Fifth report of Open Banking Data Analysis project

Team 45 28/2/2020

Things left to finish:

- Test the prediction function that has been finished to make sure it works correctly
- Need to think about the front end to present the result of current functions and connect them together
- Need to write the front end for list of accounts for users to easily switch between different accounts
- Need to work on the date filter that allows users to choose the time range of the transactions to be shown
- Need to write a function that gets the total spending for each category for further calculation
- Need to implement caps. This includes the button to set caps on different categories and also set up a separate page for caps
- Work on credit card, this includes
    - Correct the credit card data generated as there are still errors in the format and content of json files generated
    - Work on the algorithm for interest rate calculation and comparison and advise when to move money
- Give the users an alert when we detect that they are likely to go into overdraft.

Individual Progress and Plan:

Raghib:

Progress:

- Wrote new improved categorisation algorithm using MCC on Open Banking API data format
- Started working on functionality to set caps and budgets
- Started learning fundamentals of jQuery and JavaScript
- Learned about using POST and GET requests properly, with variables passed through urls- to allow for data exchange between front and back end

Plan:

- Need to write a function that gets the total spending for each category for further calculation
- Need to write the front end for list of accounts for users to easily switch between different accounts
- Need to work on the date filter that allows users to choose the time range of the transactions to be shown
- Need to create some distinction between credit and current accounts for better sorting of data and more meaningful algorithms

Yuheng:

Progress:

- I have written the backend code for current accounts, including functions to get all direct debit that will be taken from an account in the rest of this month, get the sum of all the bills and prediction for the rest of the month.
- I have tested the functionality of most functions I have written and made sure they passed the test. I am left with the prediction function.
- Generated the rough data for credit cards together with Lib Kai. There are some errors in data generated.

Plan:

- Test the prediction function to make sure all the functions work separately.
- Work with teammates to make sure all the functions work together to produce the result the front end needs
- Continue to work on credit card
    - Correct the credit card data generated as there are still errors in the format and content of json files generated
    - Work on the algorithm for interest rate calculation and comparison and advise when to move money

Lib Kai:

Progress:

- I decided to use Chart.js for the data visualisations
- Generated a complete open banking dataset for current accounts
- Generated rough data format for credit cards with Yuheng, though it is not perfect at the moment

Plan:

- Learn Chart.js and implement it onto our web app
- Generate complete dataset for open banking data
- Continuously improve visualisation of web app