Data Intake Report

Name: G2M insight for Cab Investment firm

Report date: Nov 13, 2022 Internship Batch: LISUM15

Version: 1.0 Data intake by: Data intake reviewer:

Data storage location: https://github.com/DataGlacier/DataSets.git

Tabular data details:

| Total number of observations | 848 681 |
|---------------------------------|---------|
| Total number of files | 4 |
| Total number of features | 17 |
| Base format of the file | .csv |
| Size of the data | 32.1 MB |

Cab Data

| Cub_Butu | |
|------------------------------|--|
| Total number of observations | 359 392 |
| Total number of files | 1 |
| Total number of features | Transaction ID (int), no missing values |
| | Date of Travel (int), no missing values |
| | Company (str), no missing values |
| | City (str), no missing values |
| | KM Travelled (float), no missing values |
| | Price Charged (float), no missing values |
| | Cost of Trip (float), no missing values |
| | Total: 7 features |
| Base format of the file | .csv |
| Size of the data | 21,2 MB |

- 1. "Transaction ID" feature is primary key (unique for table). Assuming 1 row means 1 travel (no travels have 2 different Transaction IDs)
- 2. "Date of Travel" feature have format "days since 1899-12-30" as the latest date is 2018-12-31 and the maximum feature's value is 43465. The minimum value of this feature in this case will correspond to 2016-01-02
- 3. "Company" feature cab company name in text format
- 4. "City" feature city name and (in some cases) state code in text format
- 5. "KM travelled" feature float value of travel distance rounded to 2 digits after decimal point
- 6. "Price Charged" feature the amount in US dollars received for a trip from customer, float with 2 digits after decimal point
- 7. "Cost of Trip" feature float with 4 digits after decimal point

- 8. Assume "Cost of Trip" feature is total cost summing up waiting time fee, cost of trip distance by counter and other costs applied (i.e., this feature is displaying real direct costs of each cab company)
- 9. Assume all values are correct. Observed differences are due to companies' price policies and marketing campaigns. No other factors.
- 10. We have no info about number of passengers in each trip. Assume that each trip was taken by 1 person with corresponding customer ID

City

| Total number of observations | 20 |
|---------------------------------|-------------------------------------|
| Total number of files | 1 |
| Total number of features | City (str), no missing values |
| | Population (int), no missing values |
| | Users (int), no missing values |
| | Total 3 features |
| Base format of the file | .csv |
| Size of the data | 0.8 KB |

- 1. "City" feature is primary key (unique for table). Text, contains city name and (in some cases) state code. Like "City" feature in Cab_Data table
- 2. "Population" feature is integer with group separator ',' (comma). IMPORTANT: Data contained in table not suite the official US Census Bureau data (see https://www.moderncities.com/article/2017-jun-top-100-us-cities-ranked-by-2016-population). For example, population of Miami, FL in 2016 was 453,579 but the value of 1,339,155 provided in file. In reverse, for Boston with official population 673,184 provided value is 248,968). What exactly does "Population" feature mean?
- 3. "SAN FRANCISCO CA" NOT mentioned in Cab_Data table. Assume that data in "City" table contains reference information, but not fully corresponds with "City" feature in Cab_Data table
- 4. "Users" feature is integer with group separator ',' (comma). Assume this is potential customers of cab companies (estimated number of people that use any cab company services) got from outer source (marketing department, agencies, etc.)

Customer ID

| Total number of observations | 49 171 |
|------------------------------|---|
| Total number of files | 1 |
| Total number of features | Customer ID (int), no missing values |
| | Gender (str), no missing values |
| | Age (int), no missing values |
| | Income (USD/month) (int), no missing values |
| | Total: 4 features |
| Base format of the file | .csv |
| Size of the data | 1.1 MB |

1. "Customer ID" feature is primary key (unique for table). Assuming all records means different people (1 person's info is contained only in 1 record).

- 2. "Gender" feature binary feature "Male"/"Female"
- 3. "Age" feature 18-65 years. Assume all customers are valid credit card holders (check income vs age)
- 4. "Income (USD/month)" feature doesn't suit data about average income in USA

Transaction ID

| Trunsuction_ID | |
|-------------------------------------|---------------------------------------|
| Total number of observations | 440 098 |
| Total number of files | 1 |
| Total number of features | Transaction ID (int), no missing data |
| | Customer ID (int), no missing data |
| | Payment_Mode (str), no missing data |
| | Total: 3 features |
| Base format of the file | .csv |
| Size of the data | 9.0 MB |

- 1. The table is mapping table between Cab_Data table and Customer_ID.
- 2. Number of observations exceeds number of records in Cab_Data. So not all the trips info is available
- 3. "Transaction ID" feature corresponds with "Transaction ID" feature in Cab_Data table
- 4. "Customer ID" feature corresponds with "Customer ID" feature in Customer ID table
- 5. "Payment Mode" feature binary feature "Card"/"Cash"

Proposed Approach:

 Merge tables with corresponding ID features into new table to make cross-table analysis and checks