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Data Analyst Challenge
Using User, Property Listing, Search and
Enquiry Data

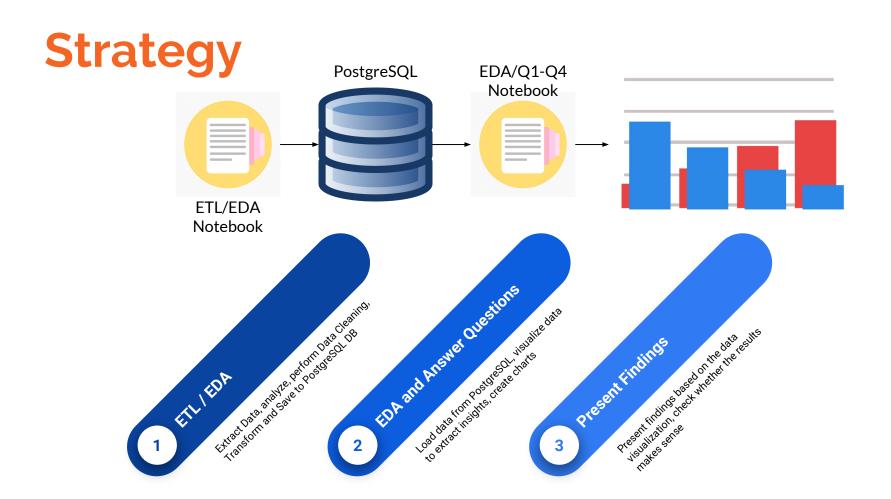Neil Cabrera
22-Feb 2019

Data Background

The data corresponds to a subset of our searches and enquiries for the month of July 2018.

All dates are in UTC.

- Enquiries received by agents from consumers

- Searches by district

- Listings

Questions to Answer

1. Write an SQL query that ranks districts by search volume (if the search was for more than one district then each value in the list is counted as one search)

2. Which district had the highest day-on-day percent change in search volume and when did it occur?

3. How would you segment our user base based on their search behaviour?

4. We want to drive conversions in the form of enquiries, what recommendations would you make to the Product Team?

Strategy

PostgreSQL

ETL/EDA Notebook

EDA/Q1-Q4 Notebook

1 ETL / EDA
Extract Data, analyze, perform Data Cleaning, Transform and Save to PostgreSQL DB

2 EDA and Answer Questions
Load data from PostgreSQL, visualize data to extract insights, create charts

3 Present Findings
Present findings based on the data visualization, check whether the results makes sense

Appendix

I. Project Environment

- Ubuntu 18.04.01 LTS x84
- Anaconda, Jupyter, Python 3.6
- PostgreSQL 10, pgAdmin4
- Intel Core i5-8400 (6 cores, 2.8Ghz)
- 16 GB RAM with SSD + HDD

II. References

Dataset and Project Background:
https://docs.google.com/spreadsheets/d/1Kb521qUBEU0mPD0vIFLXTGGVTfhKxd1zMr95CCOr6D4/edit#gid=1094332359