

Coursera IBM Capstone Project

The Battle of the (Vegetarian) Neighborhoods

Introduction

This project will examine the viability of opening a new restaurant which targets a **vegetarian / vegan** customer base, specifically in the Jacksonville, FL metropolitan area.

According to a recent Gallup poll conducted in 2018, the percentage of Americans who identify as vegetarians has remained close to 5% since 2012¹. However, sales of vegetarian food items, also referred to as plant-based foods, has grown steadily. The Plant Based Foods Association states on its web site: “Plant-based foods remain a growth engine, up 29 percent over the last two years.”²



In order to capitalize on these growing trends, this project will investigate the current restaurant landscape in one of Florida’s most populous cities: Jacksonville, and help determine where an investor or business owner would open a new vegetarian-friendly restaurant.

This analysis will attempt to research the current number of restaurants in Jacksonville, FL, including a breakdown of restaurant categories, with an emphasis on the number of restaurants classified as “vegetarian / vegan”.

¹ <https://news.gallup.com/poll/238328/snapshot-few-americans-vegetarian-vegan.aspx>

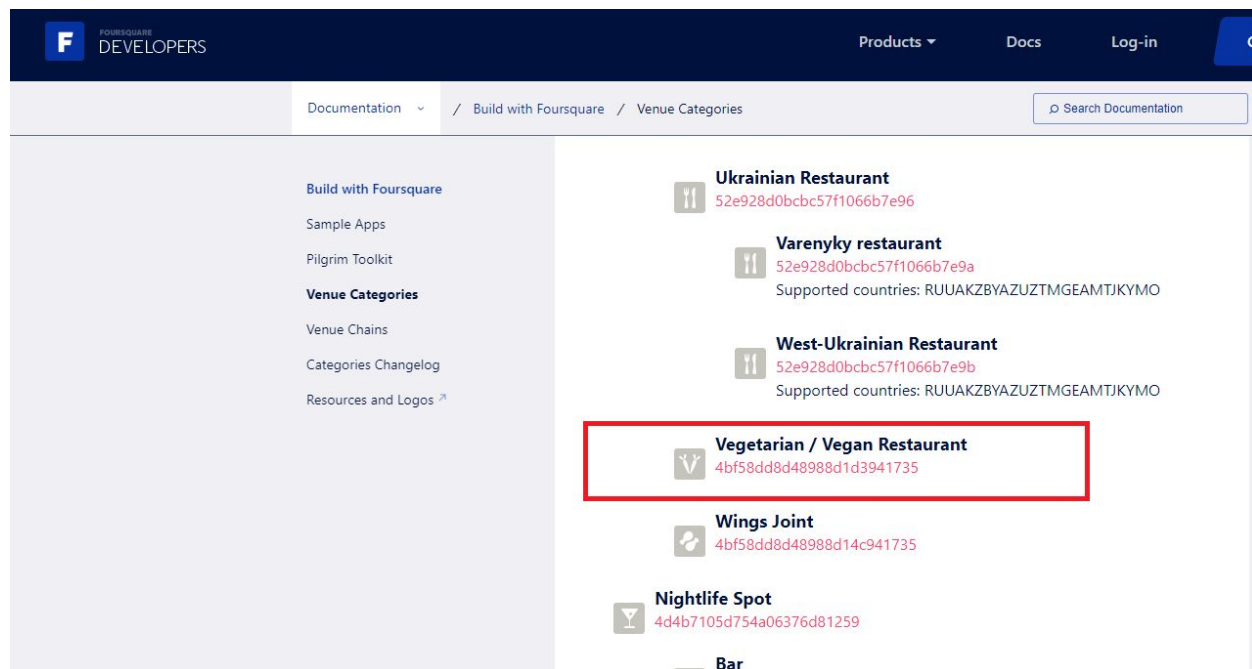
² <https://plantbasedfoods.org/marketplace/retail-sales-data/>

Data

Data sources to be used in the project include:

- Jacksonville neighborhood listing on Wikipedia
https://en.wikipedia.org/wiki/Neighborhoods_of_Jacksonville
- Latitude and longitude information for each neighborhood.
This data to be provided by ArcGIS for Developers
<https://developers.arcgis.com/features/geocoding/>
- Foursquare API - to be used to search neighborhoods, including restaurant category information.
<https://developer.foursquare.com/docs/resources/categories>

One Foursquare category which plays an important part in analysis is the sub-category specific to “Vegetarian / Vegan restaurant.”



After searching all neighborhoods in the Jacksonville metropolitan area, the results can then be parsed to determine what percentage of existing restaurants are classified as vegetarian in the Foursquare data set.

A map of the area can also help determine which neighborhood has a lower density of vegetarian restaurants, which could then increase the probability of success for a future restaurant..