CYPEE

Modern Crypto Wallet

Mentor -

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Agenda:

- Introduction
- Problem Statement
- Objective
- Scope
- Overview
- Key Features
- Requirement Analysis
- Conclusion
- Approval Mail
- Conceptual Designs
  - High Level Architecture
  - Web3 Architecture
  - Token Deployment Flow (CYP)
  - Transitional Flow
  - User Flow
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  - Class Diagram
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01 Introduction

Virtual currencies have been defined in 2009 by an anonymous person named Satoshi Nakamoto as a decentralized digital peer-to-peer payment system. Bitcoins have increased attention and two observations are attributed to its growing notice.

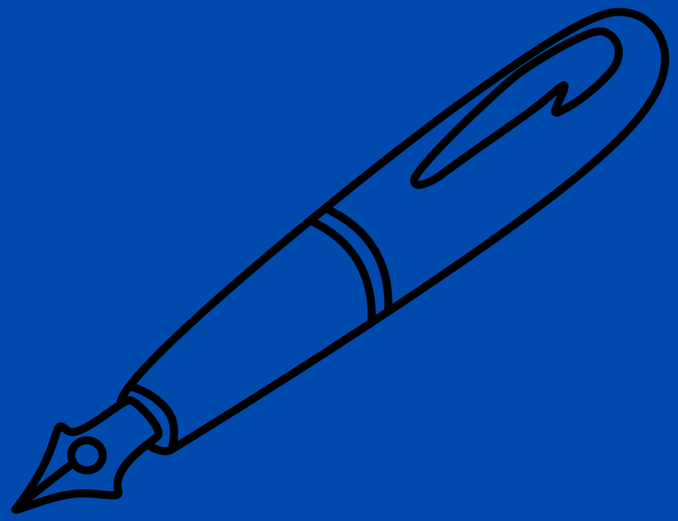
Hence, mobile phones provide the best way for using virtual currencies in payment systems. Cypee is an Android Based Native Application that has features of a crypto wallet and an Expenditure guide. It runs over a secured network of Blockchain.

04

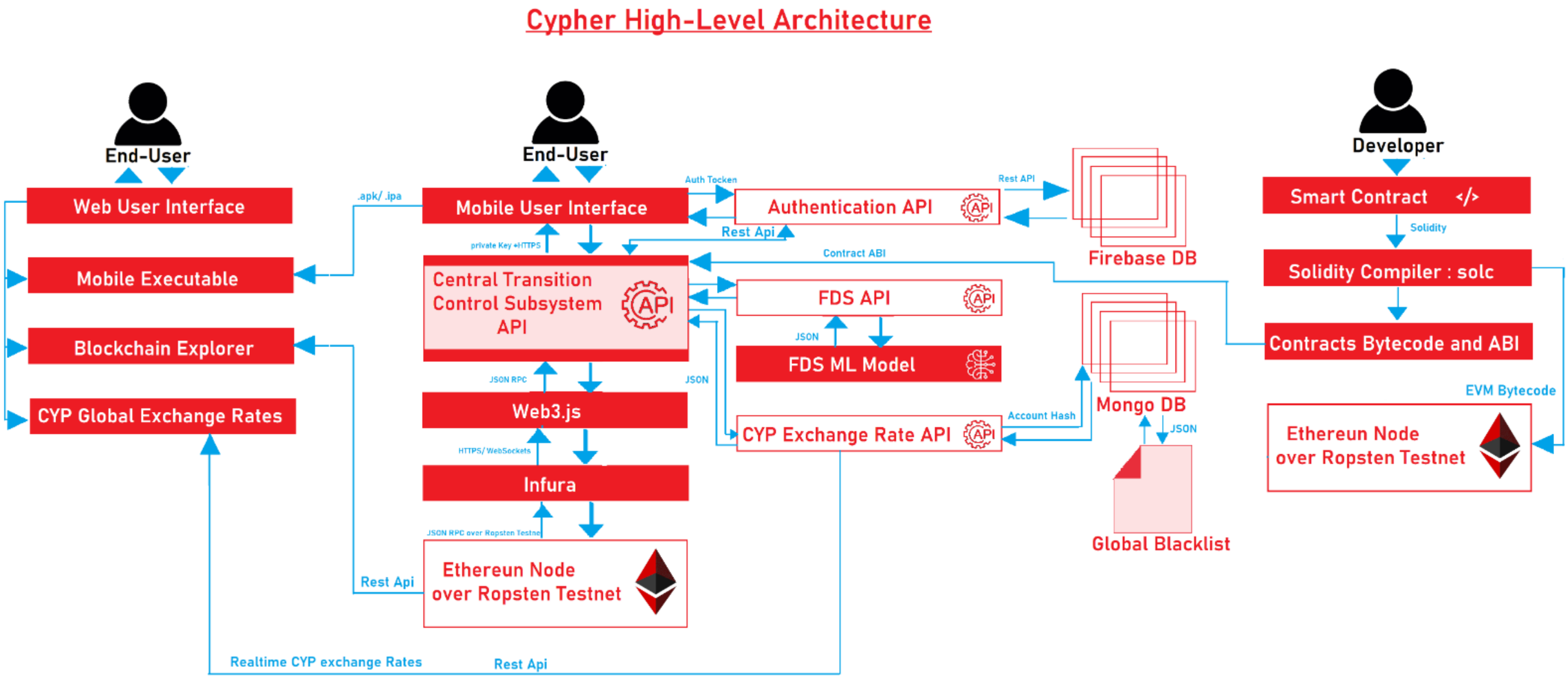
Scope:

- Virtual currencies and mobile banking represent the Greatest Achievements in information technology so far.
- The advantage of these methods of payment is that they are Easily Accessible to each client and much Faster than the traditional payroll system.
- The solution for Preventing the Identity Theft of clients is the use of cryptography.
- This method is Much Cheaper compared to traditional payment cards.
- On the other hand, because of the anonymity cryptocurrencies Can Be Used for Illegal Purposes.
- Crypto Currencies are Not Globally Acceptable yet.
- There is No Authority over Cryptocurrencies.
- Crypto Payments are Irreversible.

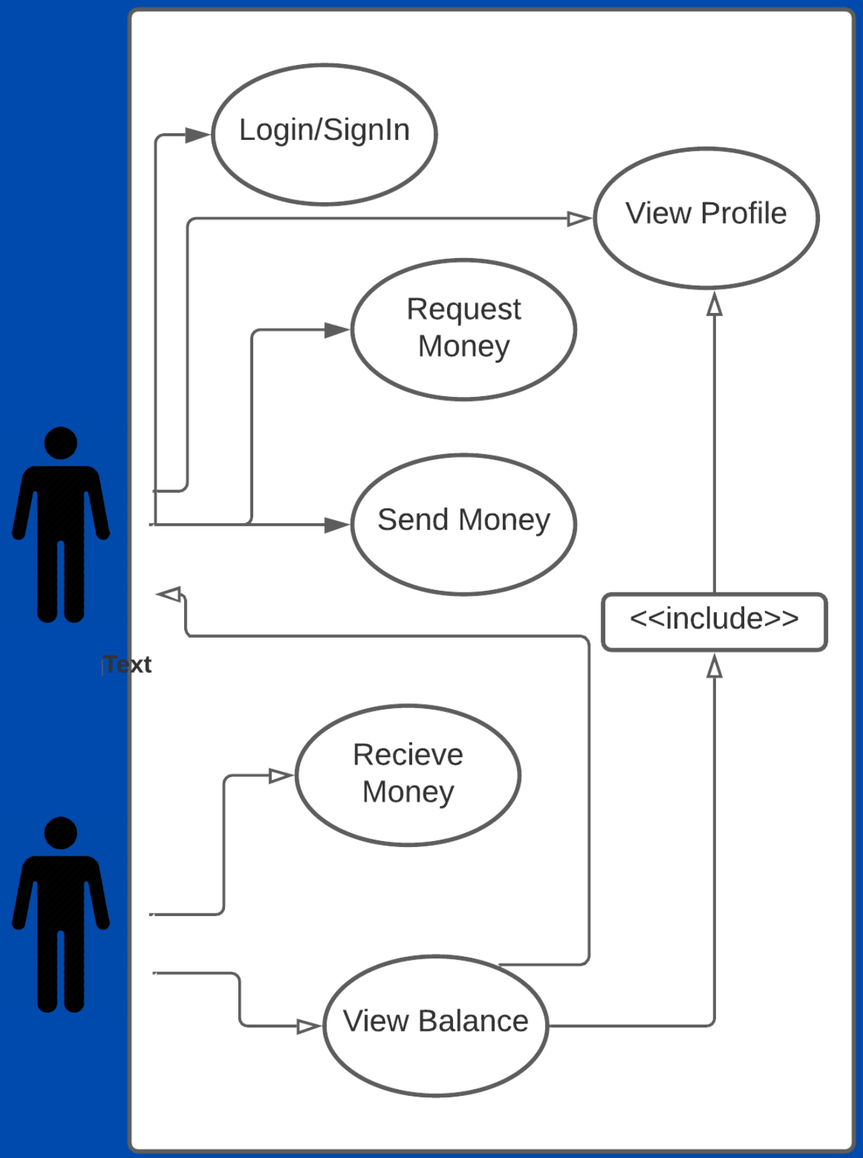
Detail Designs



High Level Architecture:

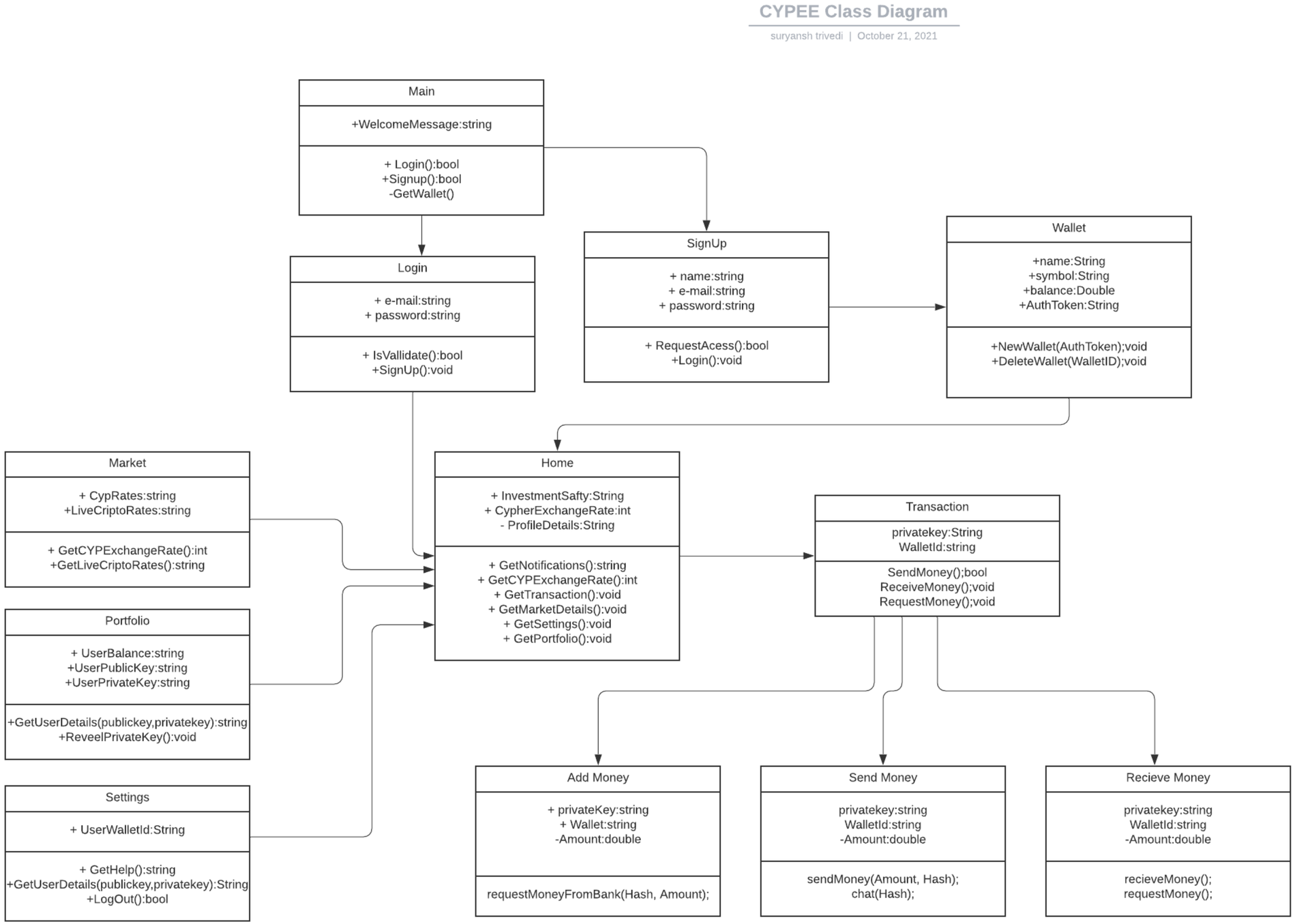


Use Case Model

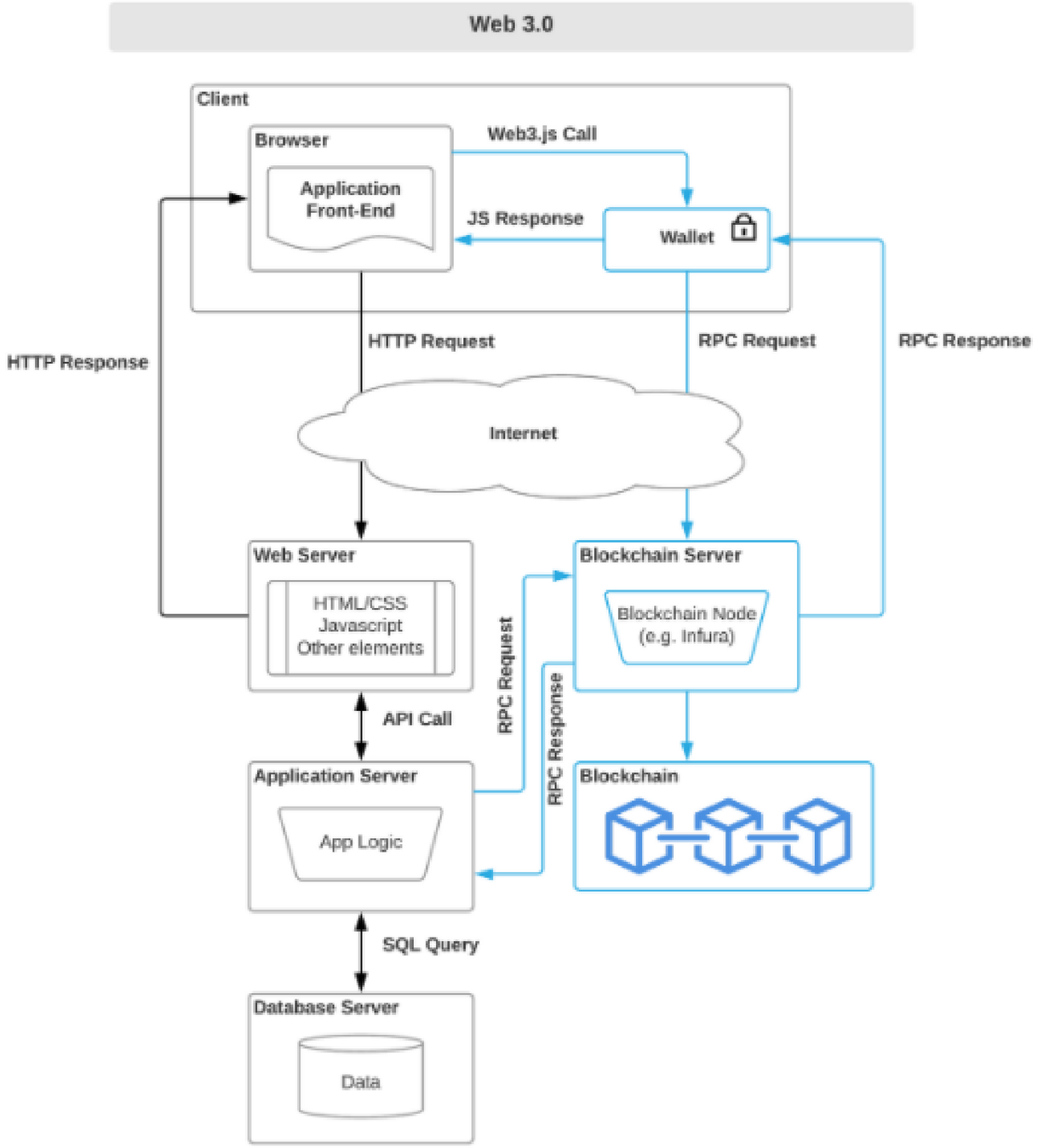


High Level Representation of different components in Cypee architecture is shown in this diagram

Class Diagram

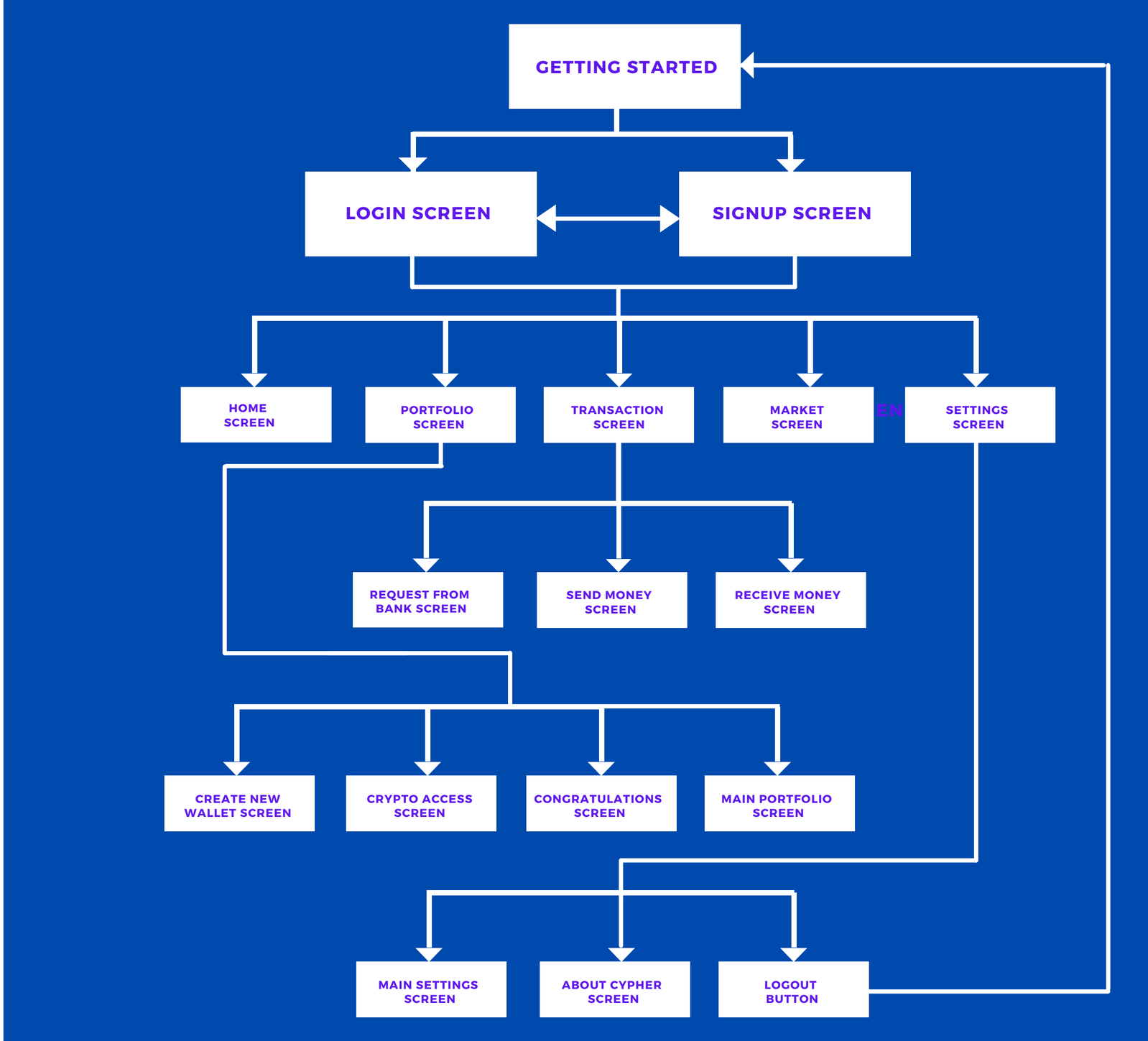


Data FLow Diagram



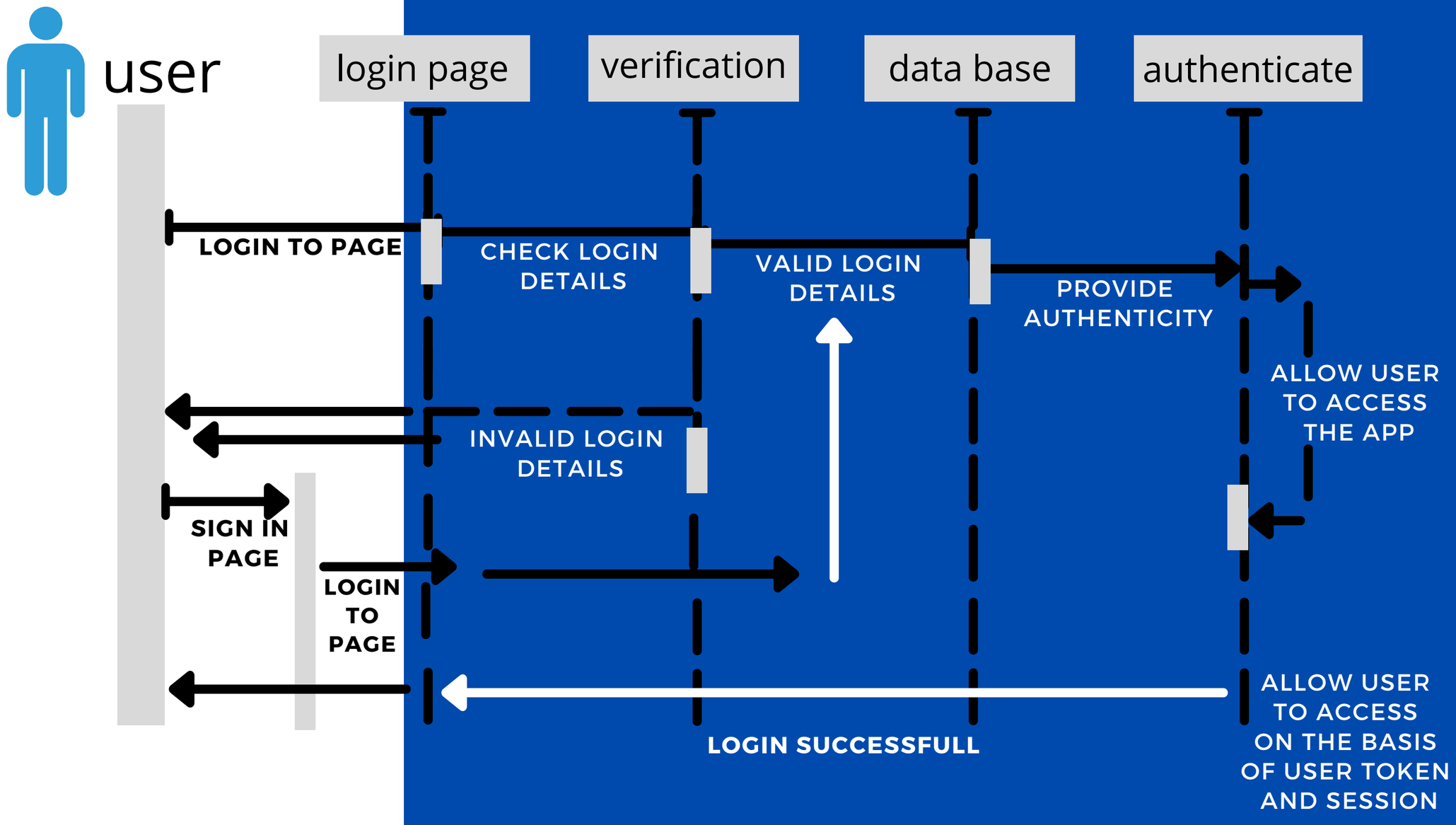
State Diagram

Detailed Flow of Application Interface from User end is displayed in this diagram. There are many screens for many different purposes. This diagram uses top-down sequence to display the user flow.



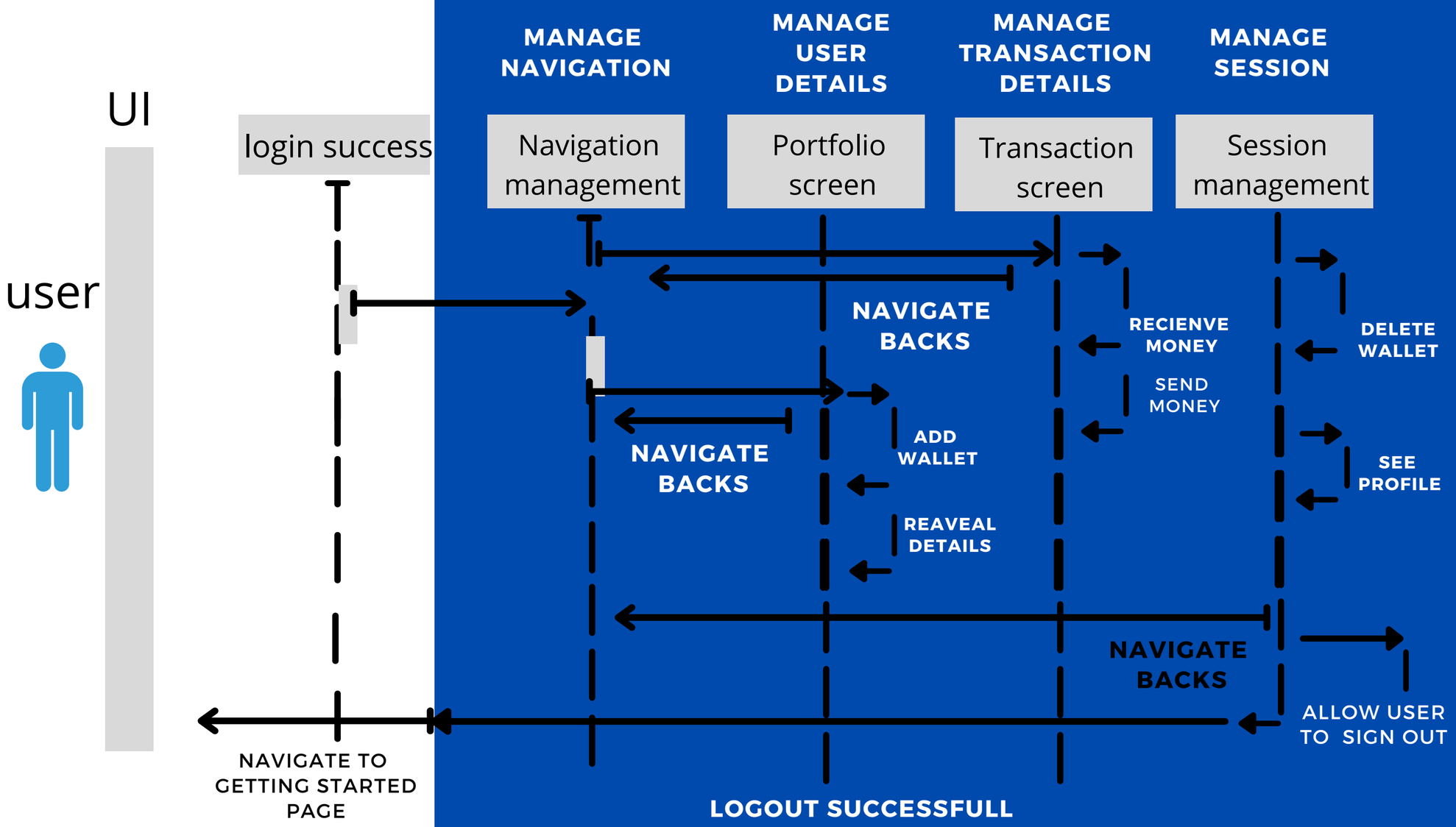
SEQUENCE DIAGRAM

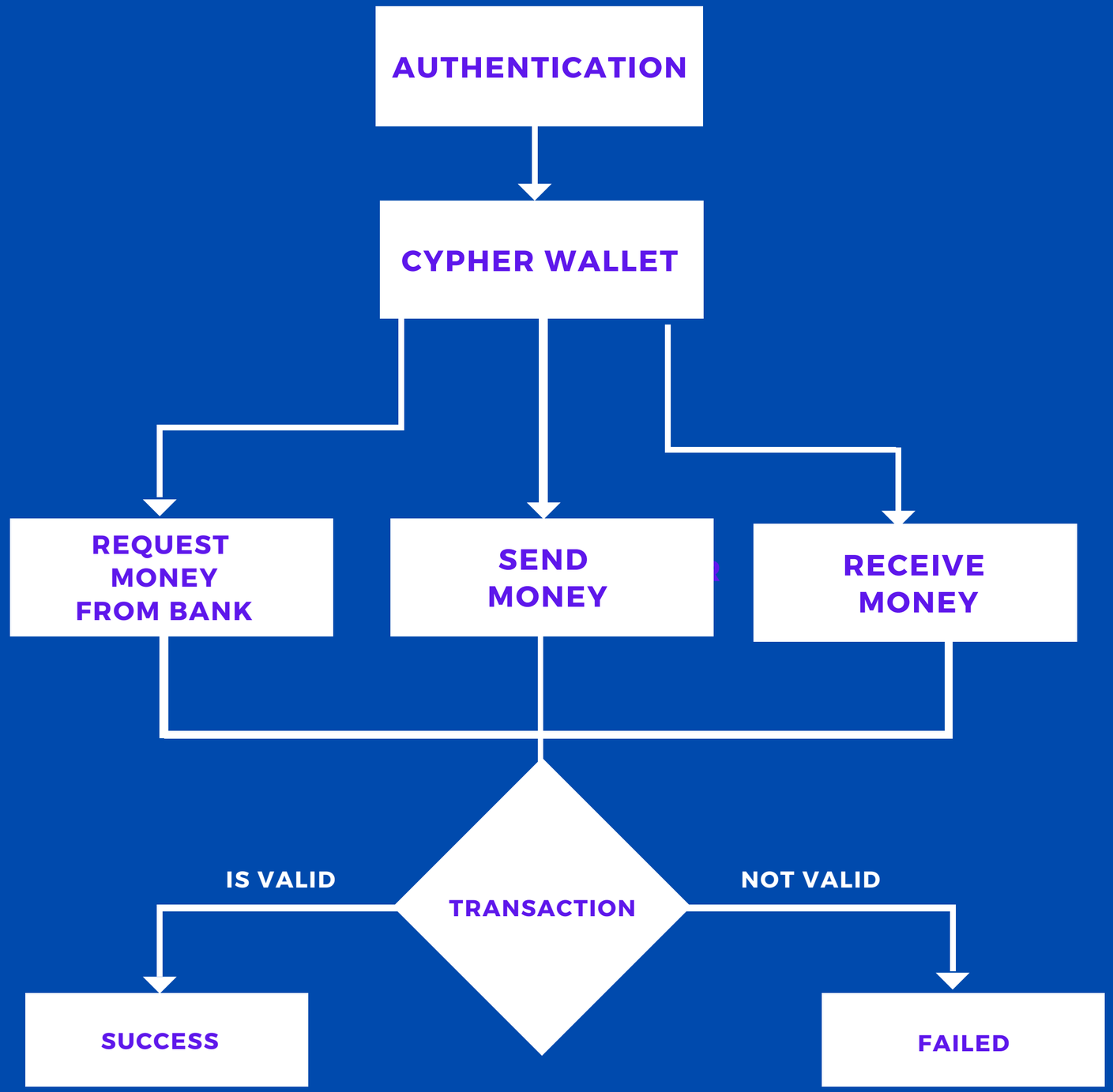
PRE-LOGIN



SEQUENCE DIAGRAM

POST-LOGIN

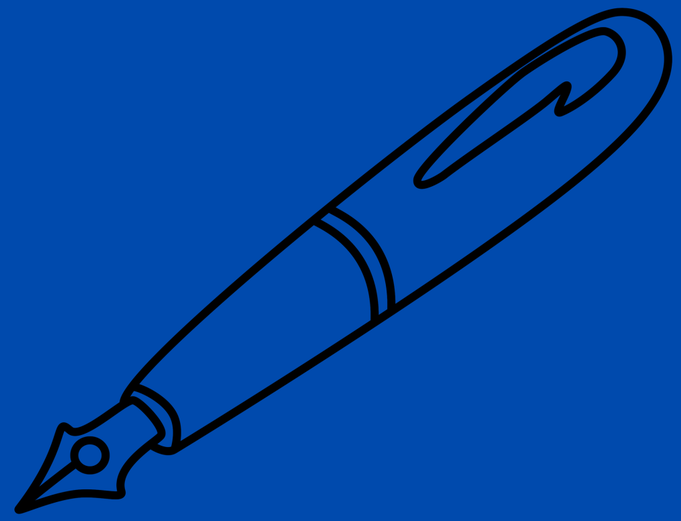




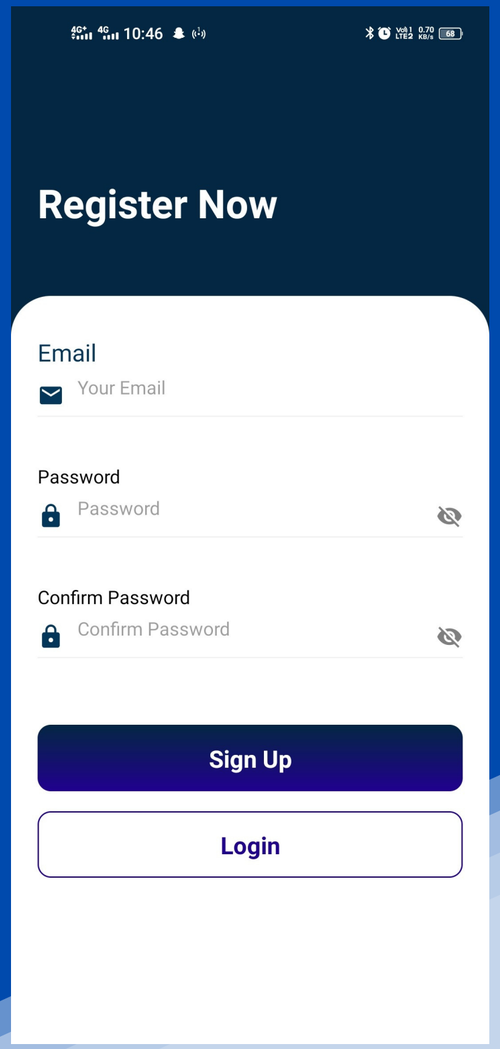
Activity Diagram

An authenticated User can do three types of transactions,
that are, Request Money from Cypee Bank, Send Money, and Receive Money.
If A transaction is Valid, the requested amount will get reflected to the Portfolio of the User.

Demonstration



Application SnapShots



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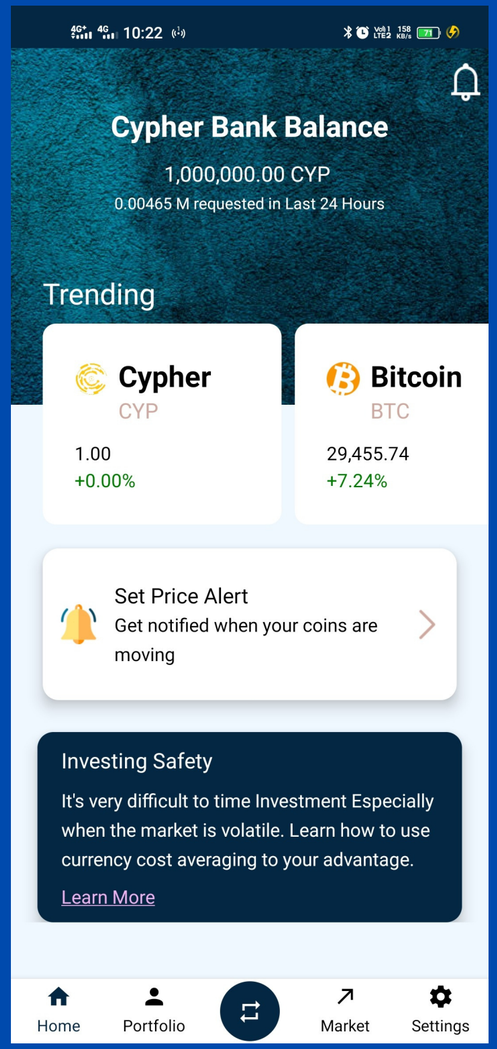

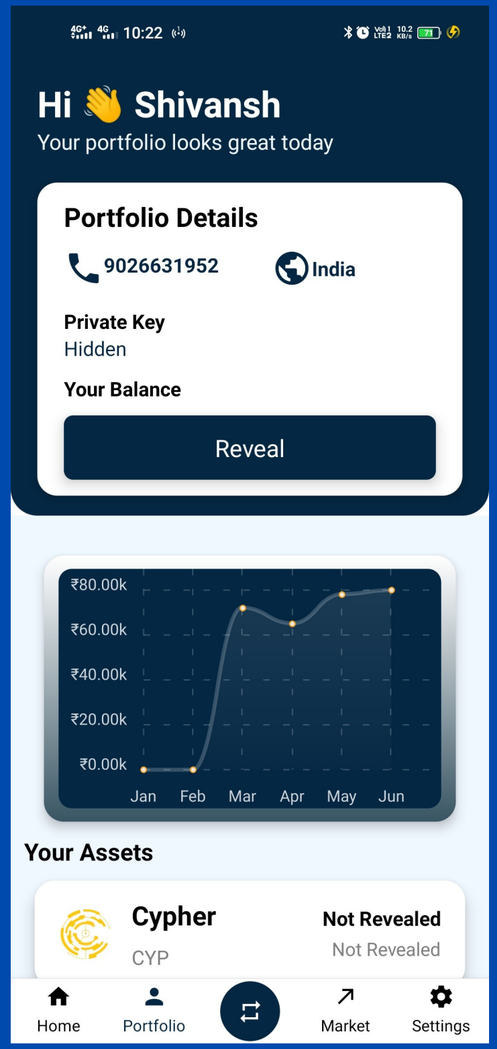

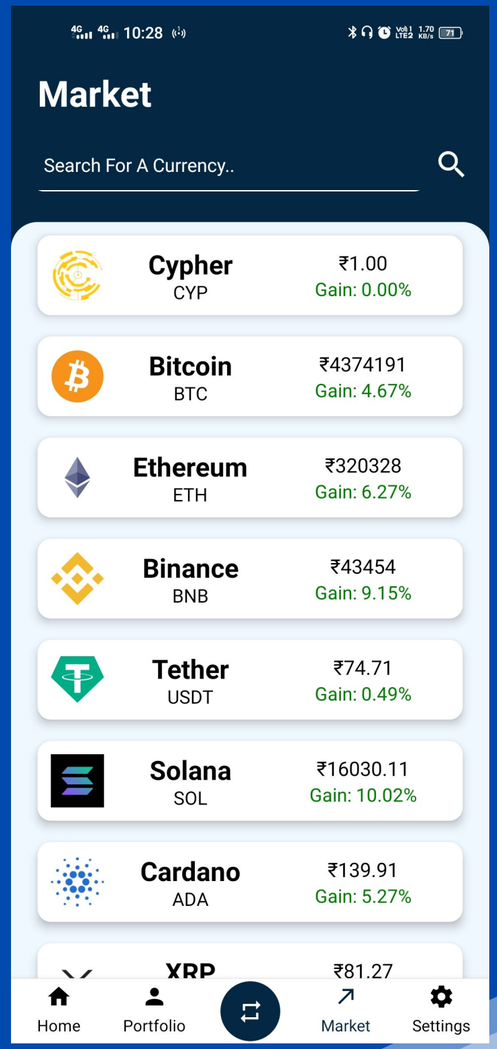

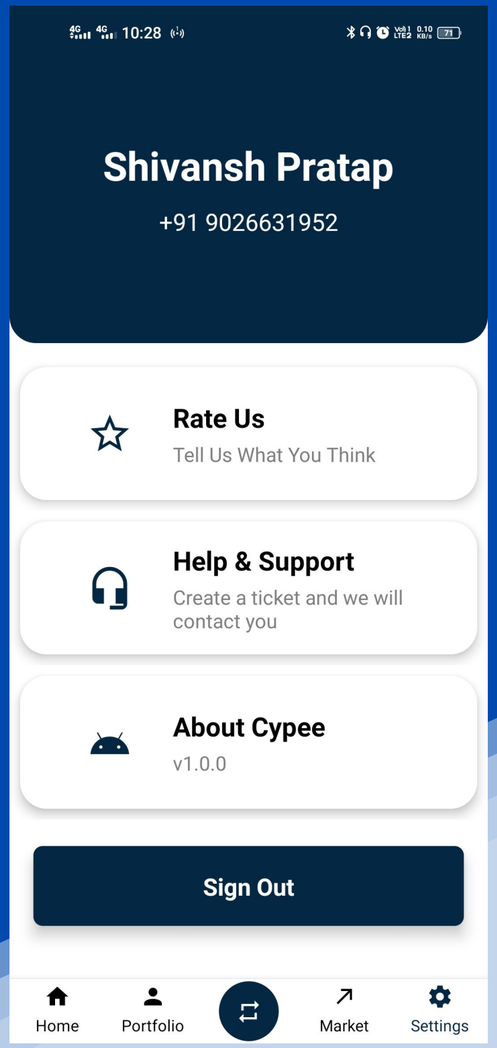

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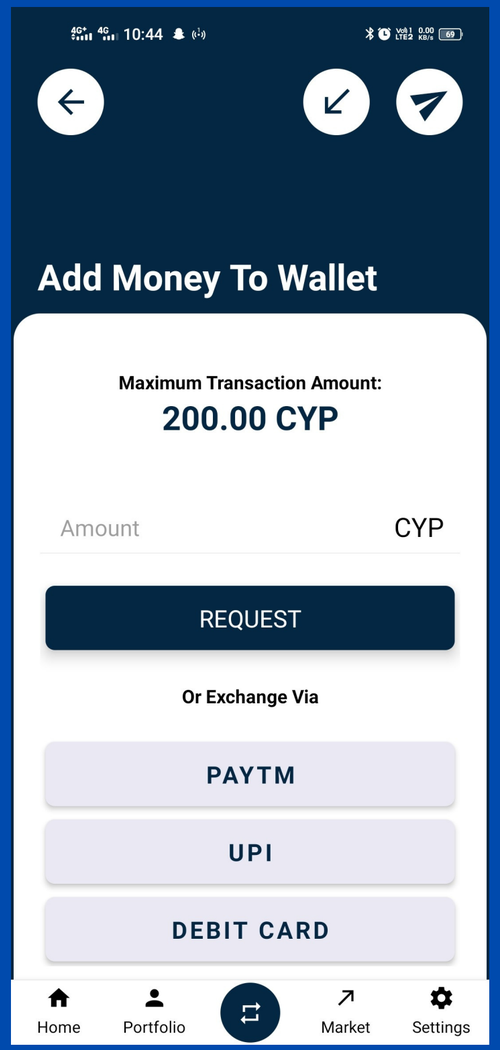
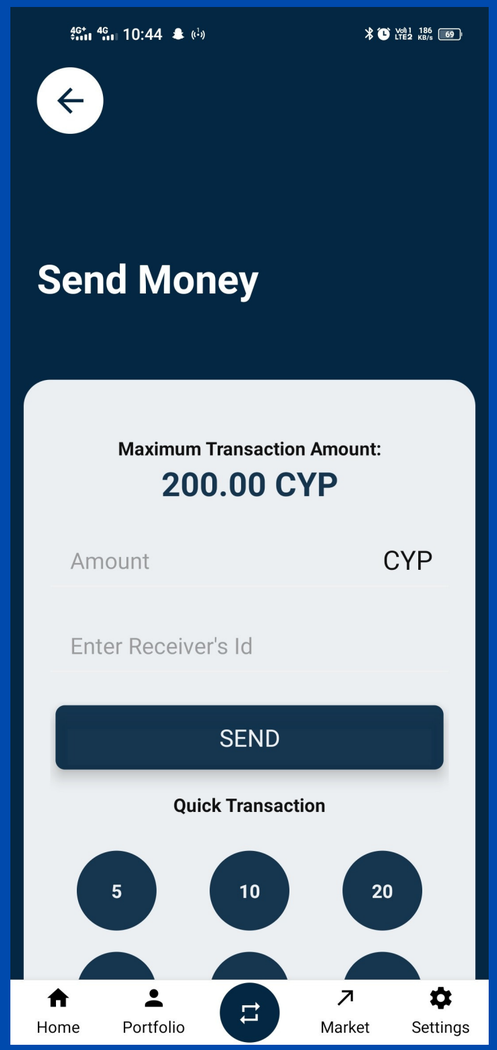
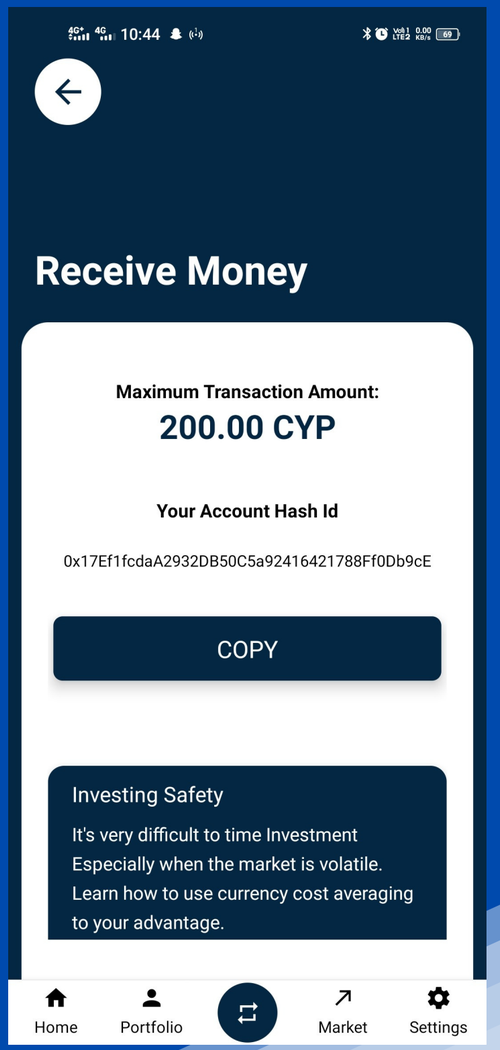
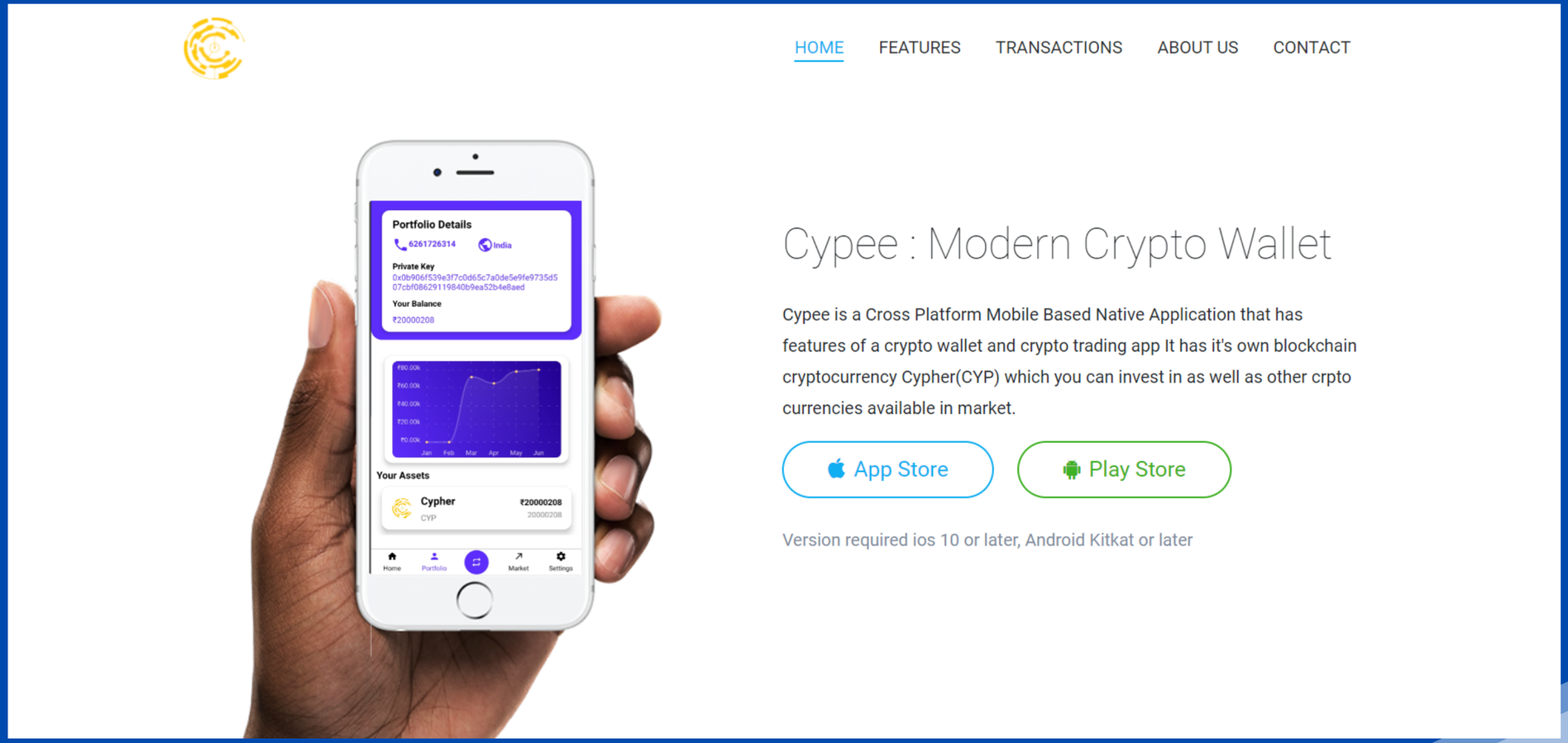


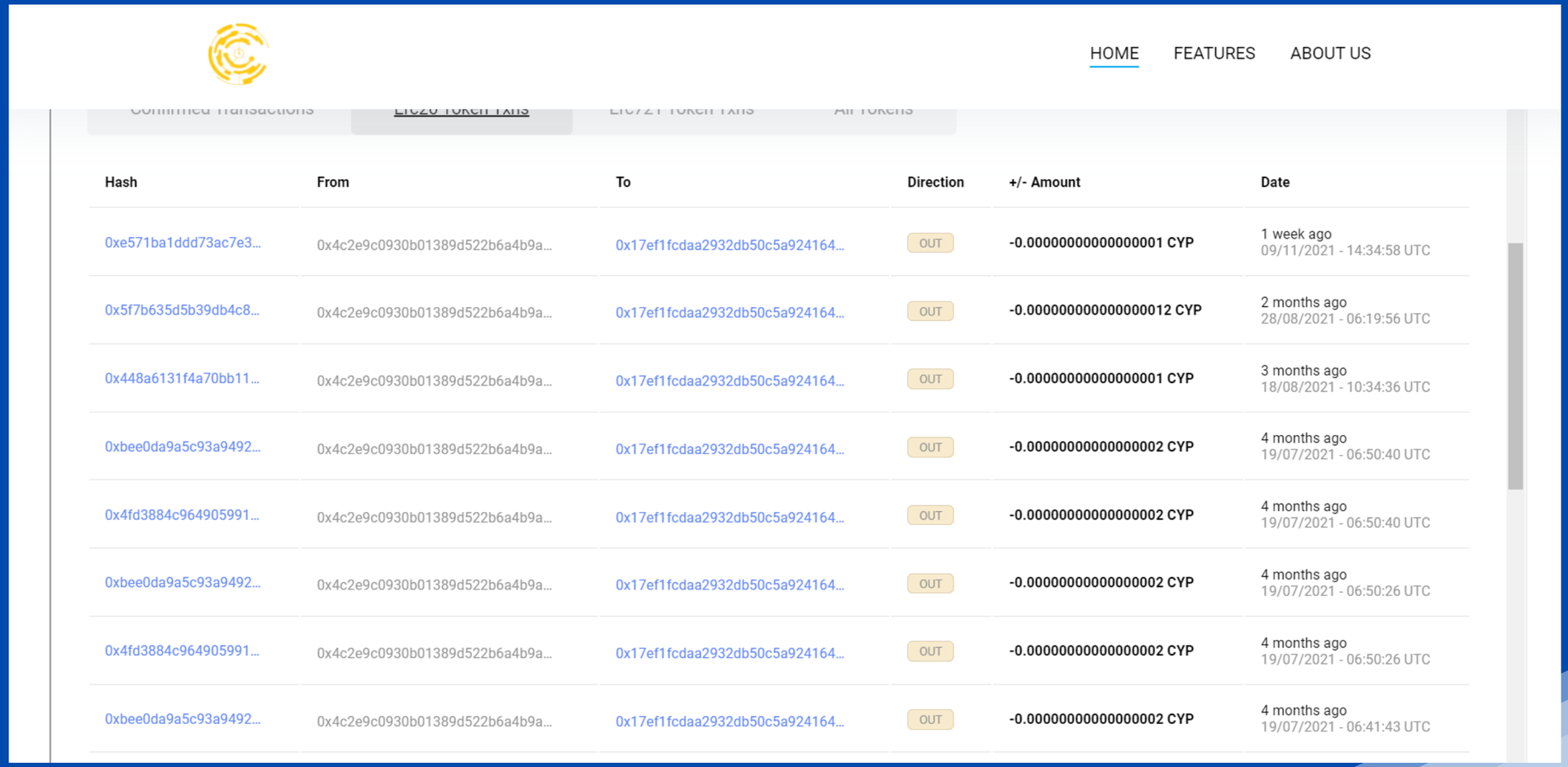




Website SnapShots



Website SnapShots



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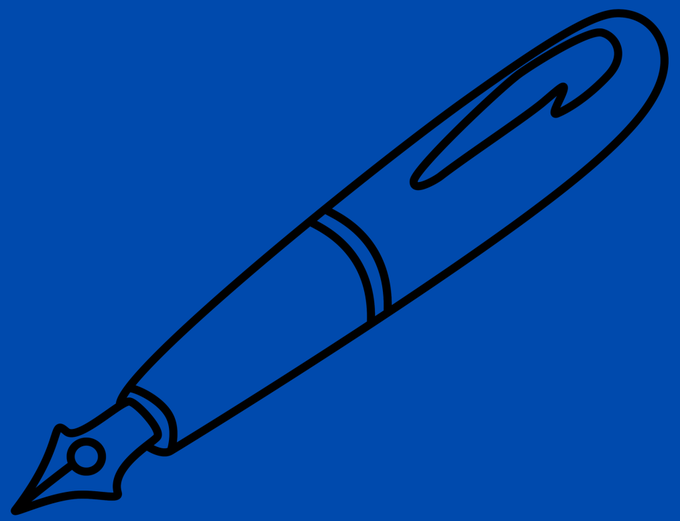
Testing



1 Unit Testing

It focuses on the smallest unit of software design. In this, we test an individual unit or group of interrelated units. It is often done by the programmer by using sample input and observing its corresponding outputs.

What we did?

a) In a program we are checking if loop, method or function is working fine

b) Misunderstood or incorrect, arithmetic precedence.

c) Incorrect initialization

2 Integration Testing

The objective is to take unit tested components and build a program structure that has been dictated by design. Integration testing is testing in which a group of components is combined to produce output. Integration testing is of four types: (i) Top-down (ii) Bottom-up (iii) Sandwich (iv) Big-Bang

Example

(a) Black Box testing:- It is used for validation. In this we ignore internal working mechanism and focuse on what is the output?.

(b) White Box testing:- It is used for verification. In this we focus on internal mechanism i.e. how the output is achieved?

3 Regression Testing

Every time a new module is added leads to changes in the program. This type of testing makes sure that the whole component works properly even after adding components to the complete program.

4 Smoke Testing

This test is done to make sure that software under testing is ready or stable for further testing

It is called a smoke test as the testing an initial pass is done to check if it did not catch the fire or smoke in the initial switch on.

Example:

If project has 2 modules so before going to module

make sure that module 1 works properly

5 Alpha Testing

This is a type of validation testing. It is a type of acceptance testing which is done before the product is released to customers. It is typically done by QA people.

Example:

When software testing is performed internally within the organization

6 Beta Testing

IThe beta test is conducted at one or more customer sites by the end-user of the software. This version is released for a limited number of users for testing in a real-time environment

Example:

When software testing is performed for the limited

number of people

7 System Testing

This software is tested such that it works fine for the different operating systems. It is covered under the black box testing technique. In this, we just focus on the required input and output without focusing on internal working.

In this, we have security testing, recovery testing, stress testing, and performance testing

Example:

This include functional as well as non functional testing

8 Stress Testing

In this, we give unfavorable conditions to the system and check how they perform in those conditions.

Example:

(a) Test cases that require maximum memory or other resources are executed

(b) Test cases that may cause thrashing in a virtual operating system

(c) Test cases that may cause excessive disk requirement

9 Performance Testing

IIt is designed to test the run-time performance of software within the context of an integrated system. It is used to test the speed and effectiveness of the program. It is also called load testing. In it we check, what is the performance of the system in the given load.

Example:

Checking number of processor cycles.

10 Object Oreinted Testing

This testing is a combination of various testing techniques that help to verify and validate object-oriented software. This testing is done in the following manner:

- Testing of Requirements,
- Design and Analysis of Testing,
- Testing of Code,
- Integration testing,
- System testing,
- User Testing.

Conclusion

The primary Objective of this project is successfully accomplished and is giving positive results at the end. We provided secured money transactions between users with personalized user experience, Fraud Detection and Crypto Trading.

We conclude our project as a breakthrough in the modern payment and investment system. It leads to overcome the challenges of traditional legacy payment system and provide User a secured, instant online transactions, and simplified user experience.

Approved Mail from Dr. Sourabh Sharma

Major Project Group G8 Cypee PPT for Demonstration Submission Inbox ×

Shivansh Pratap <shivanshpratapcmci@gmail.com>
to sourabhsharma

Respected Sir, as per the instructions provided by the major project committee, we need approval for the ppt of our major project. Kindly review and let us know in case of further modification of the same.

Project Name: Cypee - A Modern Crypto Wallet

Document: Cypee_PPT.pdf

Team Details: Group G8 (CSE-CMC-IBM) Section E

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Yours sincerely
Shivansh Pratap

Cypee_PPT.pdf

Dr. Sourabh Sharma
to me

Ok checked.

Thank You