

SEHH3165 MOBILE APPS DEVELOPMENT

Assignment 2(Group)

Individual Report

Group 14

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## Main Flow of “CCfinance

- In the input fragment, the user can input the record of his/her income or expense in the input fragment. After clicking the submit button, if the inputted record is valid, the record will store in the database. If not, it will request the user to input again.
- In the record fragment, the user can check the record in the record fragment by clicking corresponding day in the calendar. Then a detail list of that day will appear. And that the user can check the detail or delete record of each record.
- In the report fragment, the user can have a statistical report. After the user input the type of payment and time range by clicking the button. And corresponding pie chart and a detail list that with the category the income or expense record will be generated and let the user have a statistical report to know the financial condition in that time range.
- In the badge fragment, it shows the badge that the user own. If there is any new badge that the user gets. And “congratulations” animation will pop out. Also, the user can share the badge that he/she owned to other social platforms.

## Difficulty

While we are doing the database, we firstly choose the sharePreference to implement the database. For the data each record will combine into one String by add “ ;” add the end of each data. And the record will be store in the arrayList. But we quickly find out the sharePreference was not that suitable for this because to store the arrayList in the sharePreference we need to convert the arrayList to hashSet. And the access of the sharePreference to get the data is quite tedious as we need to separate each record every time. Therefore, we decided to use SQLite

instead. It can provide us a better data organization. Inside the Database we use ID to be the primary key. If the record is first record, the ID will "1" . If the record is second record, the ID will "2" so on and so on. And other data, they will be the attribute.

And for the record fragment, we first decided after user selected a day. Then it will go to new fragment a show the listView in the new fragment. But we find out that we have difficulty to change the fragment for doing this. I guess it was because we are using the ViewModel for fragment and we can mix it with the fragment manger. But then we think the layout is more straightforward for user by just putting the calendar on above and the listView below. So we use the layout of now.