Analyzing Neighborhoods of Philadelphia For Starting A New Restaurant

Introduction

The city of Philadelphia, or Philly, is the largest city in the U.S. state of Pennsylvania and the sixth-most populous U.S. city, with an estimated population of more than 1.5 million in 2019. Since 1854, the city has had the same geographic boundaries as Philadelphia County, the most-populous county in Pennsylvania and the urban core of the eighth-largest U.S. metropolitan statistical area, with over 6 million residents as of 2017 in over 100 neighborhoods. Philadelphia is also the economic and cultural center of the greater Delaware Valley along the lower Delaware and Schuylkill rivers within the Northeast megalopolis. The Delaware Valley's population of 7.2 million makes it the eighth-largest combined statistical area in the United States. In this project, I will explore the neighborhoods of Philadelphia and make a prediction on where the best location might be for starting a new restaurant in the area.

Business Problem

A client who is interested in investing in a restaurant in Philadelphia has reached out to us. They would like us to study the market and suggest them a location in one of the neighborhoods which would be in best interest of the business. Our main objectives of this project are to extract and analyze the data from multiple sources about various neighborhoods of Philadelphia using various data science techniques and suggest our client with the most appropriate location for their restaurant. Although this project is designed for finding the best location for a new restaurant, people who would like to start their business other than restaurant in the Philadelphia area maybe also find this project interesting.

Data

The data used in this project comes from multiple sources including:

- List of neighborhoods scraped from the Wikepedia page: https://en.wikipedia.org/wiki/Category:Neighborhoods_in_Philadelphia-
- Geographical coordinates of the neighborhoods of Philadelphia from geocoder.
- Venue data for each neighborhood from FourSquare.