CS 446 Deliverable 6

Suplit

Shanglin Ye, Zijian Wang, Shuangyou Huang, Haoqing Tian

slye, z2495wan, s257huan, h33tian

**Documentation**

When a new user first opens our application, they will open the login page. They will be able to sign up. Once they enter their credentials and click “Sign Up”, our system will store their information in our Firebase server, and it will use the Firebase authentication every time they wish to login. Once the user has logged in, they can subsequently logout of their account.

To begin using the system, every user must first add other users to their contact list. Our application has a search bar where they can look up other users in our database by their account name. Once they have found another user, they can click on their name to go to their profile. This profile will contain all their information, but this only consists of their name since we couldn’t think of any other useful information to display. Once you have found a user, you will be able to add them to your contact list or trusted friend list. We originally wanted users to be able to add other users by generating a code to scan or type in, but this task proved to be more difficult than anticipated and it doesn’t affect our app in a major way without it.

Once the user adds some friends, they can view all their friends on their contact list from one of the pages found in the navigation tab. Additionally, they will be able to remove friends from their contact list in they desire.

The first page that a user views when they login is the balance page. Our system will display a large green and red number at the top which represent the balance the user is owed and the balance the user owes others. There is a small green button under the red button that allows the user to pay off all their debts and will set the red value back to zero if the user has enough money in their wallet. Clicking on either of the numbers will give a breakdown of the amount owed to each individual person on their friends list. On the red button’s page, they will be able to manually settle a debt to another user which is how the users can settle debts outside the system. The simplification of the debts was an important feature but was not implemented. We encounter a major issue where fetching values from the database makes an async call. This makes debt simplification difficult since it needs to make many database calls and there isn’t an easy way to work around that.

The next page on the notifications tab we completed is the loan page. Users can add loans to another user which means that they owe you money. We originally wanted this to send a notification to the other user, but this was difficult to implement with only emulators.

We also built the wallet module. This is a place where user’s can add money to their account. This page will not allow users to add real currency since we encountered too many security issues when researching how to deal with real money.

Lastly, we have completed a settings page. As we were using emulators, we couldn’t test the functionality of adding phone numbers to one’s account, so we dropped that feature.