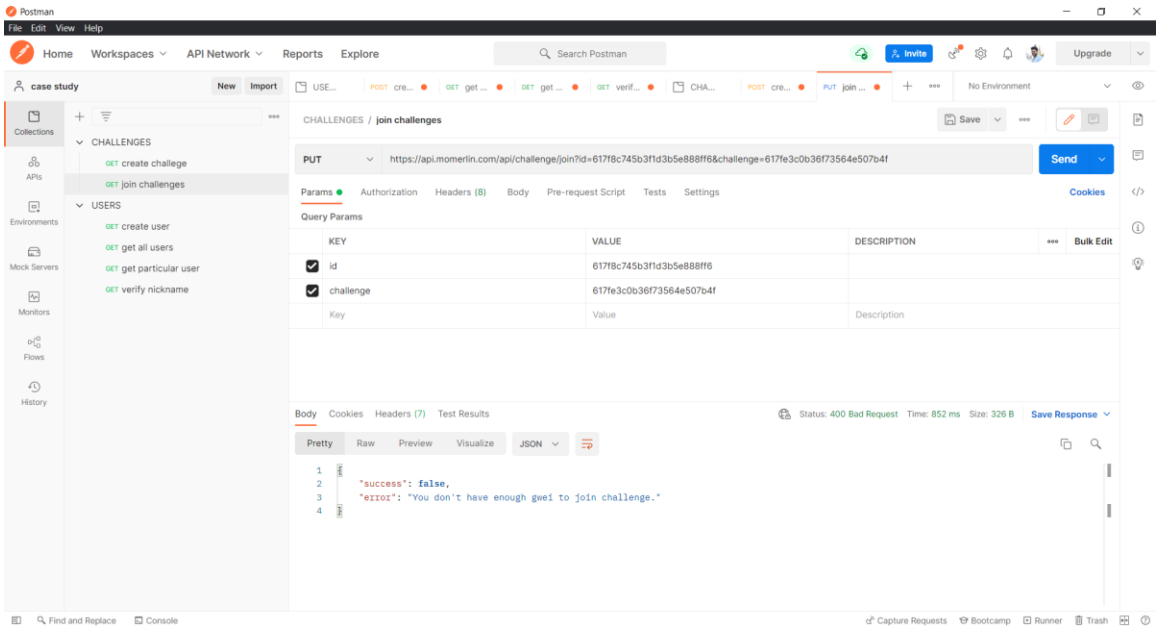


CREATE CHALLENGE

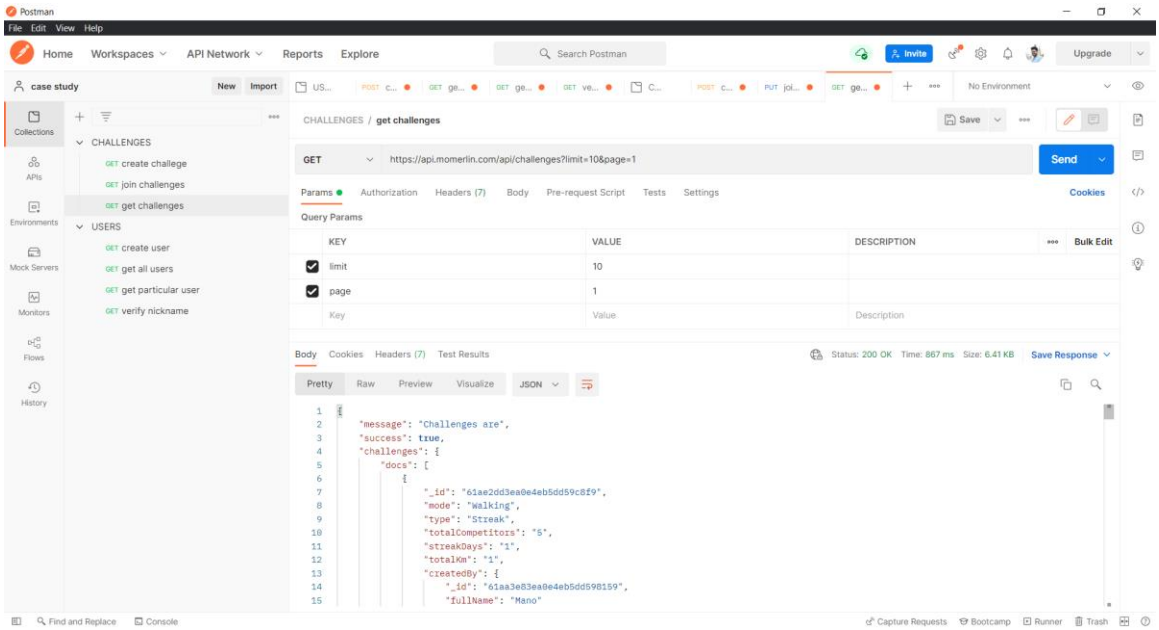




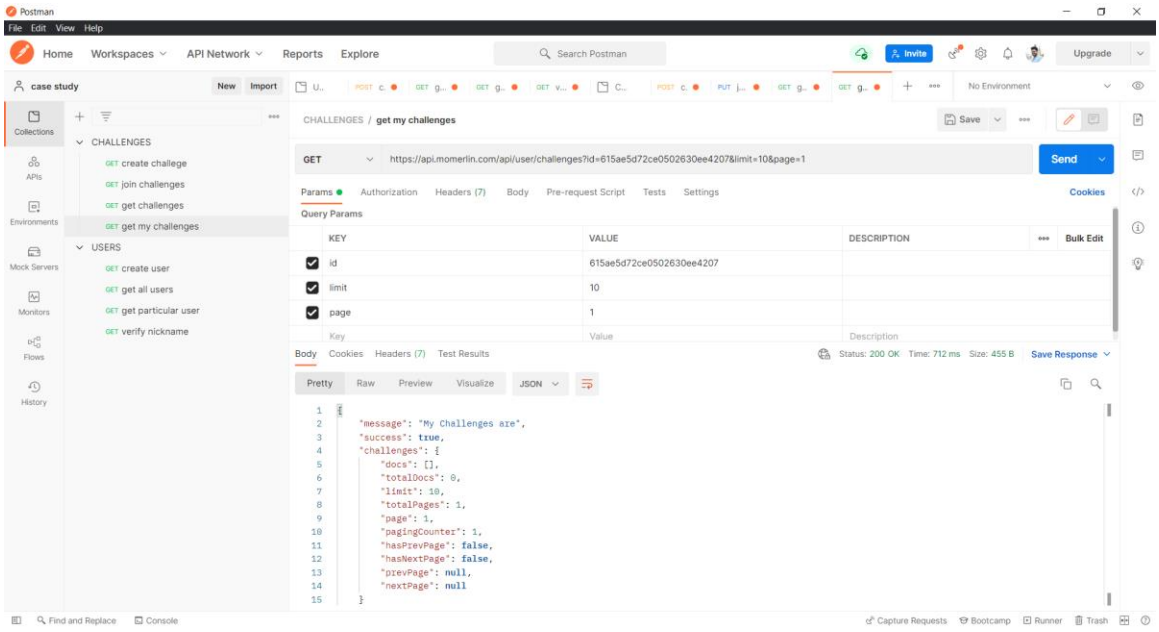
JOIN CHALLEGE



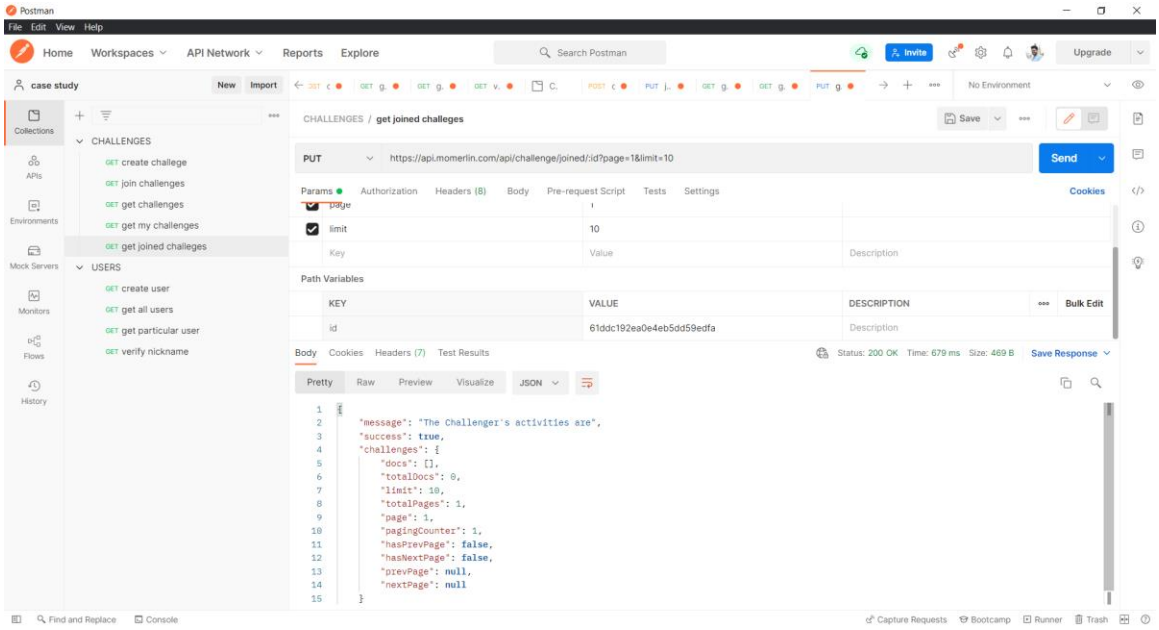
GET ALL CHALLENGS



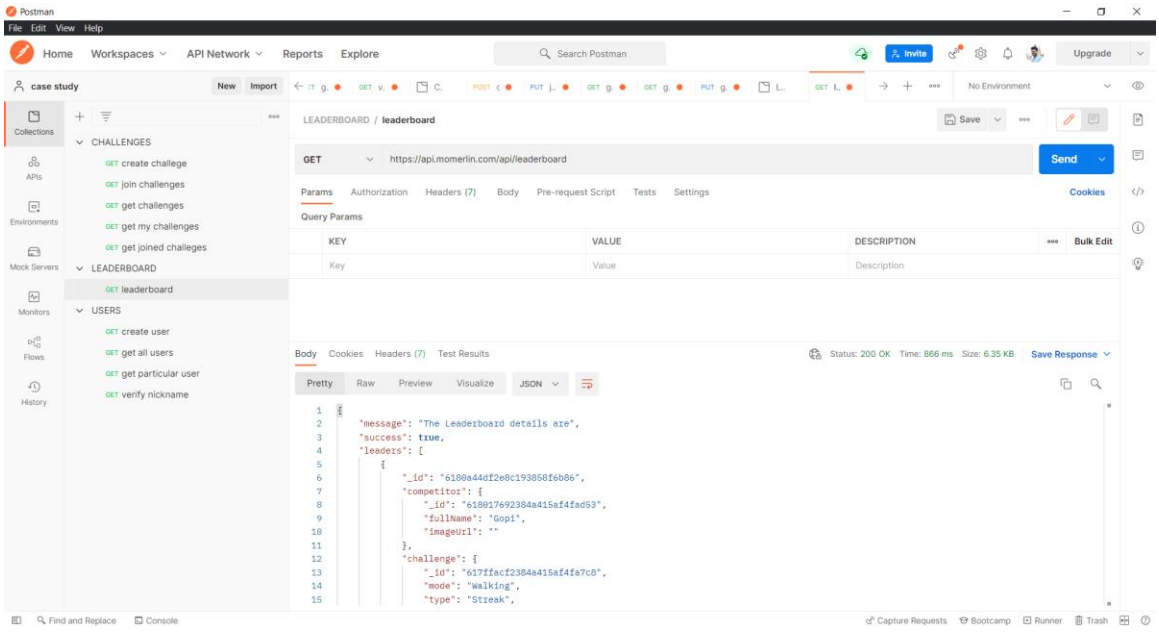
GET MY CHALLENGES



GET JOINED CHALLEGES

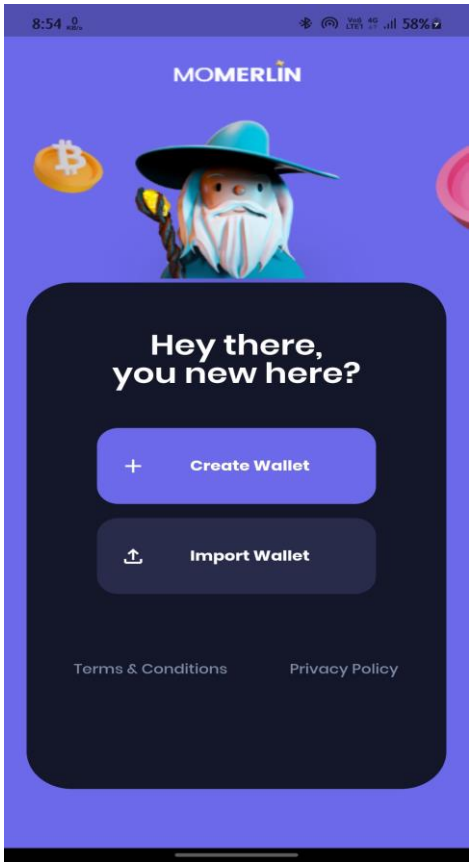


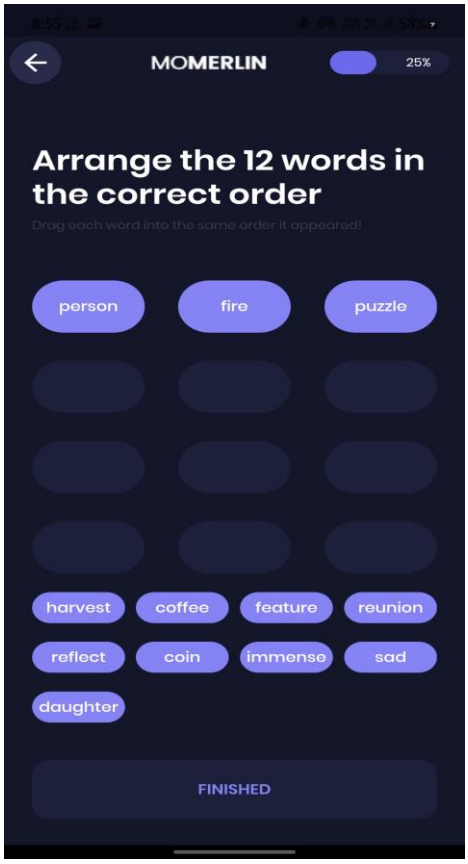
LEADERBOARD

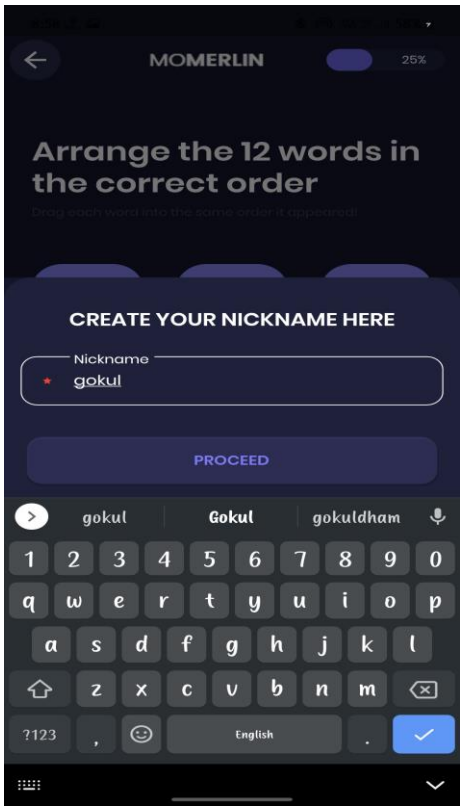


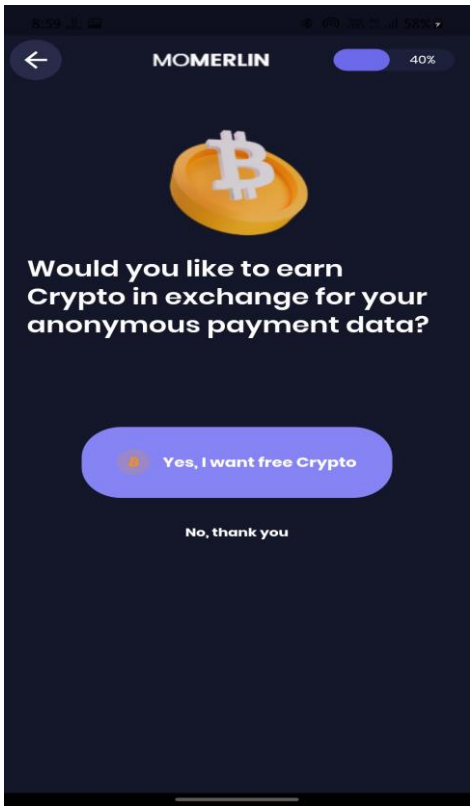
User Manual

USER MANUAL – EXECUTION PROCEDURE

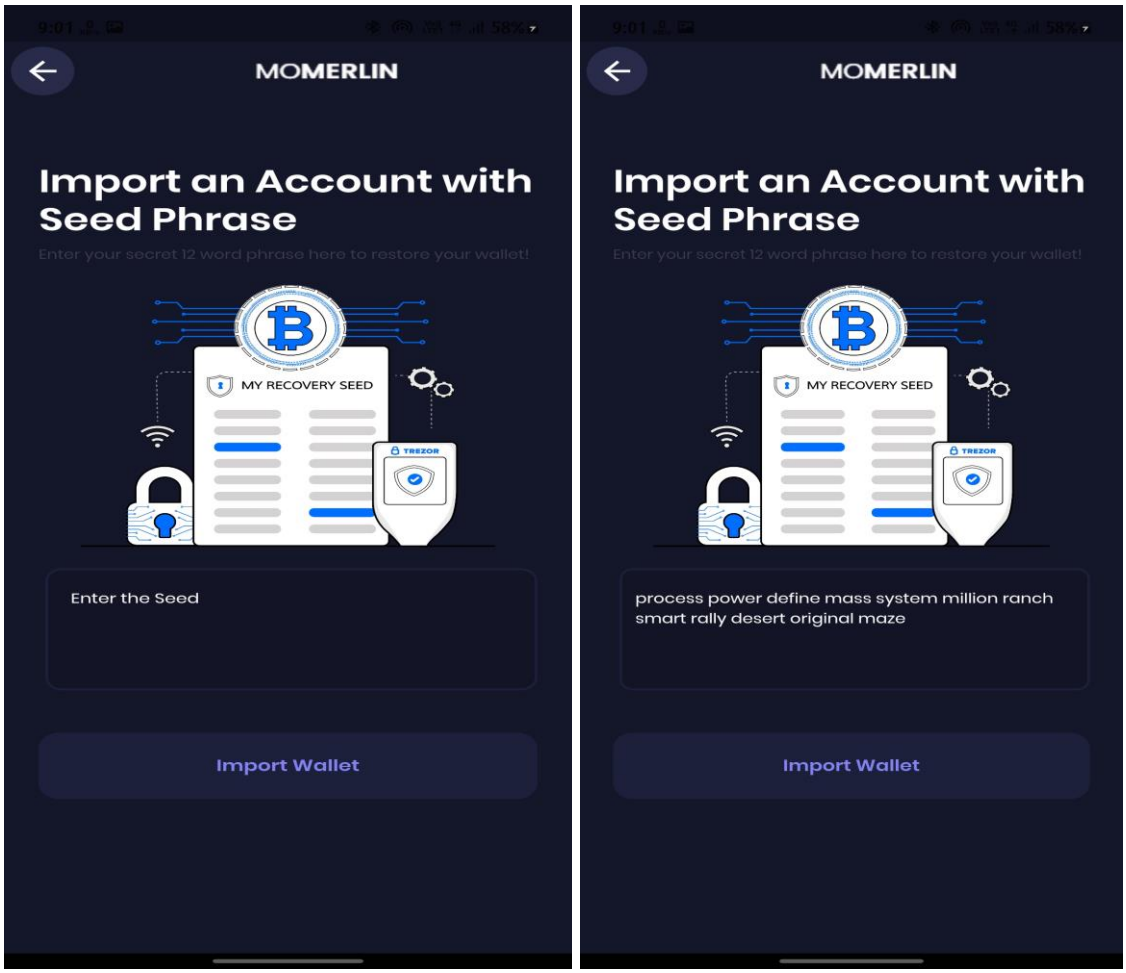




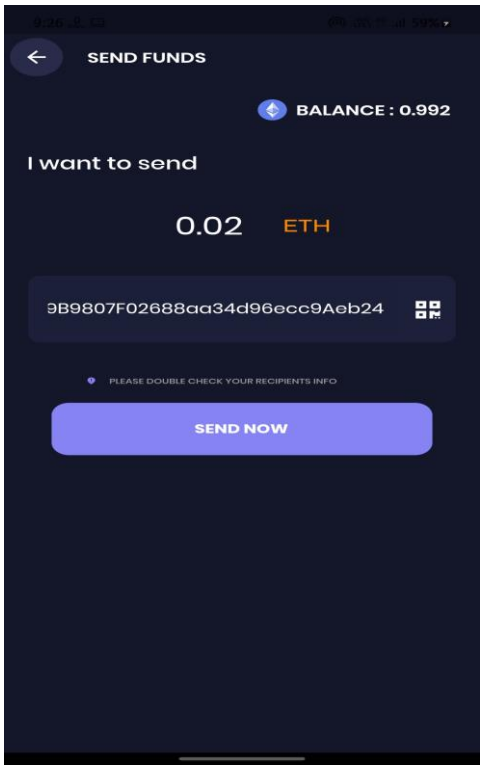




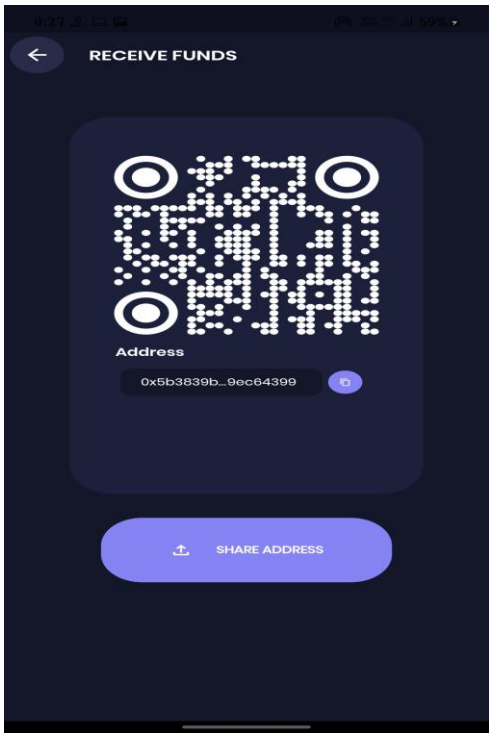
Wallet creation - New user can create an account from here with unique twelve-digit word phase from here, its also generate an address for transactions.



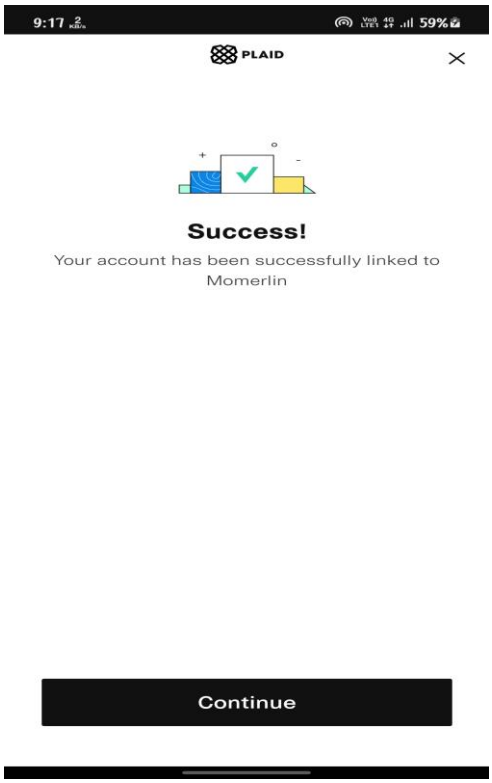
Import wallet - Existing user can import their account from here with already generated unique twelve-digit word phase.



Send - User can send their crypto to another account with receiver's unique address.

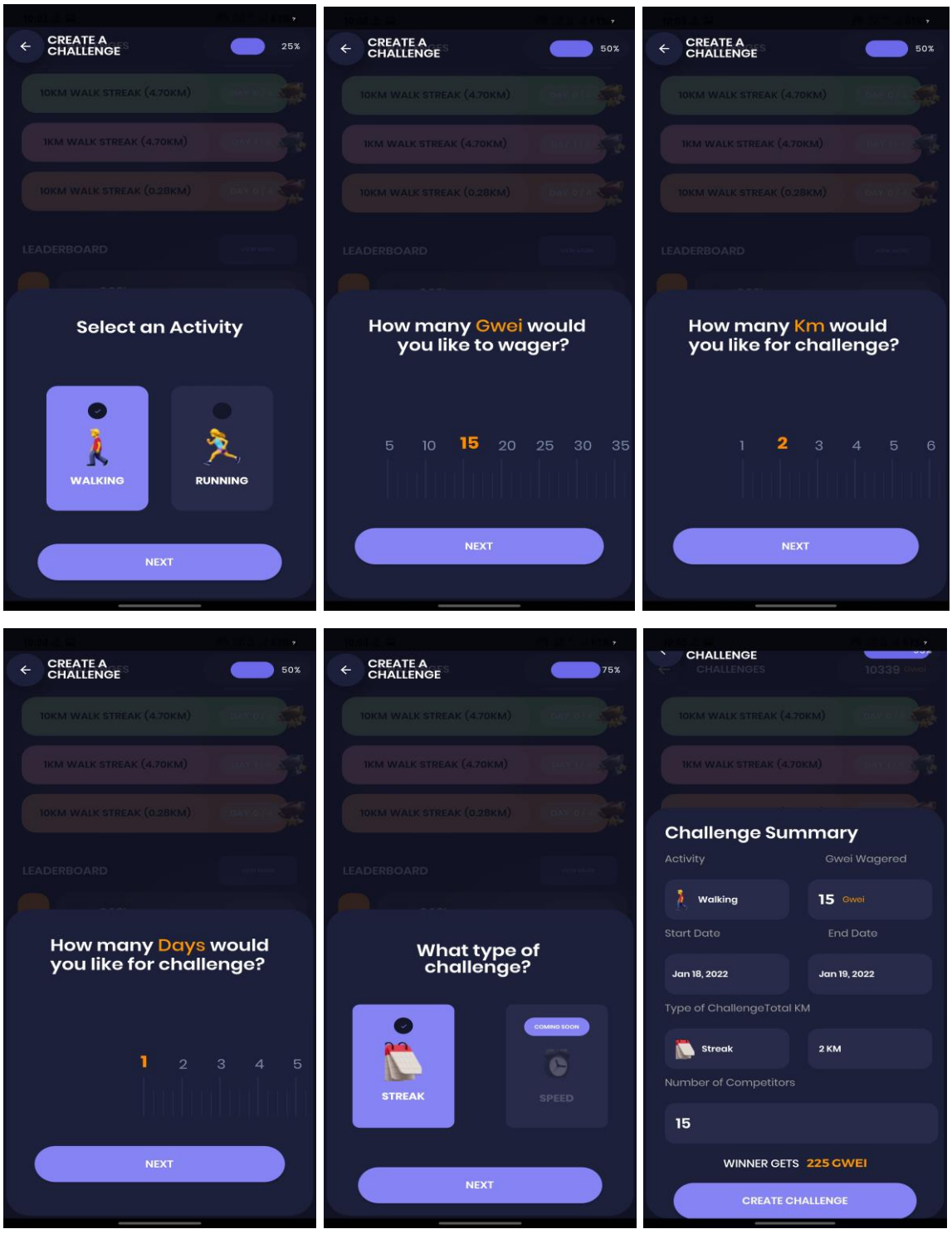


Receive - User can receive crypto from here, it can display a QR code with address for transactions and also providing sharing address.

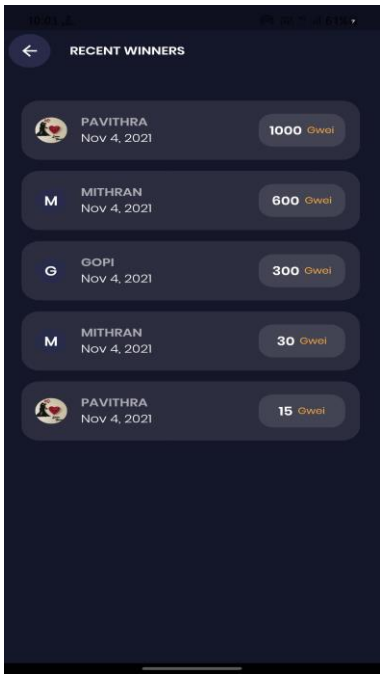


Earn - User can connect their plaid account from her to manage crypto.

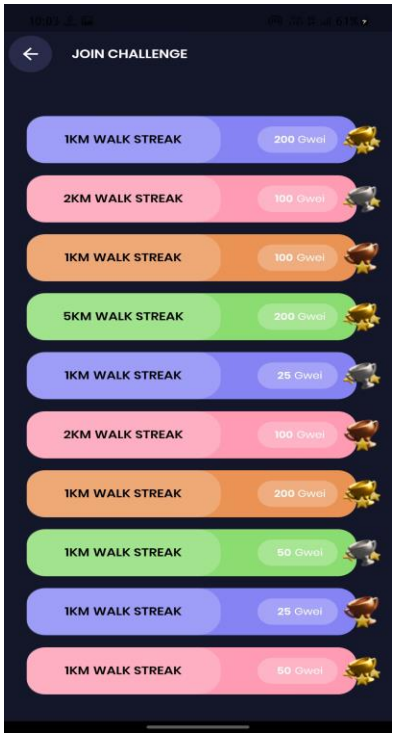
Transactions - User can check their transaction details from here.



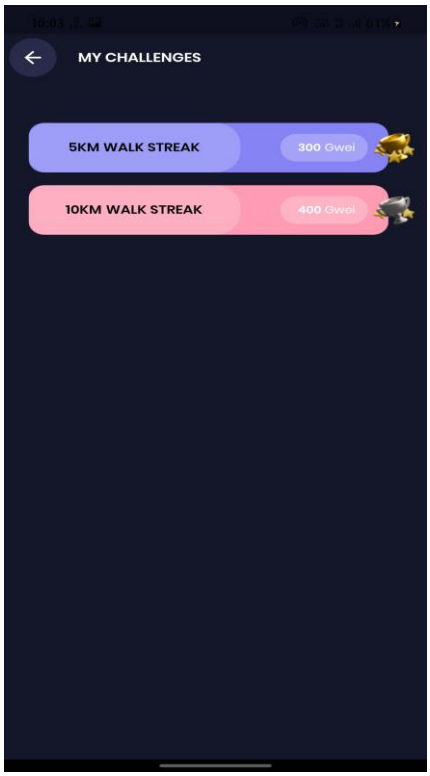
Create challenge - User can create a new challenge and host that from here with providing some challenge details.



Recent winners - It has display to the user who won the challenges in recently also providing to check the challenge details.

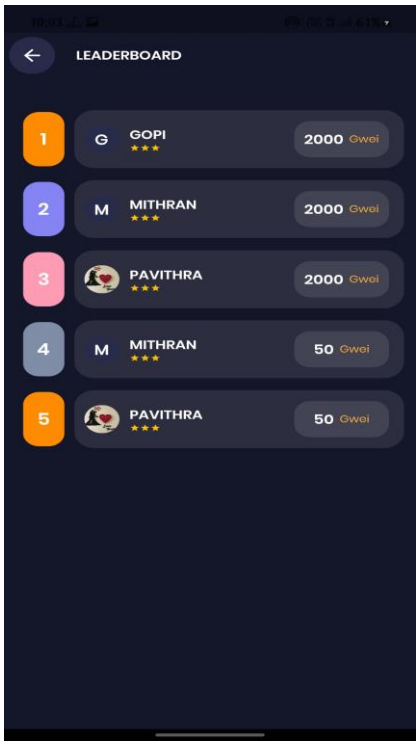


Join challenge - User can check the challenge details and if its ok for the user, they can join any particular challenge to won the crypto.

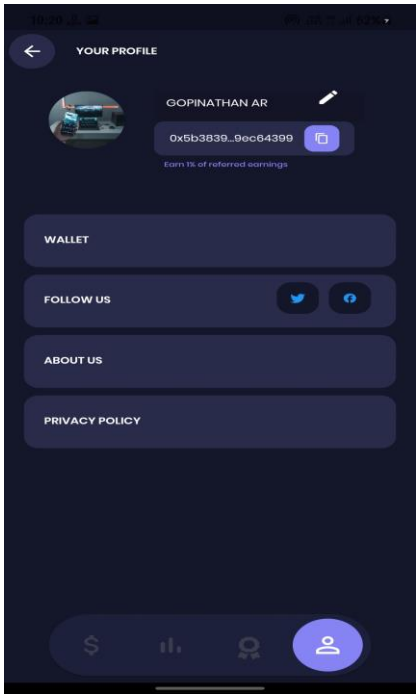


My challenge - User can check the how many challenges created by their self.

My activity - User can check their daily activities from here.



Leaderboard - User can saw who is the leading in all challenges and their details here.



Profile - User can saw their profile details and change the nickname from here.

Challenge details - User can saw any challenge details like this whenever they click any challenge in the application.

Conclusion and Future enhancement

CONCLUSION

The project entitled " **MAKE ANONYMOUS PAYMENT WITH CRYPTO**" is developed using Flutter as front end and Firebase is back end.

This project covers only the basic features required. Moreover, extra features can be identified and incorporated in the future.

This project was aimed at this and it successfully achieved within the limited time period.

FUTURE ENHANCEMENT

1. Adding some more crypto.
2. May be making this Application Attractive and Fill up the User Requirements