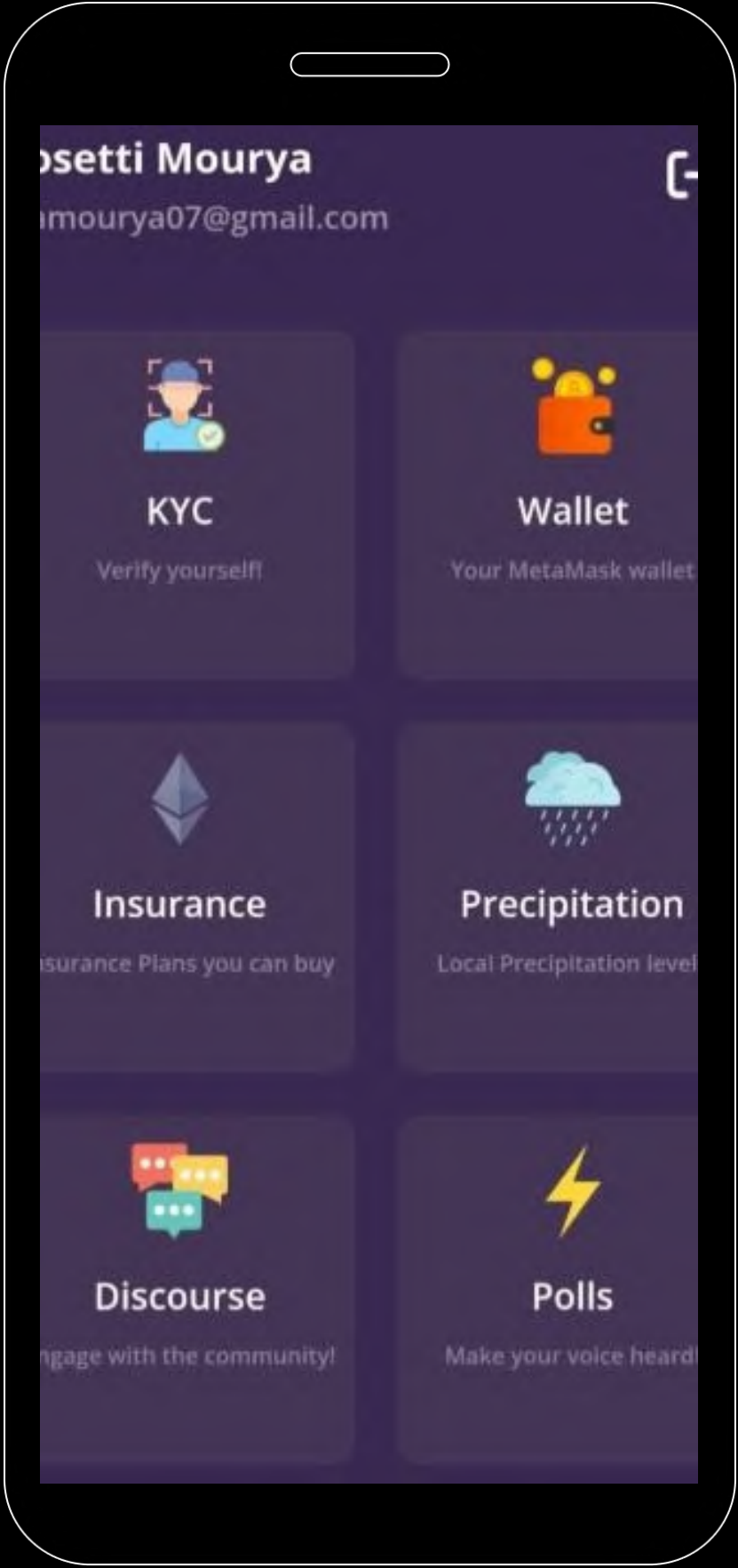


AIRDROP INSURANCE

Try Pitch



Airdrop Insurance

Overview

April 2023

airdropinsurance@gmail.com

Try Pitch



AIRDROP 101



Airdrop Cryptocurrency

[er-,dräp ,krip-tō-'kär-ən(t)-sē]

In the cryptocurrency business, a marketing stunt that involves sending coins or tokens to wallet addresses in order to promote awareness of a new virtual currency.



Motivation

Agriculture is vital for Mozambique's economy, but unpredictable weather patterns like droughts and floods pose significant challenges for farmers, causing economic hardship.

The **Airdrop Insurance Project** in Mozambique **aims to provide a social safety net** to the poorest section of society through a **voucher system** offering citizen-powered insurance for personal and crop insurance via mobile. The project also includes **bundling of risk for collective leverage in reinsurance** and **facilitates loans through tokens**. The project promotes financial inclusion and empowerment.

It is **motivated by the belief that everyone should have access to financial security** and support during challenging times. The project aims to **empower the community** by providing access to affordable and accessible insurance policies, as well as **promoting financial literacy and inclusion**.



Problem Statement:

Develop a mobile application that offers insurance policies, reinsurance programs. However, before **launching the app on the Google Play Store**, several issues need to be addressed, including **evaluating the source code** and existing privacy issues, **rewriting part of the code to solve privacy issues brought up, bundling of risk for collective leverage in reinsurance, redeploying the app on the Google Play Store**, and **preparing a report of further problems to be solved**. The success of the app depends on ensuring its security, regulatory compliance, user adoption and retention, and maintaining accurate and reliable algorithms over time.

Digital Tokens : Power Unleashed

- **INCREASED ACCESSIBILITY:** DIGITAL TOKENS CAN BE USED TO REACH A WIDER RANGE OF PEOPLE, INCLUDING THOSE WHO MAY NOT HAVE ACCESS TO TRADITIONAL FINANCIAL SERVICES. THIS CAN BE BENEFICIAL ESPECIALLY FOR FARMERS IN DEVELOPING COUNTRIES OR FOR PEOPLE WHO WORK IN THE GIG ECONOMY.
- **LOWER COSTS:** USING DIGITAL TOKENS CAN HELP REDUCE THE ADMINISTRATIVE COSTS ASSOCIATED WITH INSURANCE POLICIES. THIS COULD MAKE INSURANCE MORE AFFORDABLE FOR PEOPLE WHO MAY NOT HAVE BEEN ABLE TO AFFORD IT BEFORE.
- **FASTER CLAIM PROCESSING:** DIGITAL TOKENS CAN FACILITATE FASTER CLAIM PROCESSING AND PAYMENT. THIS CAN HELP PEOPLE GET THE SUPPORT THEY NEED MORE QUICKLY, WHICH CAN BE CRITICAL IN TIMES OF CRISIS.
- **INCREASED TRANSPARENCY:** BLOCKCHAIN TECHNOLOGY, WHICH IS OFTEN USED TO FACILITATE DIGITAL TOKEN TRANSACTIONS, CAN INCREASE TRANSPARENCY IN THE INSURANCE INDUSTRY. THIS CAN HELP BUILD TRUST BETWEEN INSURANCE PROVIDERS AND CUSTOMERS.

ROLES

Admin

Adminstrate Airdrop Application

Member

Apply for insurance using digital tokens, but may lack knowledge regarding computer or software usage

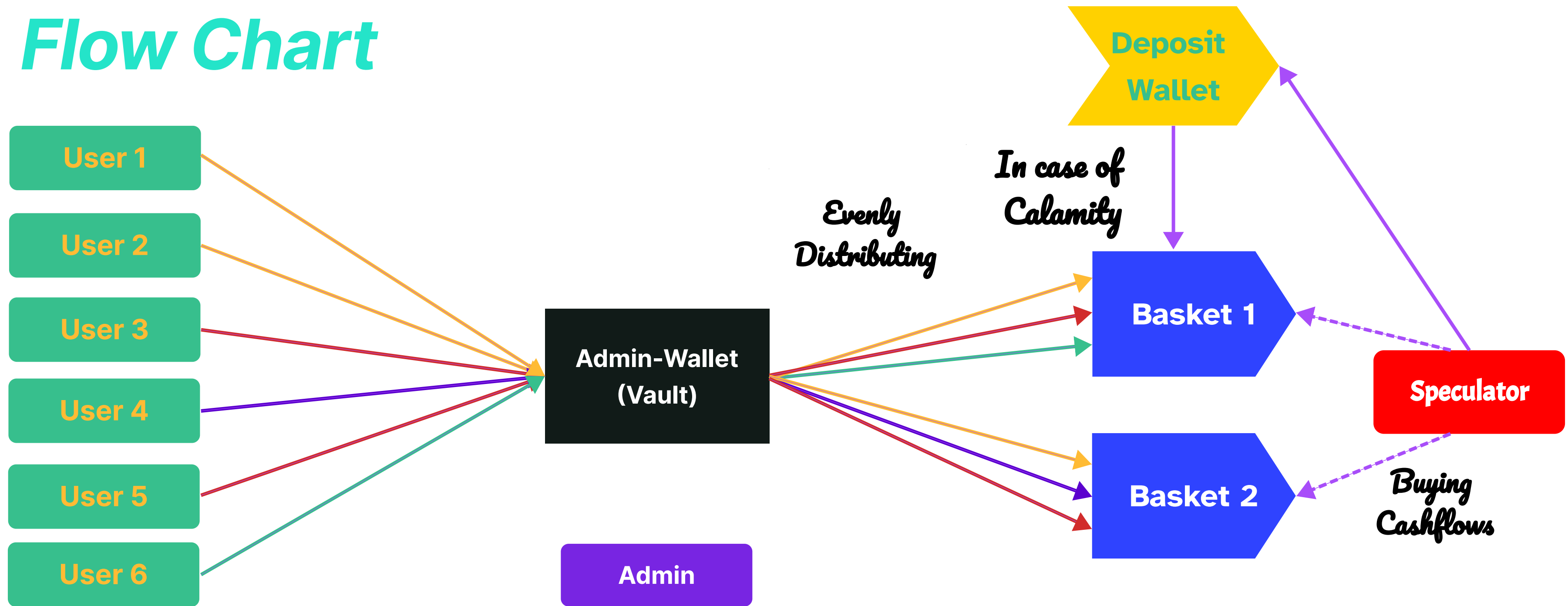
Manager

Review & Authenticate
Official documents of a member to grant access to the Airdrop Application

Speculator

Bids & cashes in the members' insurances and takes on the responsibility of managing payouts to the users while also assuming the risk involved

Flow Chart



Airdrop Insurance

Lemonade

ML to **predict** and **prevent insurance fraud**, speeding up the claims process and providing more accurate payouts.

Blue River Technology

Crop Insurance Product that utilizes **ML** to predict weather patterns and automate claims processing based on weather-related losses.

Airdrop Insurance - Our Project

Superfluid to **automate insurance claims** with more accuracy, speed, and cost-effectiveness.

Existing Solutions

SCOPING

AIRDROP INSURANCE

Timeline/Milestones

Finding and
Fixing errors in
the code

Updating
codebase to
Flutter 3.7.7

Improving
existing features

Design and
Implementation
of Manager Polls

Creating IIITH
Tokens

Deployment of
the Application
on Play store

Implementing
Speculator role

Improving UI/UX
Interface

Implementing
smart contracts
in Solidity

Enabling Money
streaming using
Superfluid

Enabling users
to claim free
testnet tokens

Login & Signup
pages - Members
& Admins

Verify Claims
from Members via
Admin Role

Create, Buy &
Claim Insurance
options

Digital Token
Streaming on the
Web

Final Release to
Google Play
Console

Public Launch

Sprint 3

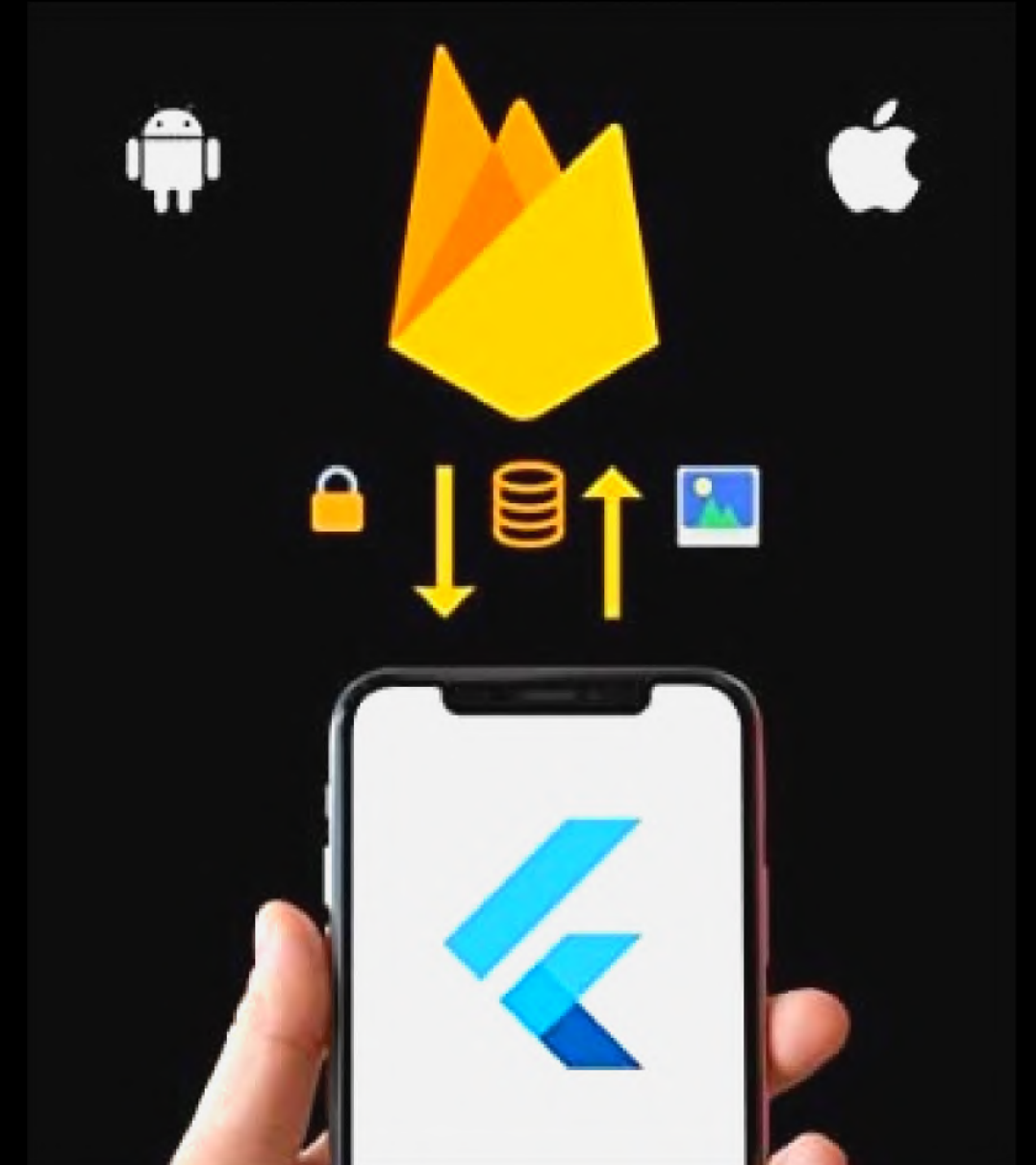
Sprint 4

Sprint 5

Sprint 6

Sprint 7

FINALE



FEATURES

IMPLEMENTED – R1

DOWNLOAD

APP

- Scan the QR code
- Download the APK file
- Install it on your mobile
- Use it!!



MANAGERPOLL

←

Propose a Managerpoll

Poll duration

3/10/2023 - 3/31/2023

Reset Form

Submit Poll Proposal

←

Approve poll proposals

Can I become a manager?

▼

Promotion Poll: Should I be Promoted to Manager Role?

▲

Additional information

1089

Voting options

Yes

No

Start date

10-03-2023

End date

31-03-2023

✓ Approve

✗ Decline

want to become a manager

▼

want to become a manager

▼

jsjsj

▼

want to become a manager

▼

←

+

🕒

👤

Active polls

Promotion Poll: Should I be Promoted to Manager Role?

▲

Additional information: 1089

Yes

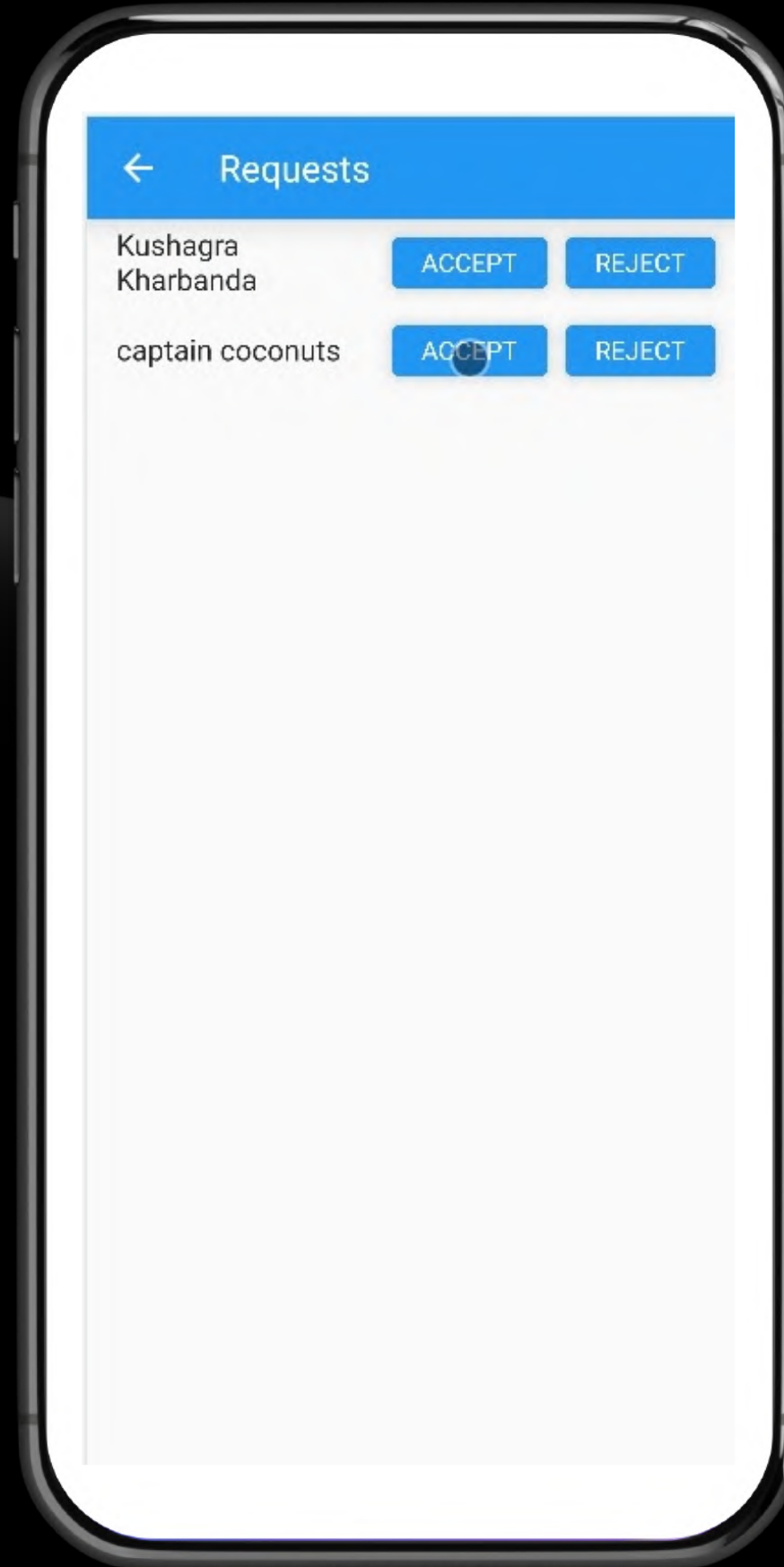
0%

No

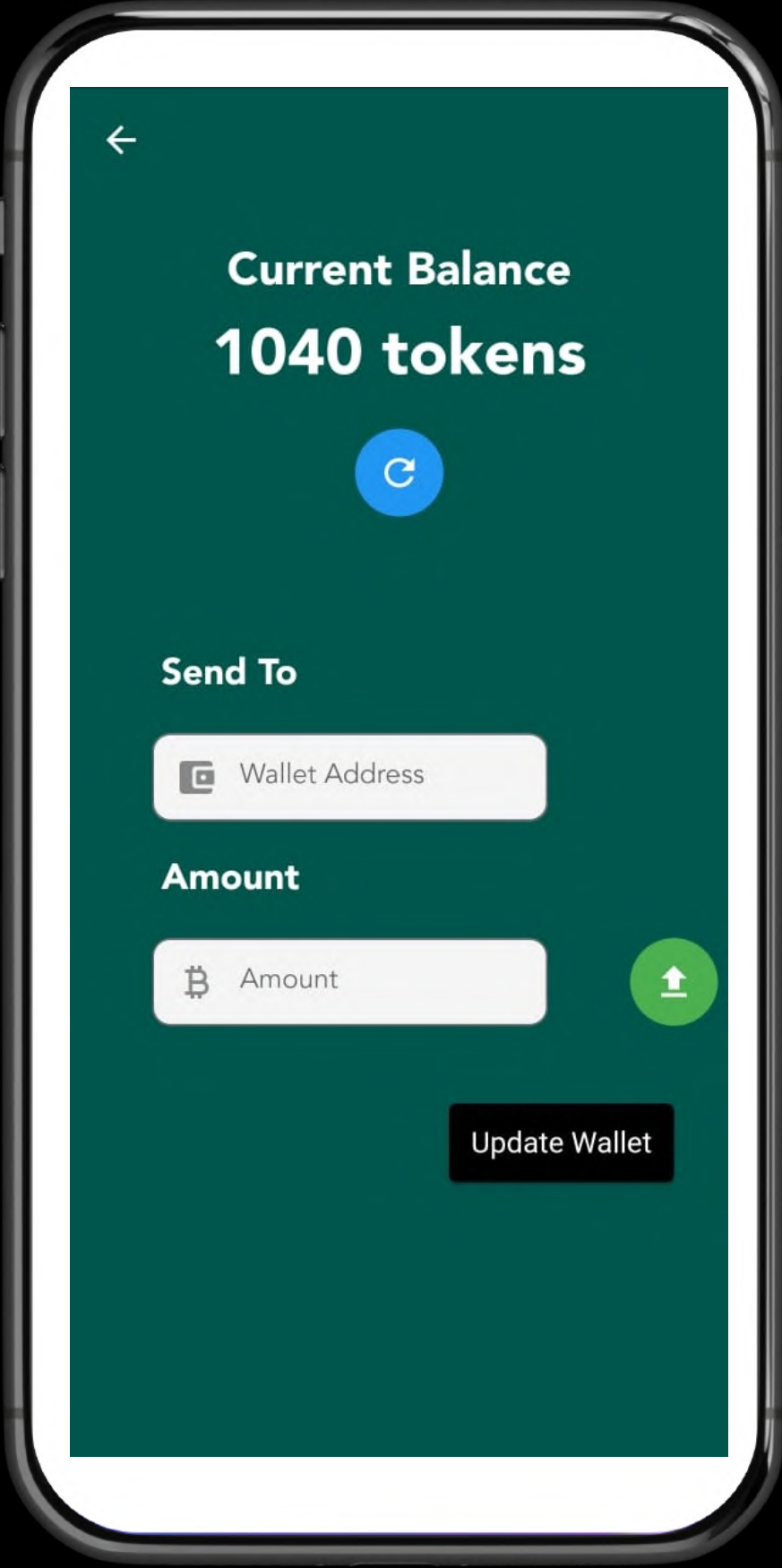
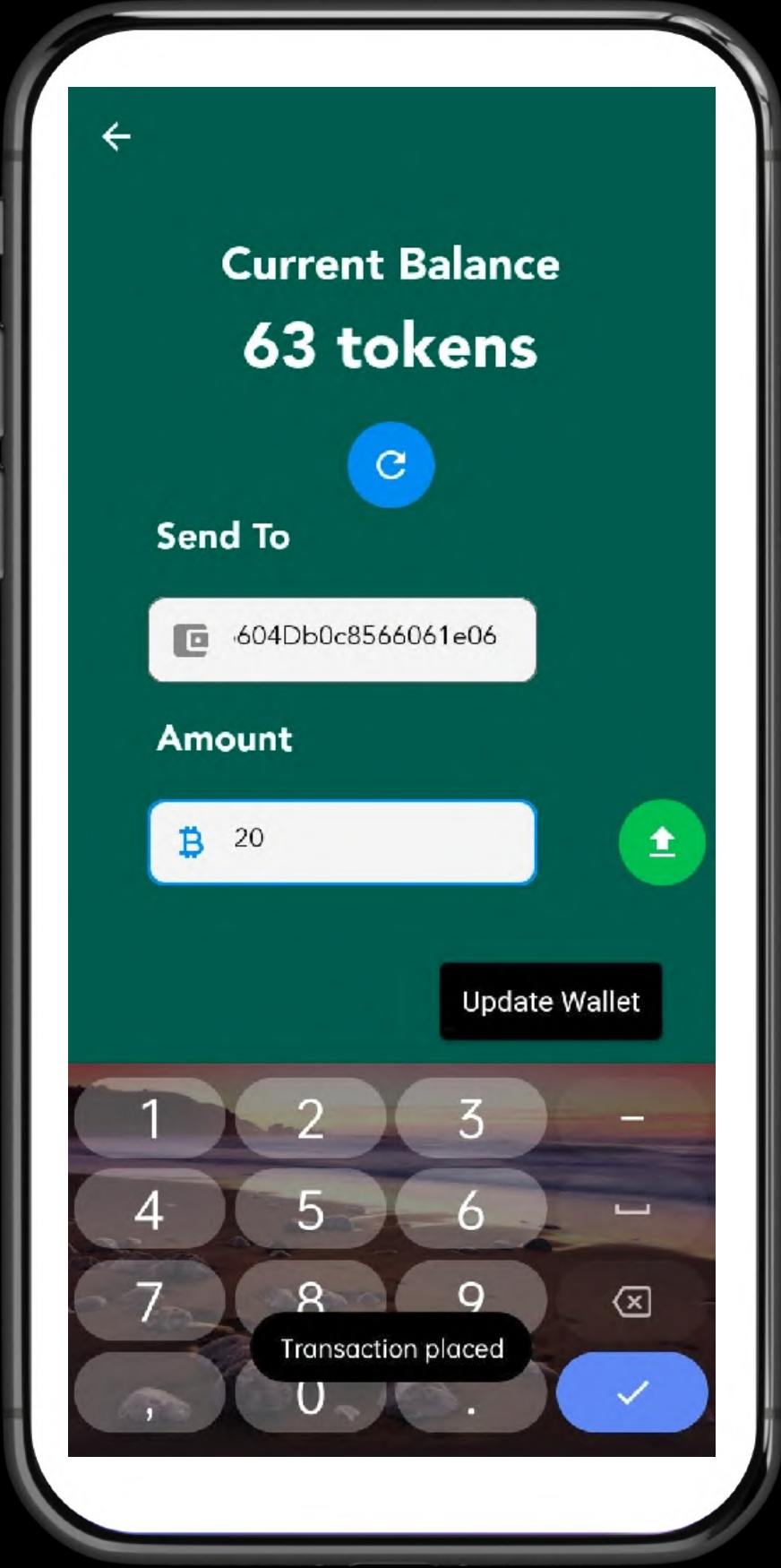
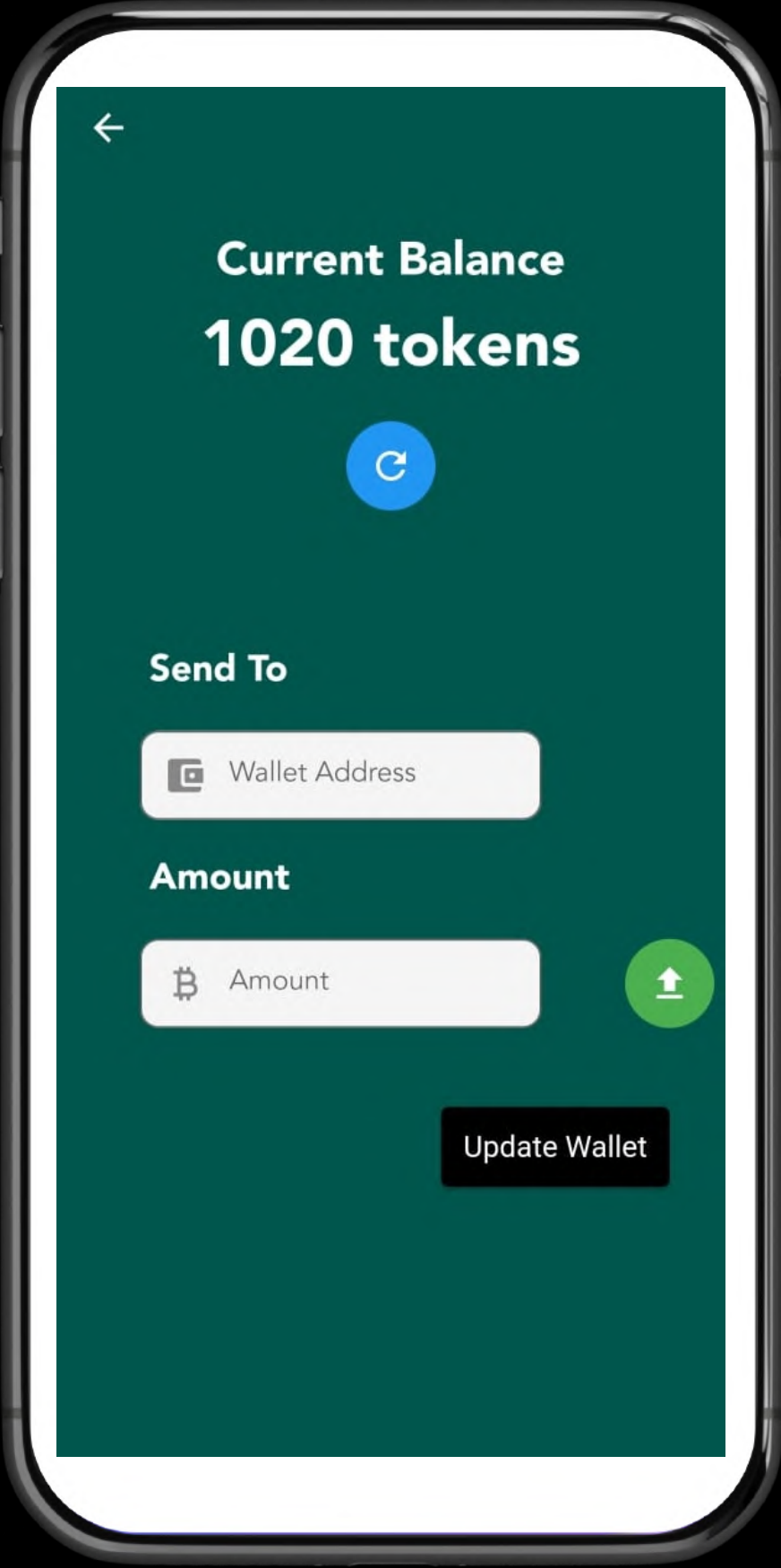
0%

Try Pitch

MANAGER REQUESTS IN ADMINPAGE



IIITH TOKEN TRANSACTION



APP DEPLOYMENT ON GOOGLE PLAY CONSOLE

REJECTIONS

Google Play Console

Search Play Console

🔗 ? Airdrop Insurance

All apps

Dashboard

Inbox1

Statistics

Publishing overview

Release

Releases overview

Production

Testing

Open testing

Closed testing

Internal testing

Pre-registration

Pre-launch report

Overview

Details

Settings

Reach and devices

Overview

Device catalog

App bundle explorer

Releases overview

See an overview of all of your releases across different tracks. [Show more](#)

Summary of all tracks

Production

Active · 0 active devices · 1 country / region · [Release dashboard](#)

Hide test tracks ^

Open testing

Inactive

Closed testing

Active · 3 tracks

Internal testing

Inactive

Add filter

Search releases

Latest releases

Release	Latest version	Track	Release status	Last updated	Countries / regions	Install base	
8 (3.0.4)	8	Production	❌ Release not approved Full rollout	Mar 3, 2023 1:45 PM	1 of 177	0.00%	→
6 (3.0.3)	6	Closed testing - Alpha V 2.0	❌ Release not approved Full rollout	Feb 25, 2023 6:06 PM	1 Synced with production	0.00%	→
2 (2.0.0)	2	Closed testing - track01	❌ Release not approved Full rollout	Feb 16, 2023 11:54 PM	1 Synced with production	0.00%	→
1 (2.0.0)	1	Closed testing - Alpha	❌ Release not approved Full rollout	Aug 31, 2022 8:23 PM	1 Synced with production	0.00%	→
-	-	Open testing	Draft	-	1 Synced with production	-	→

APPROVAL

Google Play Console

Search Play Console

🔗 ? Airdrop Insurance

All apps

Dashboard

Inbox2

Statistics

Publishing overview

Release

Releases overview

Production

Testing

Open testing

Closed testing

Internal testing

Pre-registration

Pre-launch report

Overview

Details

Settings

Reach and devices

Overview

Device catalog

App bundle explorer

Production

Create and manage production releases to make your app available to all users in your chosen countries. [Learn more](#)

Track summary

Active · Latest release: 8 (3.0.4) · 177 countries / regions · 0 installs

Release dashboard

Releases

Countries / regions

Releases

8 (3.0.4)

✅ Available on Google Play · 1 version code · Released on Mar 10 12:02 PM

Show summary ^

View release details

Release history

Show ^

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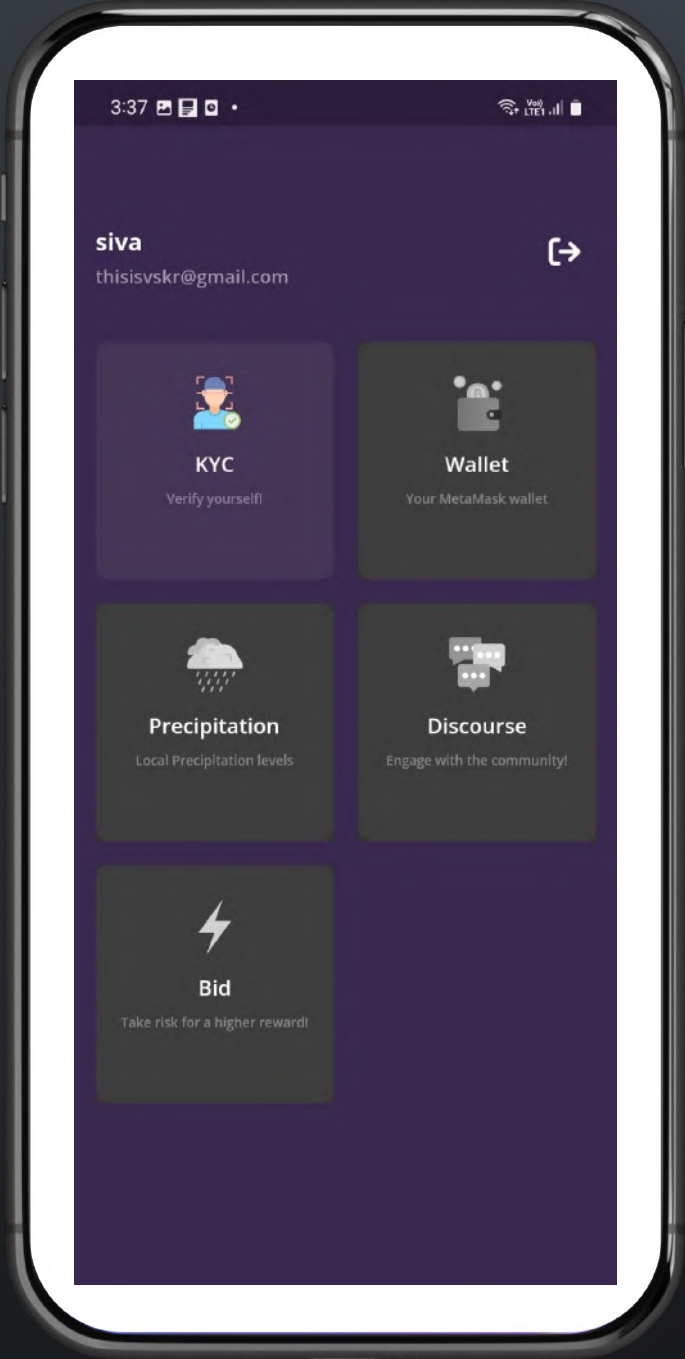
R2

PROGRESS FROM R1

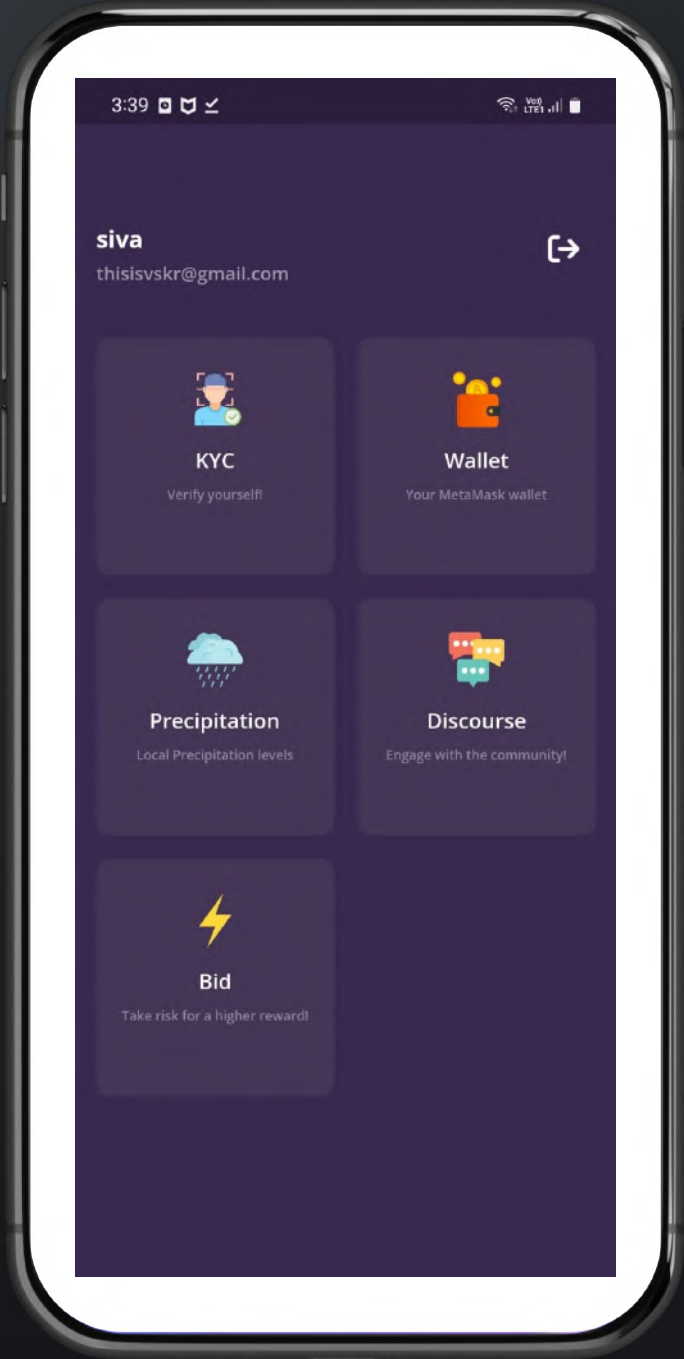
Speculator role



Login/Register Page
for Speculator

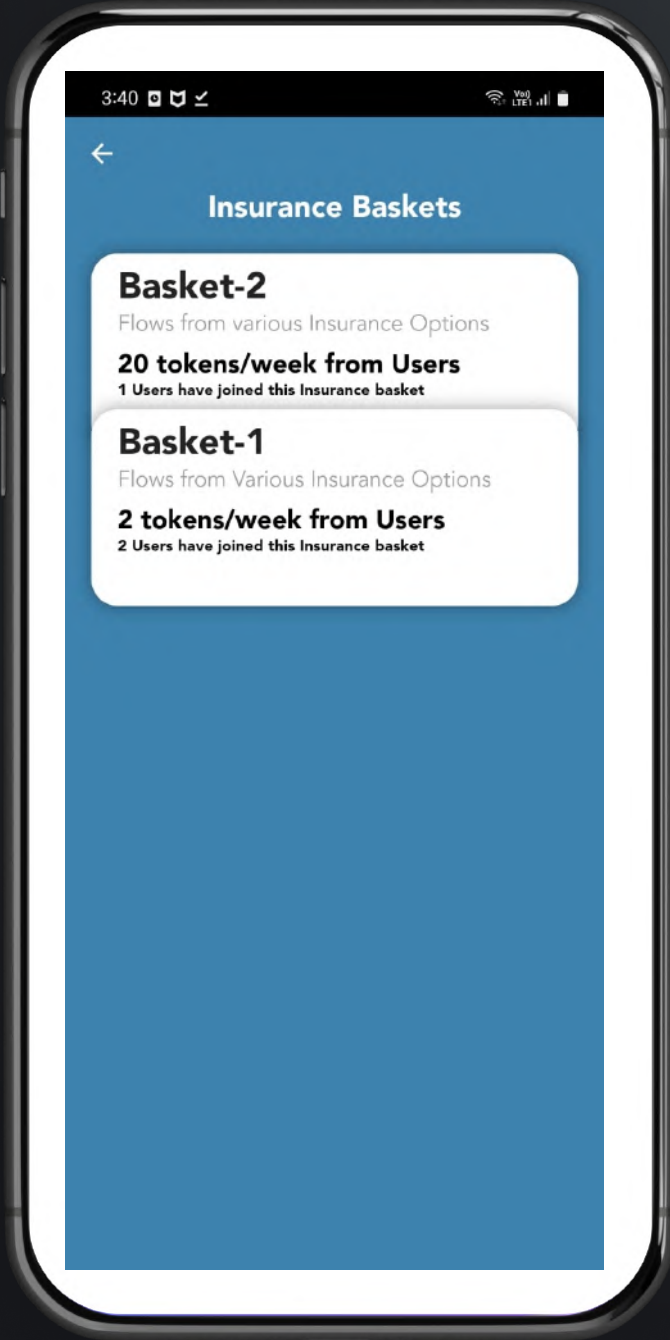


Before
KYC Verification

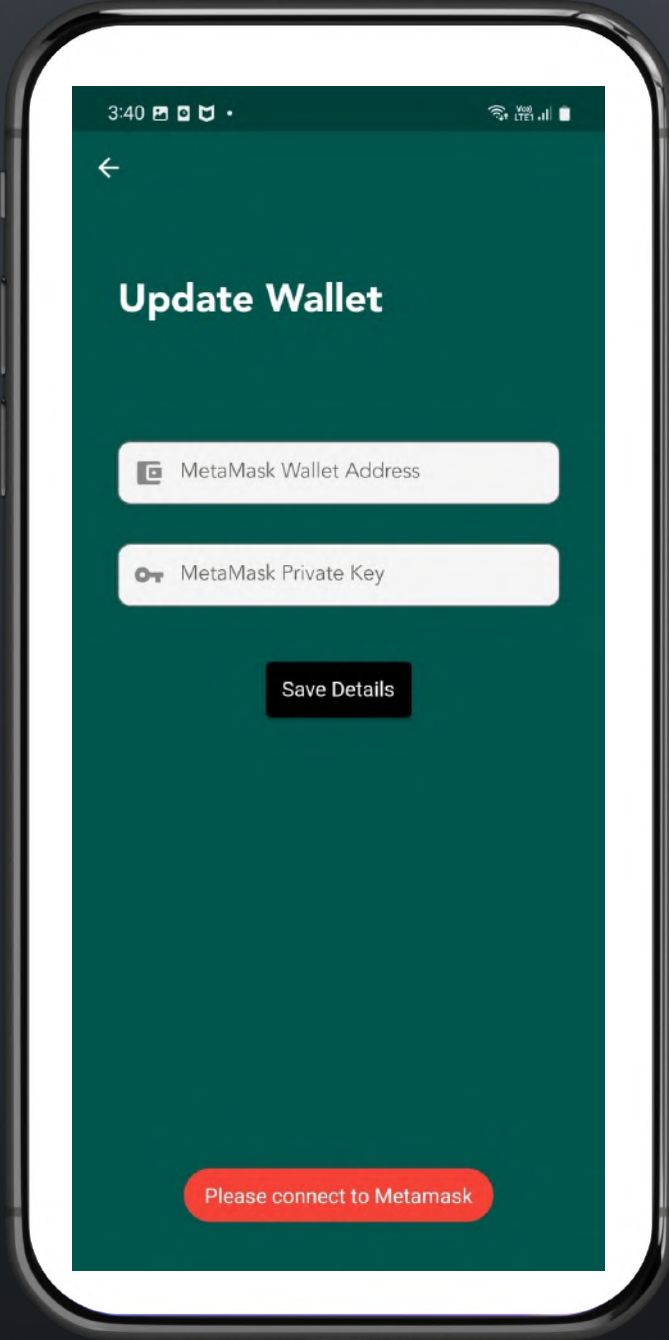


After
KYC Verification

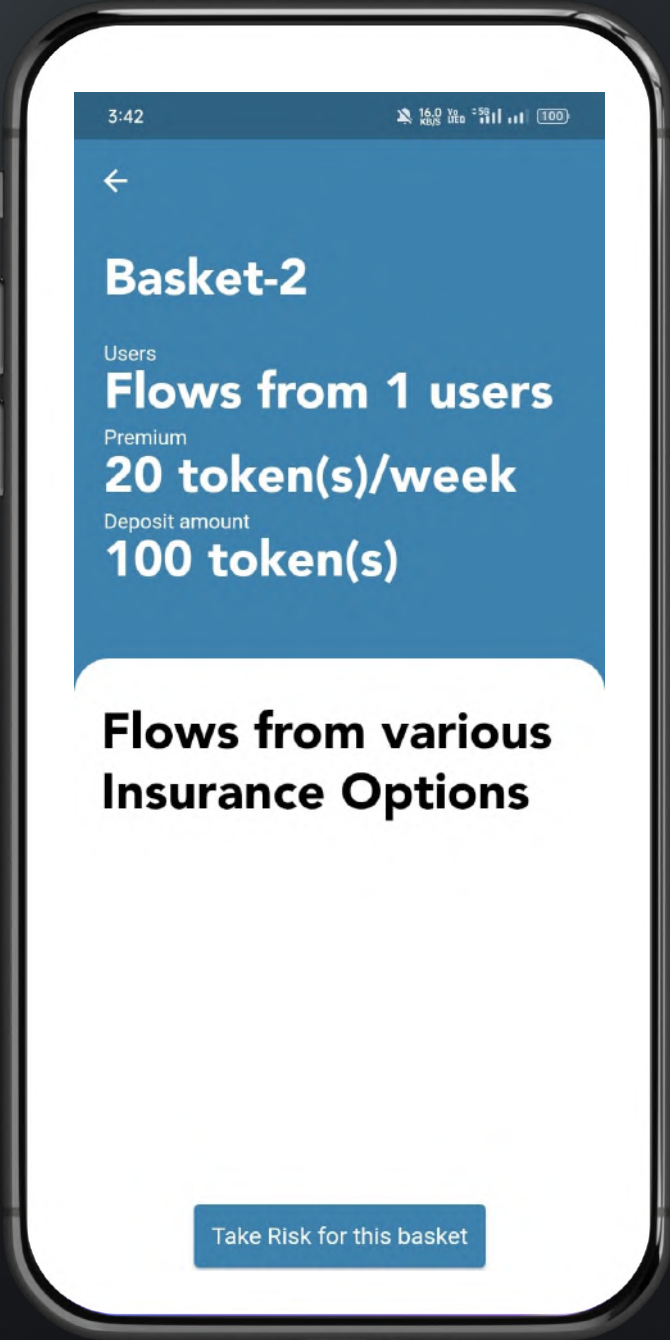
Speculator role



Display Insurance Bid Options



Update Wallet (If not connected yet)



Purchasing Insurance Baskets

GETTING TOKENS

Get Tokens

To given metamask
wallet address

0xc8...1e06

CLICK TO GET 100K DAIX

NOTE: This will only work on Mumbai and you must wait 12 hours between calls.

DIGITAL TOKEN STREAMING

Create a Flow

0xc8...1e06

Recipient Address

0x463FD0d9Fd88551400C9DadC8650Fc3037CE5

Flow Rate (wei/second)

2000000000000

CLICK TO CREATE YOUR STREAM

Your flow will be equal to:

5.184 DAIx/month

Update a Flow

0xc8...1e06

Recipient Address

0x463FD0d9Fd88551400C9DadC8650Fc3037CE5

Flow Rate (wei/second)

2000000000000

CLICK TO UPDATE YOUR STREAM

Your flow will be equal to:

51.84 DAIx/month

Delete a Flow

Connected Wallet: 0xc8...1e06

Recipient Address

0x463FD0d9Fd88551400C9DadC8650Fc30

DELETE FLOW

When flow is created

Super Tokens					All networks ▾
P Polygon Mumbai					
Asset	Balance	Net Flow	Inflow/Outflow		
₿ fDAIx	0.00063155	+5.256 / mo	+5.256 / mo	-0 / mo	⌵


When flow is updated

Super Tokens					All networks ▾
P Polygon Mumbai					
Asset	Balance	Net Flow	Inflow/Outflow		
₿ fDAIx	0.0008465	+52.56 / mo	+5.256 / mo	-0 / mo	⌵

When flow is deleted

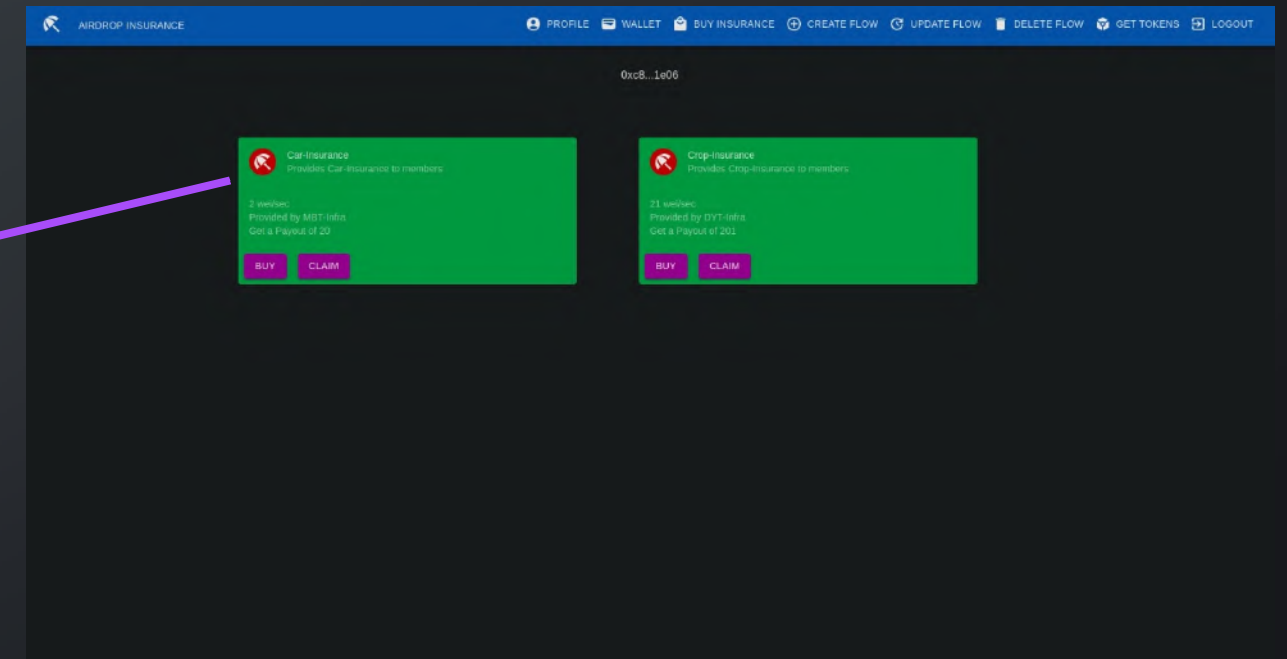
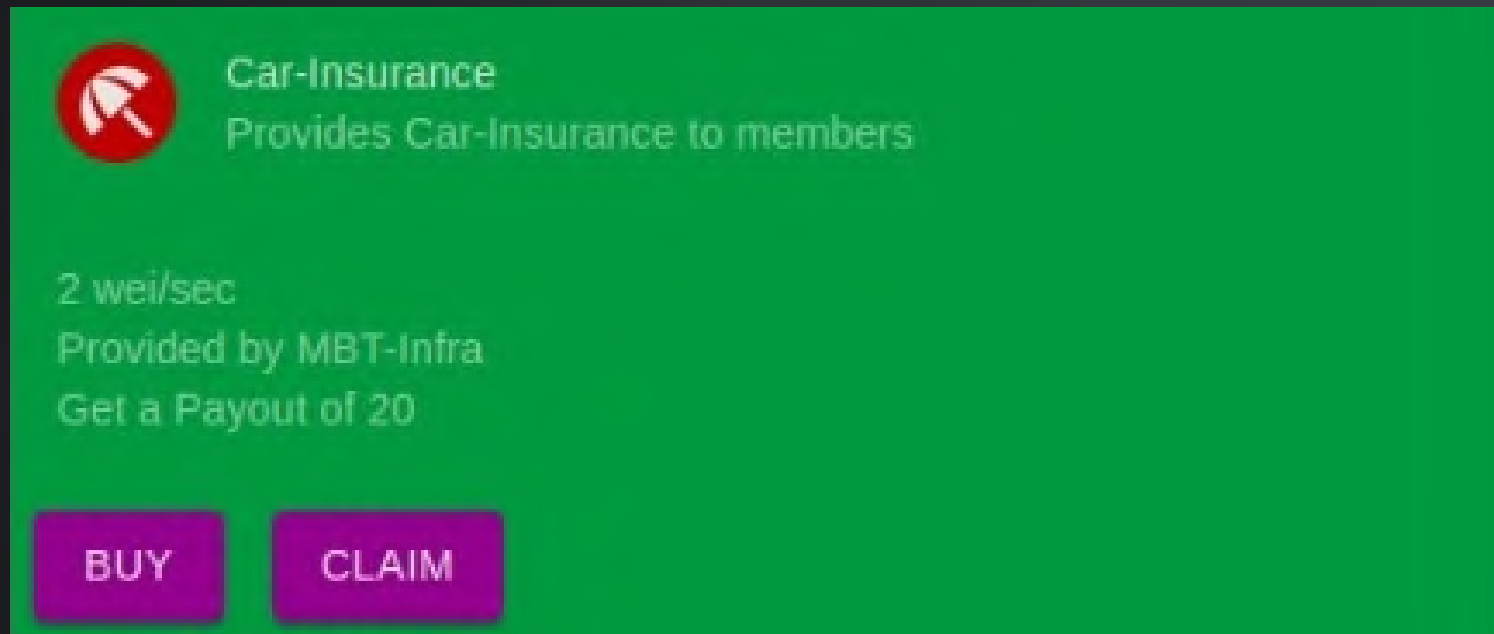
Super Tokens

All networks

P	Polygon Mumbai				
Asset	Balance	Net Flow	Inflow/Outflow		
 fDAIx	0.008188	-	-		⌵

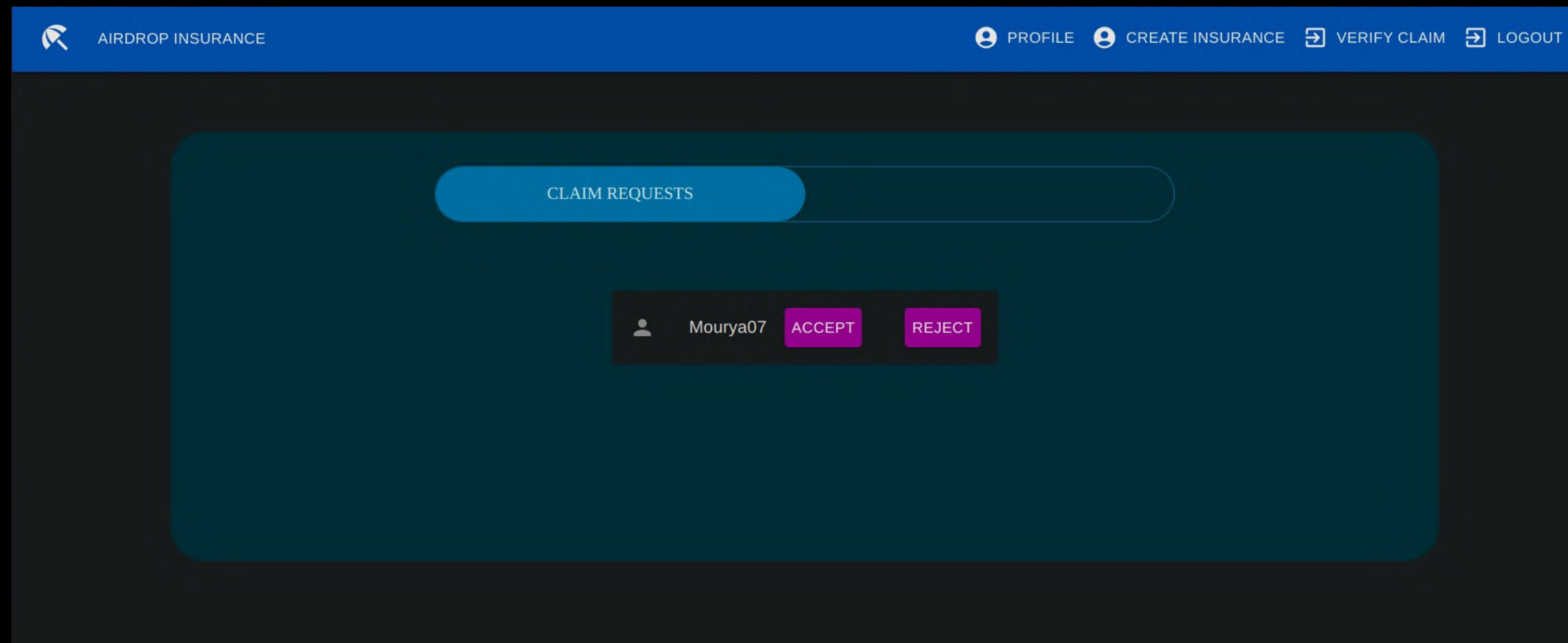
Streaming stopped

Buy and Claim Insurance Options




- Clicking on Buy creates a superfluid stream from the buyer's wallet to the admin's wallet, based on the amount specified flowrate in the Insurance Option.
- Clicking on Claim generates a request that is displayed in the admin's Verify Claim tab, and upon their acceptance, a flow is created from the admin's wallet to the user's wallet.


Claim Verification





Clicking on **Accept** starts a payout stream to the Buyer's wallet and Clicking on **Reject** removes the Claim Request


Create Insurance Option


 AIRDROP INSURANCE

 PROFILE

 CREATE INSURANCE

 VERIFY CLAIM

 LOGOUT



Create Insurance Option

Name *

Description *

Provider *

Price *

0

Payout *

0

SAVE CHANGES

The Feature of Creating an Insurance option in the Web Application involves filling in fields for Name, Description, Provider, Payout, and Price.

PENDING TASKS

AIRDROP INSURANCE

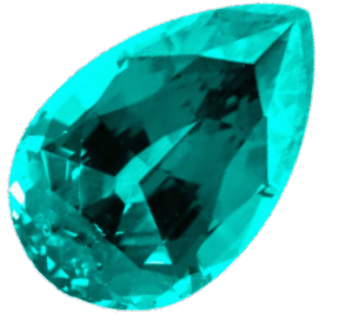


IMPLEMENTATION OF MONEY STREAMING USING SUPERFLUID



- Superfluid is a financial technology that facilitates money streaming by enabling continuous and instantaneous payments between parties.
- It is a protocol built on Ethereum that eliminates the need for traditional payment channels, allowing users to dynamically send and receive funds based on the terms of the contract
- **We utilize the Superfluid platform for instantaneous transactions between the treasury wallet and the buyer of an insurance option when purchased, as well as between the treasury wallet and the speculator when they undertake the risk of an insurance option.**





FINAL RELEASE TO GOOGLE PLAY CONSOLE

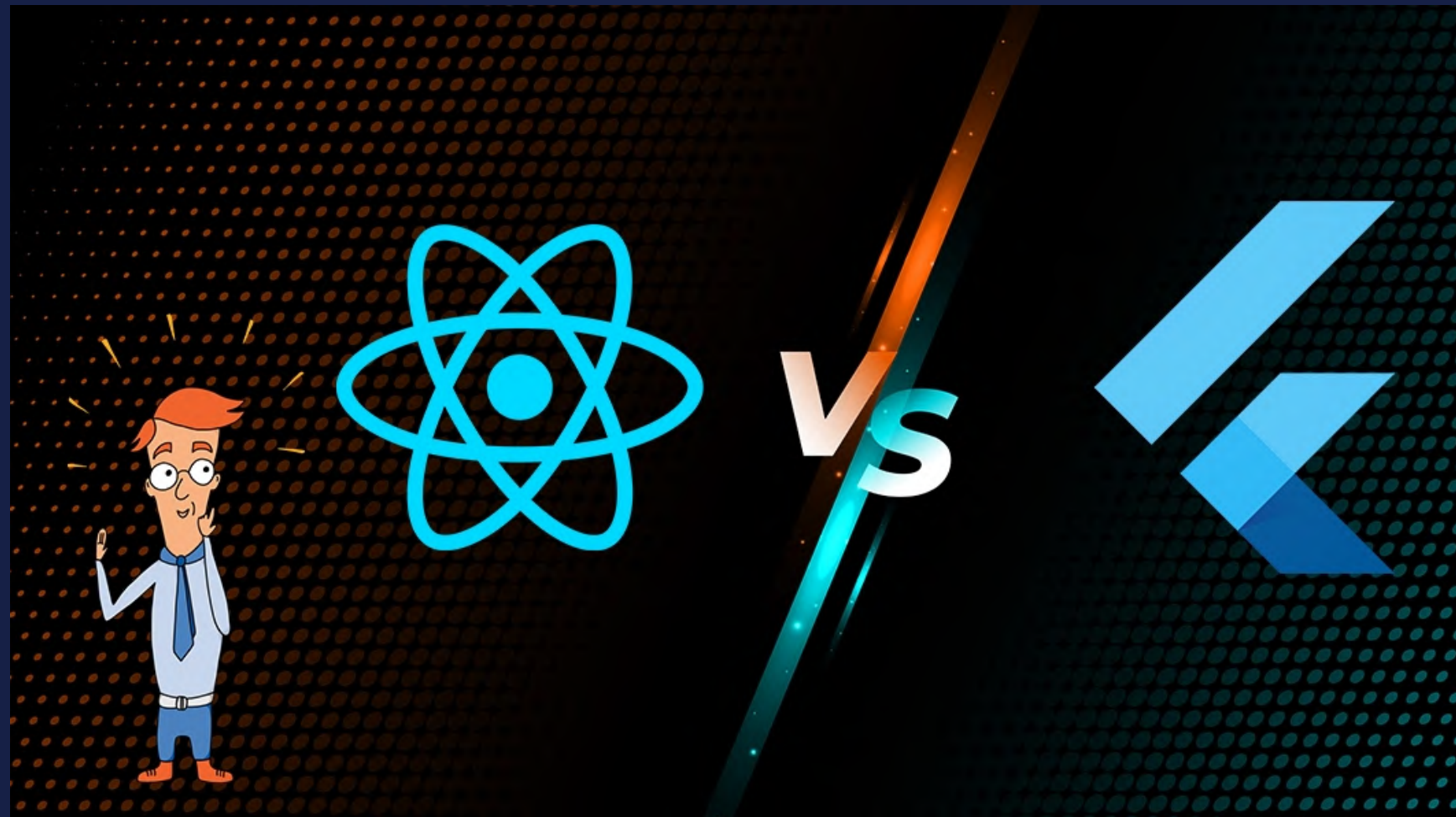
- A speculator bids and cashes in the members' insurances and takes on the responsibility of managing payouts to the users while also assuming the risk involved.
- However, we will need to establish strict criteria for selecting speculators, as well as provide a transparent and accountable system for managing their activities to ensure the protection of our users' funds.
- **Adding the speculator role will enhance the user experience and improve security measures, providing peace of mind to members. The platform is dedicated to continually improving its security measures to safeguard users' funds.**
We intend to add this role into our Application.



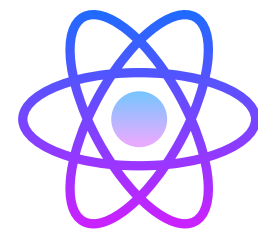


AIRDROP INSURANCE

Frameworks / Libraries



Frameworks



DONE

RESEARCH STUDY SURVEY

VESTING SCHEDULER



You

- Schedule Vesting -

To: Alice

Start Date: February 1st

Cliff Date: March 1st

End Date: June 1st

Cliff Amount: 100 AMZNx

Flow Rate: 100 AMZNx/mo.

Vesting Scheduler



Calls to transfer
cliff amount and
start stream



You

100 AMZNx/mo. stream

100 AMZNx cliff amount sent



Alice



Calls to end stream



You

Stream deleted



Alice

CHALLENGES FACED

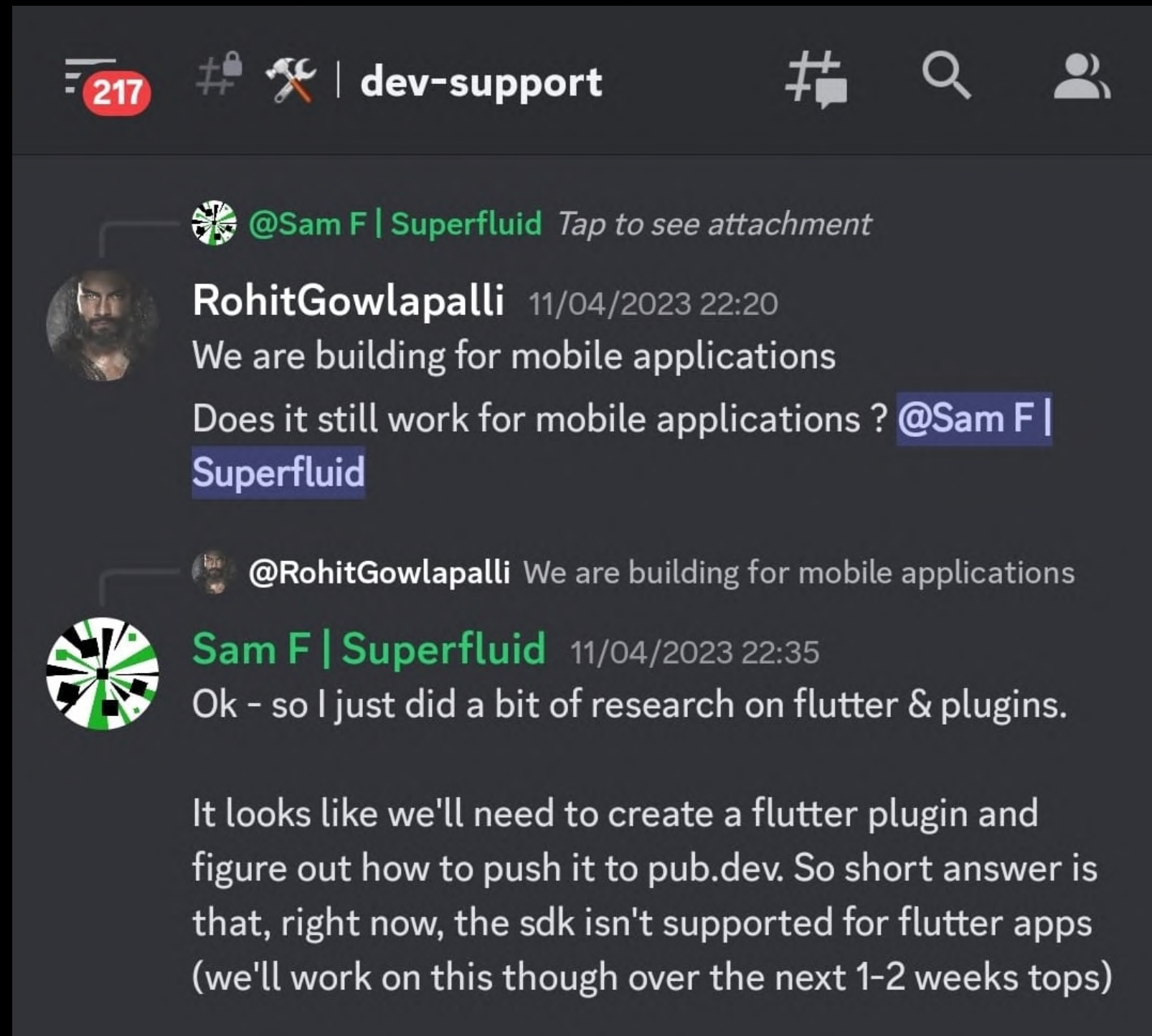
AIRDROP INSURANCE

- ❑ **Acquiring** the necessary skills in **Flutter**, **Firebase**, and **Solidity** frameworks required a significant amount of self-directed learning, and it proved to be quite time-consuming.
- ❑ **Analyzing** a **massive codebase** to detect any pre-existing privacy concerns and assess the source code was a challenging and time-intensive undertaking.
- ❑ **Submitting** our app for **Closed Testing** in Google Play Console was difficult due to strict policies and community guidelines. Although we addressed all privacy concerns, it was rejected four times due to an active version in previous release tracks.
- ❑ To **update** our existing Flutter codebase to the **latest Flutter** version, we had to resolve roughly 200 syntax errors. This process required a considerable amount of effort and involved re-iterating the code.

```
error • Undefined name 'Widget' • polls-1.0.1-upd/lib/polls.dart:1462:25 • undefined_identifier
error • Undefined name 'widget' • polls-1.0.1-upd/lib/polls.dart:1463:25 • undefined_identifier
error • Undefined class 'Widget' • polls-1.0.1-upd/lib/polls.dart:1471:3 • undefined_class
error • The method 'Icon' isn't defined for the type '_PollsState' • polls-1.0.1-upd/lib/polls.dart:1473:14 • undefined_method
error • Undefined name 'Icons' • polls-1.0.1-upd/lib/polls.dart:1474:9 • undefined_identifier
error • Undefined name 'Colors' • polls-1.0.1-upd/lib/polls.dart:1475:16 • undefined_identifier
error • The method 'Container' isn't defined for the type '_PollsState' • polls-1.0.1-upd/lib/polls.dart:1479:14 • undefined_method
warning • The 'authors' field is no longer used and can be removed • polls-1.0.1-upd/pubspec.yaml:4:1 • deprecated_field
info • Unused import: 'package:flutter/material.dart' • test/widget_test.dart:8:8 • unused_import
info • Unused import: 'package:flutter_test/flutter_test.dart' • test/widget_test.dart:9:8 • unused_import
info • Unused import: 'package:app/main.dart' • test/widget_test.dart:11:8 • unused_import
```


CHALLENGES FACED

AIRDROP INSURANCE



- Integrating Superfluid flows into Flutter presents a challenge due to **the lack of existing plugins in pub.dev**, the official package repository for Flutter.
- **The Superfluid SDK is built for TypeScript and JavaScript frameworks**, which means that writing smart contracts in Solidity and mapping them to the existing Superfluid SDK is required to integrate Superfluid with Flutter
- Although we Superfluid faced difficulties integrating their technology into Flutter, we were able to **demonstrate the flows through a React JS web application built in a span of 1 week.**

MEET TEAM-10



GOWLAPALLI ROHIT

2021101113



LOSETTI MOURYA

2021101121



SIVA KOTI REDDY

2021101135



KADALI NIRMALA

2021101126

Major Tasks	Contributors
App Deployment	Kadali Nirmala & Rohit Gowlapalli
ManagerPoll & Implementation of Speculator Role	Rohit Gowlapalli
IIITH Token Transaction	Vempati Siva Koti Reddy & Kadali Nirmala
React Web Application to Demonstrate Transaction Flows	Rohit Gowlapalli & Losetti Mourya
<u>Implementation of Smart Contracts in Solidity</u>	Losetti Mourya & Vempati Siva Koti Reddy
Project Documentation	Vempati Siva Koti Reddy , Losetti Mourya & Rohit Gowlapalli

Q&A —



Thank you

Airdrop Insurance
[@Pitch.design](#)