## Introduction:

Restaurant is a place we choose not just for food but also to spend time with loved once. The restaurant business is one of the most competitive business which has flourished a lot in the recent times. As per a recently conducted study, there are total 92 cuisines in Chicago with 3.67 restaurants per square mile. Hence choosing the right neighborhood with minimum to NO competition is very important for the restaurant to make profit.

## **Problem Description:**

Darden Restaurants Inc an American multi-brand restaurant operator headquartered in Orlando. The board has decided to open an Italian restaurant in Chicago area.

The objective of this project is to find the most accurate neighborhood profitable for Darden company to open an Italian restaurant and avoid conflict with any other restaurant of same cuisine.

## Source of Data.

- The list of neighborhoods is obtained from the <a href="https://en.wikipedia.org/wiki/List">https://en.wikipedia.org/wiki/List</a> of neighborhoods in Chicago. There are 246 localities/neighborhoods in Chicago.
- 2. The latitude and longitude of each neighborhood is obtained using geocoder package.
- 3. The list of Italian restaurants in each neighborhood is obtained using Four Square API using venue endpoint.
- 4. The neighborhood data has 364 unique categories of venues obtained from the Four-Square API.

## Methodology.

The data on venue is merged with the neighborhood data and filtered for venue category for "Italian restaurant". The methodology section will be explained in detailed in week 5 report