Meeting 1

Date: 3:15pm 28/08/2023

Attendance: Harry, Jack, Dulan, Nivethan, James

#### What we've done:

- Set up group messenger chat to communicate.
- Made google doc and drive to post work.
- Clone the template repository which contains the datasets. (Everybody has joined)
- Everyone has made a personal github branch to organise everyone's output.
- Familiarised ourselves with the dataset.
- Set up group Kanban.
- Considered using AWS Glue to help create the ETL script.

- Conduct preliminary analysis on each of the datasets to get comfortable with the data. (Basic visualisations, outlier analysis, shape of data, data type). Split work by datasets.
- Begin writing a generalised ETL script for this dataset.
- Everyone to find at least 1 external dataset (start with the ABS)

Meeting 2

Date: 3:15pm 04/09/2023

Attendance: Harry, Jack, Dulan, Nivethan, James

#### What we've done:

- Conducted preliminary analysis on each of the datasets to get comfortable with the data. (Basic visualisations, basic outlier analysis, shape of data, data type).
  Split work by datasets.
- Written a generalised ETL script for this dataset.
- Found census data relating to population and income.
- Found SA2 to postcode dataset.

- Conduct in-depth outlier analysis on the curated data Niv
- Investigate NULL values and missing data before and after joins Harry
- Generate any other insights for the curated data Dulan
- Investigate geospatial aspects of data Jack
- Edits to and maintaining the ETL script James
- Created summarised notebook detailing relevant topics. Will combine all our findings from the week into this notebook. James

Meeting 3

Date: 3:15pm 11/09/2023

Attendance: Harry, Jack, Dulan, Nivethan, James

#### What we've done:

- Conduct in-depth outlier analysis on the curated data Niv
- Investigated NULL values and missing data before and after joins Harry
- Generated insights for the curated data Dulan
- Investigated geospatial aspects of data Jack
- Edited and maintained the ETL script James
- Created summarised notebook detailing relevant topics. Will combine all our findings from the week into this notebook. James
- Generated the first draft dataset to be used for the ranking system.

- Finalise the ETL script.
- Group merchant tags into categories for future weeks.
- Finalise the curated dataset to be used for the ranking system.
- Continue analysis and on curated data to find any important relationships.
- Create basic models to predict whether a transaction may be fraudulent in the future.

Meeting 4

Date: 3:15pm 18/09/2023

Attendance: Harry, Jack, Dulan, Nivethan, James

#### What we've done:

- Fixed the ETL script.
- Group merchant tags into categories for future weeks.
- Finalise the curated dataset to be used for the ranking system.
- Continue analysis and on curated data to find any important relationships.
- Identified outliers based on merchant tags.

- Finalise the ETL script.
- Finalise removal of outliers.
- Investigate features, determine what current features can be used in the ranking system and models.
- Feature engineer to create new features to be used in the ranking system and models.
- Start ranking system, and basic modeling if we can complete the previous steps.

Meeting 5

Date: 3:15pm 25/09/2023

Attendance: Harry, Jack, Dulan, Nivethan, James

### What we've done:

- Finalised the ETL script.
- Finalised removal of outliers based on segments.
- Investigated features, determined what current features can be used in the ranking system and models.
- Feature engineered to create new features to be used in the ranking system and models.

- Start ranking system, and basic modeling if we can complete the previous steps.
- Create an initial ranking system should be in working order.
- Identify the top 10 merchants within each segment.
- Start basic modeling if we can complete the previous steps.

Meeting 6

Date: 3:15pm 02/10/2023

Attendance: Harry, Jack, Nivethan, James

#### What we've done:

- Created some initial ranking systems.
- Used modeling to help feature engineer.
- Created an initial ranking system.
- Identified the top 10 merchants within each segment for the initial ranking system.

- Determine the Top 100 merchants overall and the Top 10 merchants for the chosen segments.
- Additionally, prepare a final summary notebook and walk your tutor through your findings and additional insights (3-5 minutes max).
- Groups are strongly recommended to include visualisations and prepare a draft of their presentations.
- This week's checkpoint marks will be allocated based on the quality of insights and justification over the final ranking system