# Capstone Project - The Battle of Neighborhoods

### Introduction

**Milan** is a city in northern Italy, capital of Lombardy, and the second-most populous city in Italy after Rome.

The city proper has a population of about 1.4 million while its metropolitan city has 3.26 million inhabitants. Its continuously built-up urban area, that stretches well beyond the boundaries of the administrative metropolitan city, is the fourth largest in the EU with 5.27 million inhabitants. <sup>[10]</sup> The population within the wider Milan metropolitan area, also known as Greater Milan, is estimated at 8.2 million, making it by far the largest metropolitan area in Italy and the 3rd largest in the EU.

Milan is considered a leading alpha global city, with strengths in the fields of art, commerce, design, education, entertainment, fashion, finance, healthcare, media, services, research and tourism. Its business district hosts Italy's stock exchange (Italian: *Borsa Italiana*), and the headquarters of national and international banks and companies. In terms of GDP, it has the second-largest economy among EU cities after Paris, and is the wealthiest among EU non-capital cities. Milan is considered part of the Blue Banana and one of the "Four Motors for Europe".

The city has been recognized as one of the world's four fashion capitals thanks to several international events and fairs, including Milan Fashion Week and the Milan Furniture Fair, which are currently among the world's biggest in terms of revenue, visitors and growth It hosted the Universal Exposition in 1906 and 2015. The city hosts numerous cultural institutions, academies and universities, with 11% of the national total of enrolled students. Milan is the destination of 8 million overseas visitors every year, attracted by its museums and art galleries that include some of the most important collections in the world, including major works by Leonardo da Vinci. The city is served by many luxury hotels and is the fifth-most starred in the world by Michelin Guide. The city is home to two of Europe's most successful football teams, A.C. Milan and F.C. Internazionale, and one of Europe's main basketball teams, Olimpia Milano. Milan will host the 2026 Winter Olympics together with Cortina d'Ampezzo.

[source: wikipedia]

## **Business Problem**

The objective of this project is to provide the best locations in Milan to open a new pub. By the implementation of the tools, methodologies and data science techniques learned during the course we aim to be able to answer the question: "Where should one open a new pub in the city of Milan?".

## **Target Audience**

The resulting report and notebook will be particularly helpful to aspiring business owners to analyse and make up their minds about the best location to pick for starting a new busines. Hopefully while some minor tweaking we will be able to enhance the notebook in order for it to work with various business types (such as restaurants, night-club etc). Being this a time of emergency this workings might be useful to plan the restart of business activity in Milan.

## Data

In order to approach the problem we will need:

- List of neighborhoods in Milan
- Geographical coordinates of these neighborhoods
- Existing venues data

#### Sources and Methods

Wikipedia will provide us with the lists of neighborhoods. We will be able to get this information through the use of Python and in particular, the Beautifulsoup package. With the Geocoder package we will be able to then get latitudes and longitudes for these neighborhoods.

To get the existing venues data we will use the Foursquare API.