CSCE606 Software Engineering
Project Report - Online Wallet

Team members: Swetha Reddy, Sambhav Khurana, Manik Taneja (client), Keerthana Polkampally (scrum master), Jackson Sanders, Chunkai Fu (product owner)

The aim of the wallet app is to facilitate monetary transactions between any two users registered on the app. The primary customer need is to make this process simple, allowing users to transact efficiently and view their past transactions. The web-based application will meet this need by providing a user-friendly interface for sending & receiving money. Users must first register on the app and go through the KYC (Know Your Customer) process. Admin would then approve or decline the user's KYC request. If accepted, users would be able to add money to their app as well as view their wallet details and transaction history.

The stakeholders for this project include the end-users who will be able to perform monetary transactions as well as the development team responsible for building the app. The user stories will guide the development process, ensuring that the app meets the needs of the end users and provides a seamless experience. The project would be implemented with Ruby on Rails. We will need to start implementation from scratch as the previous team used PERN. Moreover, there were many issues in the implementation of the previous project. Many parts were overly complicated and did not function as desired. Therefore, we will not be using any of the legacy code. However, we are taking some learnings from the previous project. We would start with only the app's basic features and focus on deploying them as soon as possible. Once these basic components go live, we would then move on to implement other intricate but value-adding features like linking the user profile with their Google accounts and timing out the session after some predefined period to enhance security. The development team will use GitHub for version control and Pivotal Tracker to facilitate project management, delivering the app efficiently and effectively.

In this project, we will create a web application that serves as a "Digital Wallet" for users. User Stories are as follows:

1. Feature: Login
   As a user
   So that I can login to the application
   I will register if I am signing in for the first time
   and login if already registered.

2. Feature: KYC
   As a user
   So that I am authorized to use the application
   I should be prompted to fill in KYC (Know Your Client) details
   if this is the first time I am accessing the home page.

3. Feature: Admin access
   As an admin
   So that I have access to all the user information
   I should have access to all the databases with the necessary
   security and can also approve/deny KYC of users.

4. Feature: Transactions
   As a user
   So that I can make transactions
   I should be able to send, receive and request money.

5. Feature: Edit Profile
   As a user
   So that I can view or make changes to my profile
   I should be able to edit my details on the profile page and
   they should be reflected in the profile after submission.
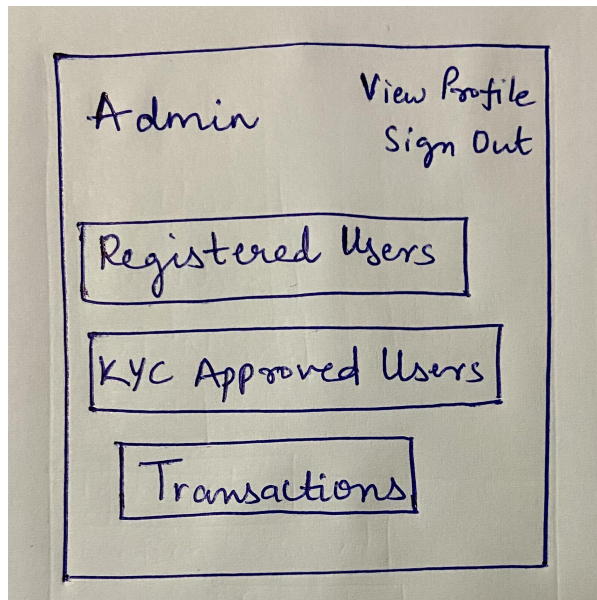
Lo-Fi UI sketches:

VIRTUAL WALLET

UserName
[   ]

Password
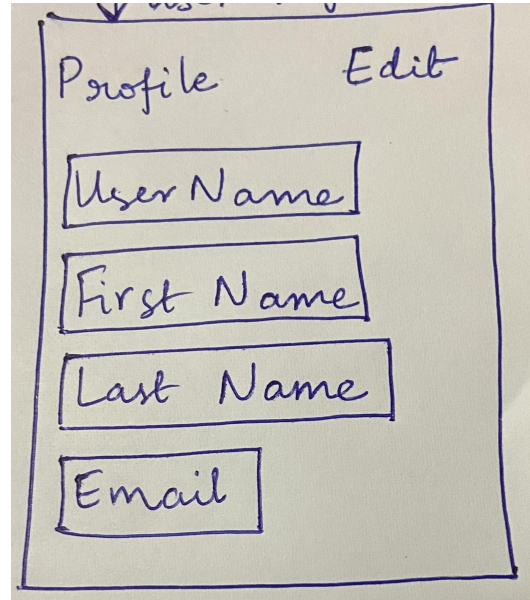[   ]
            [Login]

Register | Contact Us | About

User Registration
[UserName]
[First Name]
[Last Name]
[Email]
[Password]
[Confirm Password]
            [Register]

KYC Details   Sign Out

[First Name]
[Last Name]
[ID Number]
        [Submit]

                    View Profile
Transaction   Sign Out

[Request / Send]

[User Name]

[Amount]
        [Submit]

Admin   View Profile
                         Sign Out

Registered Users

KYC Approved Users

Transactions

Profile   Edit

User Name

First Name

Last Name

Email

Storyboard:
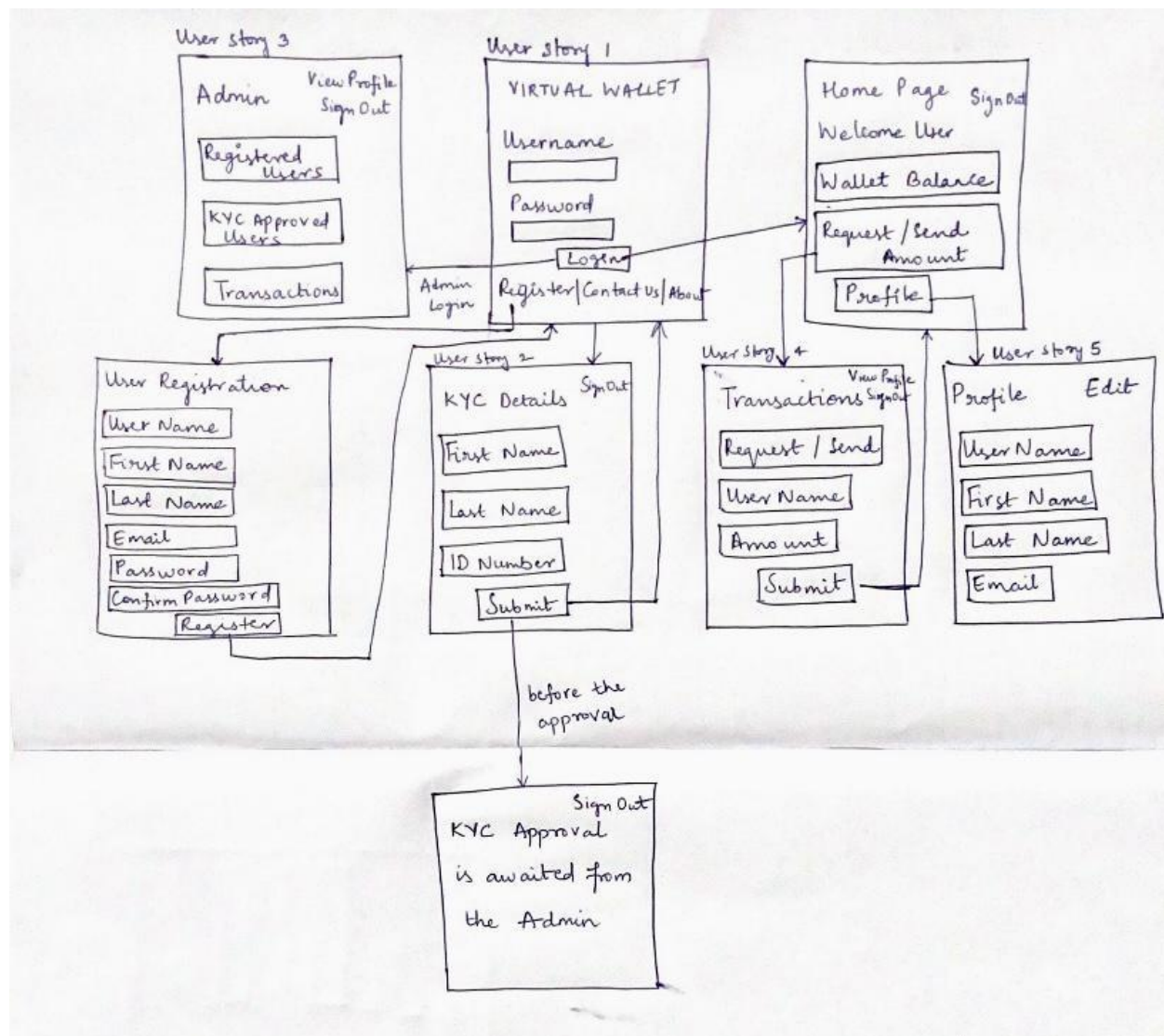
Links

- Mockup UI and the program schematic can be found here, feel free to add information:

  - https://lucid.app/lucidspark/bffa82a7-74e0-4c9d-ad7b-369829cc2fbc/edit?viewport_loc=-1340%2C-475%2C4367%2C2050%2C0_0&invitationId=inv_fa58c691-d702-48a7-960e-6e69b719a099

- Storyboard link:

  - https://www.figma.com/file/mn2sUlMvSm6TPp6zCoVtgz/Untitled?node-id=0%3A1&t=AXVrw94MQGguBMJG-0

- Link to Pivotal Tracker:

  - https://www.pivotaltracker.com/n/projects/2629557

- Link to Github repo:

  - https://github.com/ChunkaiFu/wallet.git