### **Practical 3**

## **Analysis-**

In today's date most of the transactions are done over the internet. There are very few Digital Wallets available at today's date and very less awareness. Normally to do any transaction one has to go to the nearest bank or ATM to perform the transaction. Or while doing any type of shopping one needs to carry the hard cash to buy or sell the goods. This is time consuming and also extremely hectic.

#### **Problem Statement-**

Currently present wallets have different limitations like complex UI and a limited number of transactions in a day, same processing fee for all amounts. The project proposal aims to develop a new payment method for all sorts of transactions over the Smartphone

## Problems with current system-

- 1) Complex UI-The purpose of this project is to increase the usability of digital wallets and make transactions securely. Most of the current wallets have difficult and complex systems designs and User Interfaces. The aim of this project is to create a prototype of a mobile wallet app and make the UI/UX simpler
- 2) Different Wallets-There are many applications in a smart phone which have their own e- wallets. So when you make any purchase of goods or services through these applications you get various options for making payment. Generally people add money to their e-wallet and pay them. In other words, it is handling separate wallets for different applications which is an overhead. So if we have money in our e- wallet but we cannot use it for other application Therefore, money in the e-wallet of earlier application will be of no use until you make any payment or transaction through it. In

response to this problem, we propose a technique which makes the separate e-wallets of different applications centralized. One can use the money on any platform without any restrictions. There are some apps that might charge you for doing a transaction.

- 3) Limited Transactions- In all current digital wallets there are many limitations like Number of transactions we can made in a day are very less. In our app, there will be no limitations of number of transactions.
- 4) Processing Fee- for each transaction the digital wallet deducts some extra processing fee which is the same for different amounts Whether we transfer a hundreds or thousands of money.

## **User analysis:**

- 1) Currently for doing any transaction most of the users are going physically.
- 2) For bank transactions, the user is physically going to the bank. Most of the user's time is getting wasted because of the long and hectic bank process for transactions. Also, users need to carry hard cash all the time.
- 3) For any sort of shopping user again needs to carry hard cash this gets lost sometimes or stolen and is not secure. Also there is a problem of change while shopping which most of the users raised concern about.
- 4) Users are in need of a solution which will nullify all above issues.
- 5) And the project proposal can nullify all the above issues. User will no more need to go to bank for transaction and can perform them over internet securely from any remote location. No worries of cash getting stolen or lost.
- 6) Also, while shopping user can use the application to perform transactions. User just needs to carry his/her smart phone and need an internet connection. It will also nullify issue of change as user can transact exact amount.

## **Task Analysis:**

Major task of this application will be

1) Send/Receive Money

This is the main task of this app. Users can send and receive money from their contacts who're using this application. The system will create a transaction record for each money transfer operation

2) View Past Transactions-

User can view all the passed transaction they've made along with the transaction details like transaction id, timestamp, sender, amount etc.

3) Rollback Transactions-

If the user sees some transactions that are not made by them or if they see any malicious activities with their account (password change emails, otps etc) they can request for a rollback transaction in the support.

4) User Profile-

User can update their profile details like email, phone number and change their password

# **Domain Analysis:**

- Domain analysis gives developer an understanding about the problem domain and the actual functionality which client requires. At this point developer also gets an understanding for whom this system is developed and why this system is required.
- Following are the functionalities gathered after the domain analysis:
  - 1) User can register his account on application.
  - 2) User can login using username and password.

- 3) User can link bank account with the application.
- 4) User can perform all bank transactions.
- 5) User can also pay for the shopping which was done on the internet.
- 6) Also for physical shopping user can use the application to perform transactions.
- 7) User can view all the previous transactions that he performed over the application.
- 8) User can view balance of all the bank accounts which are linked with the application.

## Design a Persona-

Personas are fictional characters, which you create based upon your research in order to represent the different user types that might use your service, product, site, or brand in a similar way. Creating personas will help you to understand your users' needs, experiences, behaviors and goals. Creating personas can help you step out of yourself. It can help you to recognize that different people have different needs and expectations, and it can also help you to identify with the user you're designing for. Personas make the design task at hand less complex, they guide your ideation processes, and they can help you to achieve the goal of creating a good user experience for your target user group.





#### "Looking for an E-Wallet app which will ease my life."

Age: 51
Work: IT Manager
Family: Married, kids, etc.
Location: Las Vegas
Archetype: Frequent
Transactioner

# Personality



### Goals

- · To spend less time for transactions
- · Securely managing all transactions

#### Frustrations

- · Physically going for performing transactions
- · Bad user experience

# Bio

Elon is 51 years old and works as IT Manager for a large international company. He is married. He has two children. The family lives in a large house in a residential neighborhood. He is a very balanced person. Hence he always goes out to make bank transactions or for basic shopping. He is frustrated how he always needs to carry cash and also that it takes a lot of his precious time. He needs something which will make the transactions simple and seamless. He expects this transactions to be as professional as he is.

## Motivation



# Entity-Relationship (ER) Diagram-

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

Entities and attributes of this application-

**User-** Phone number, Name, Email address

Login- Username, Password

Bank Accounts- Bank name, Account number, Balance

Transaction- Bank name, Receiver, Amount

Transaction History- Bank name, Receiver, Amount, Timestamp, Transaction ID

