The Battle of the Neighborhoods (Week 1)

Problem Background:

The City of Riga, is the capital and most populous city of Latvia. Almost half population of Latvia live or work in Riga. Nowadays in most cases work requires seating for multiple hours a day, which brings very unhealthy static tension to the body.
Therefore, various sport venues became more and more popular among student and young workers.

It is quite nice choice for new business but where will be better choice to start?
In our case we are interested in venues that combine Gyms and Fitness Center. Why? For example, in Yoga centers most clients are females, but in Gyms – male. We do not want to divide our clients and want to create a center for both, may be for couples or for families.

Therefore, our goal to building a recommendation system for finding best suitable Gym/Fitness Center for active population (young people from 15- 49) based on certain criteria is valuable analytical problem that perfectly fits into *Clustering* type of Data Science problems which could be solved by unsupervised learning algorithms.

Target Audience:

Group of activists and investors who want to start "gym/fitness business" in Riga.

Success Criteria:
The success criteria of the project will be a good recommendation of Neighborhood in Riga based on possible lack of Gyms /Fitness Center.

Data

For this project I 'll use the following data:

- **Riga City data that contains list Neighborhoods, Area of Neighborhoods, Population (size and density.**

  Data source: https://lv.wikipedia.org/wiki/Rīgas_apkaimju_uzskaitījums

- **Riga City Population age and education.**

  Data source:
  http://data1.csb.gov.lv/pxweb/en/iedz/iedz__tautassk__riga__tsk2011/TSG11-R02.px/?rxid=0cebbc5d-dfba-43d1-903e-e18eb1de0eaf

  http://data1.csb.gov.lv/pxweb/en/iedz/iedz__tautassk__riga__tsk2011/?tablelist=true&rxid=0cebbc5d-dfba-43d1-903e-e18eb1de0eaf

Description: This data from Central Statistical Bureau of Latvia contains *the required information. It is not very new, but still can give us some insights. And we will use this data set to explore various neighborhoods of Riga.*

- **GeoJSON file for Riga's Neighborhoods.**

  Data source: https://github.com/art-licis/riga-geojson-neighbourhoods

  Description: By using this json file we can create map of Riga with correct neighborhoods borders**.**

- **Gyms/Fitness Center in each neighborhood of Riga.**

  Data source: Foursquare API

  Description: By using this api we will get all the venues in each neighborhood.