## Capstone Project for Opening a Thai Restaurant in Frankfurt am Main

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## 1 Introduction

In this project, we are trying to find a solution to the stakeholders that want to open a Thai Restaurant in Frankfurt.

Since there are lots of parameters to find a best place to open a Thai Restaurant, we can use data science techniques to handle with this problem.

Especially important facts that must be considered are;

- How many restaurants are in a special neighborhood?
- What type of restaurants are there?
- Is a neighborhood special or not with people's culture who lives there? (For example there can be a lot of Thai restaurants in the neighborhood where mostly people with Asian culture live)



Figure 1. Map of Frankfurt am Main

## 2 Data

We will use;

- Pgeocode api to get the coordinates of the neighborhoods in Frankfurt am Main.
- Foursquare api to get the venues in Frankfurt am Main.

There are totally 39 neighborhoods in Frankfurt. We get the coordinates of these neighborhoods with pgeocode api.

After getting coordinates, it is time for foursquare api. Foursquare api provide us venues in Frankfurt. When we fetch the data from Foursquare, We have 951 venues in Frankfurt.

Our data frame includes the features;

- Postal code
- Neighborhood Latitude
- Neighborhood Longitude
- Venue Name
- Venue Latitude
- Venue Longitude
- Venue Category

In our project, we will mostly interested in the location and the category of the venues.

As shown in Figure 2, These venues are mostly located in Frankfurt Center. There is an attraction point in Frankfurt Center. So we will take this into account for the stakeholders.



Figure 2. Venues in Frankfurt am Main