The Battle of Neighborhoods

MICROSOFT OFFICE USER

Table of Contents

Introduction

The J restaurant is a leading omnichannel company and trying to extend their business. They are looking for a new city to open a new restaurant.

Background

As the marketing strategy of data science and technology has also progressed, the current restaurant uses limited marketing resources on the most influential customers. Therefore, identify valuable city is the primary task for the company. Due to environmental risks (such as fluctuations in demand, the changing of customer's needs) and data-rich, the predict is not the best method to choose the best city. The data would be used to build the model and validate the model. The model is expected to find the best city for J restaurant.

Methodology

In order to get more comprehensive results, this project will combine a variety of models and theories for decide the city of the restaurant. The methodology would contain the theoretical method and technology applications.

Theoretical method

The model would separate into two parts location and population. The primary step of calculating how many competitor there are in the city. According to the database, the variables related to consumption intentions will be regarded as strategies to find the best city.

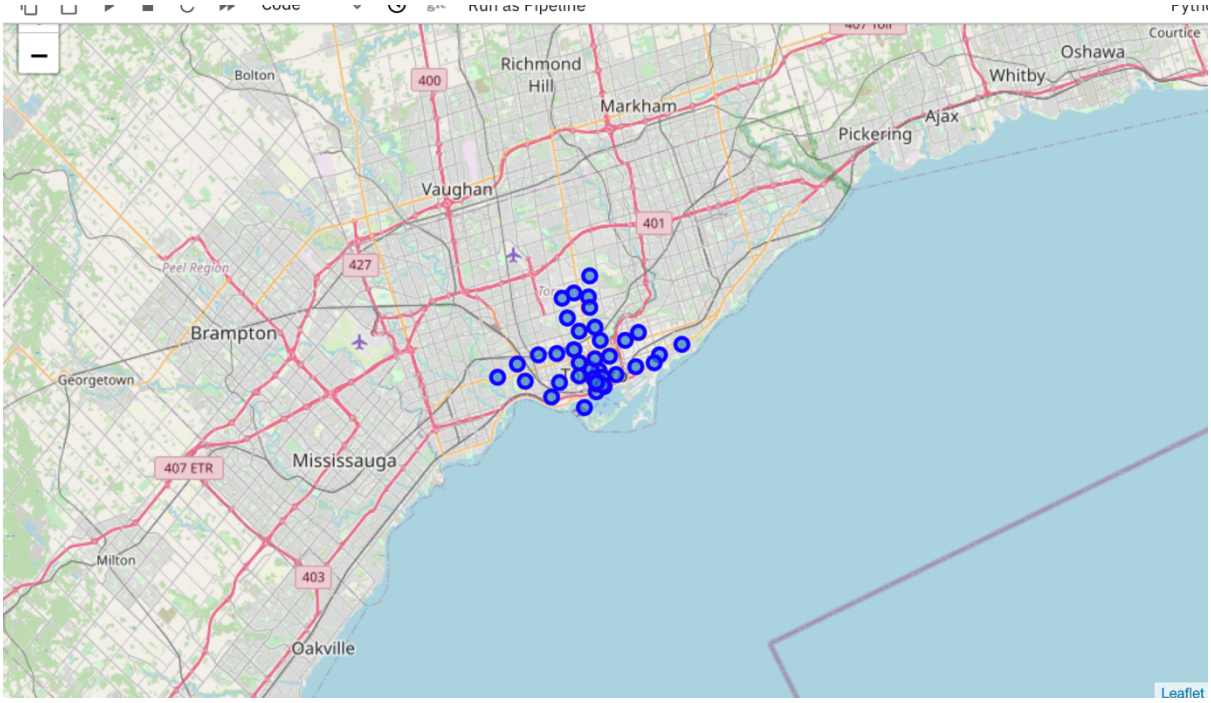
Technology applications

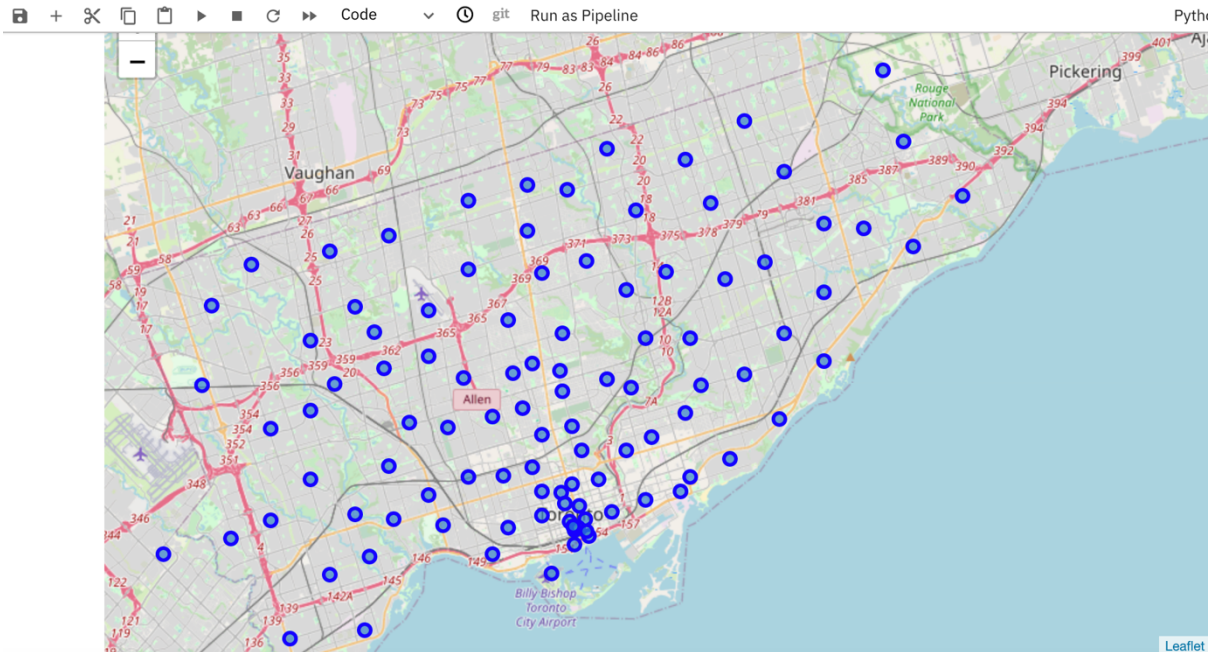
In order to quickly integrate big data and achieve theoretical analysis and model establishment, this project will use Google map and Jupyter notebook as the leading platform with programming language Python.

- Google map
  This platform is where the data is accessed. This provide the main data.
- Jupyter
  All projects run through the virtual platform, and the data can be easily imported from the google map. The model establishment and final visualization of the entire project are carried out on this platform.
- Python
  Python will be used to analyze and build models on the virtual platform. Many open-source packages will be used, for example, Lifetime, Panda, Plotly and Seaborn.

Deliverable

The project would include the problem statement, data acquisition, hypothesis and exploratory analysis. At the end of the project, the model would get the solutions. The results calculated during the research will be presented in graphs with data visualization simultaneously.




Code
git
Run as Pipeline
Vaughan
Pickering
Rouge National Park
Allen
Billy Bishop Toronto City Airport
Leaflet