IBM Applied Data Science Capstone

Coursera Capstone

Opening a New Restraunt in Manhattan, NYC





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Introduction

Manhattan has attracted lots of famous restaurants all over the world. People can enjoy everything that they can imagine whether it is domestic home cook or special foreign dishes. China Town, Korea street, Japanese street, Little Italy etc. become popular because most of the authentic restaurants gather there. However, some other top restaurants choose to be separated to distinguish themselves as noble. They might have their own parking areas, special decorations, might lie in the luxury shopping malls.

For the restaurant owner, they want to take advantage of the congesting effect which will bring a stable volume of customers, but they also want to avoid a fierce competition with other restaurants. Therefore, choosing the location of the restaurant is one of the most important decisions that will have great influence on whether the restaurant will be a success or a failure.

Business Problem

As for a restaurant owner, where should he open a new restaurant becomes a tough question. Choose the street that has all kinds of different foods or pick up a place where there are few competitions. Also, it is quite useful to other venues such as movie, theater, hotel and office that provide stable customers to have lunch or dinner.

The objective of this capstone project is to analyze and select the best locations in the Manhattan, NYC to open a new restaurant. Using data science analytical approach and machine learning techniques as clustering, this project aims to provide the solutions to answer the question: In the Manhattan, NYC, if a restaurant owner is looking for a place to open a new restaurant, where would you recommend to open it?