Introduction

With the aging population growing in numbers in Singapore, many people are focusing more on health in order to achieve healthy aging. This perception has influenced many people from all range of ages to participate actively in physical exercises. As a result, there are increasing number of gyms or fitness centers that are being set up across all parts of Singapore. Accessibility is one of the most important factors in which people chooses their gym/ fitness center. Hence, understanding the locations of gyms and their respective densities represent the first step in deciding the where should the next gym/ fitness center be such that it could best cater to consumer needs.

Business problem:

Therefore, the specific business problem that this study will attempt to address is: Where will be the best location to set up a gym/fitness center in Singapore now? This information will be especially useful for investors and developers, who are the main target audience of this study, to decide on the next location for setting up fitness centers or deciding the best location for conducting fitness classes.

Data

The following data will be used to solve the above problem. 1) All 40 areas of Singapore will be analyzed for the numbers of enrichment centers. The list of the 40 areas can be obtained from the Wikipedia page (<https://en.wikipedia.org/wiki/Planning_Areas_of_Singapore>). Using python request and beautiful Soup packages, data to these areas will be extracted. Geographical coordinates will be obtained via python geoencoder package. 2) Venue data for each of these areas will be extracted using the Foursquare API. These data will then be used for machine learning by K-Means clustering and each clusters will be overplayed on the map using folium to visualize the density of gyms across each areas.