

# Capstone Project

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## Introduction

*The 10 Coolest Neighborhoods in Miami*, an article in [culturetrip.com](http://culturetrip.com) lists the trendiest neighborhoods in Miami. If someone wishes to open a new restaurant in one of these neighborhoods what would be the best type of restaurant to open based upon the existing restaurants. That is, what type of new restaurant would see the least amount of competition from restaurants serving the same type of food.

## Data

The data for this project will be found at the following locations:

- Types of restaurants located in each neighborhood from Foursquare's API at <https://api.foursquare.com>
- List of Miami neighborhoods with coordinates: [https://en.wikipedia.org/wiki/List\\_of\\_neighborhoods\\_in\\_Miami](https://en.wikipedia.org/wiki/List_of_neighborhoods_in_Miami)
- 10 coolest neighborhoods in Miami: : <https://theculturetrip.com/north-america/usa/florida/articles/the-10-coolest-neighborhoods-in-miami/>
- Coordinates for Miami Beach and Coral Gables will be determined using the python library GeoPy.

## Methodology

A list of the coordinates of the 10 neighborhoods will be collected from Wikipedia and the missing Miami Beach and Coral Gables coordinates will be determined by GeoPy. The data is cleaned and then only restaurant venues for each neighborhood is extracted from Foursquare's API.

## Results

All restaurant types that have nonzero percentages are displayed for each neighborhood. Unfortunately Only 2 venues were returned for Coconut Grove, 1 for Coral Gables, and 4 for Upper Eastside so these Neighborhoods will not be used for consideration. The restaurant types 'Restaurant' and 'Food' will be considered as 'American'.

## Discussion

Little Havana, of course, has a high concentration of Latin American restaurants. All neighborhoods in consideration have quite a variety of different restaurants.

## Conclusion

Three neighborhoods will not be considered as note in the Results section above. This project is of course ignoring so many more variables in selecting where and what type of restaurant to open.