The Battle of Neighborhoods
Capstone Project

Kevin Andoni

February 14, 2021

1 THE PROJECT

1.1 Introduction

The goal of this project is to provide our business partners in Vienna with a clear empirical, visual and descriptive analysis of the best location to open their next Coffee Shop.

1.2 Background

Vienna, the capital city of Austria was recently classified again as the most liveable city in Europe (link). Among the important factors taken into account in this announcement, would be the broad spectrum of cultural and leisure activities. Coffee is one of these activities/passions that bring people together in this city. This is also one of the reasons that this destination has become the top choice of numerous investors for opening their Coffee Shop in.

2 THE DATA

2.1 Data Collection

The data will be collected from different trusted sources that are released by the government to open public, from google API services, from open GitHub resources. For calibrating our geospatial locations with the EPSG dataset we will use the GeoRepository web services which adopt the latest ISO standards and is also open for public use. These resources will help us create our detailed dataframes and geo-dataframes which will include: a highly accurate mapping of the streets that would be of interest to us, the respective districts, the distances from the center and many more.
To get updated information about businesses inside our area of interest, we will use one of the most powerful and trusted resources, the Foursquare data platform. The data will be accessed by using the API Developer tool (offered by the website) and then categorized to a dataframe accordingly.

2.2 Data Preparation

All the dataframes will undergo to continuous appending and filtering processes. As we progress with our analysis, we will benefit from multiple visualizing tools that will help us create relations in and between different sets of data. Among these tools, we could list the variety of the folium's tilesets including CircleMarkers, FastMarkerCluster, GeoJSON-TopoJSON Overlays as well as HeatMaps.
As we make progress in our research, by continuously refining our search parameters and filtering our list of results, we should be able to find our best candidates of places.