A Peek into New York’s Fitness Preferences

* A data analysis report

Introduction

The purpose of this project is to analyze the location data related to physical health and fitness related venues like gyms, fitness centers, sports arena and others. I would like to see how a model city like New York, which is the center of intense economic activity and thereby home to majority population following sedentary lifestyle, places its fitness industry. This report would give basic insights about the spread of different types of fitness venues across the five Boroughs of New York city. Also this can be a starting point for deeper analysis leading up to building and developing health & fitness as a viable business opportunity in any of the neighborhoods of New York.

Data

I am using the data sources provided in the previous weeks of the Coursera Capstone Project course which includes,

New York location data

Source URL - https://cocl.us/new\_york\_dataset

File - newyork\_data.json

Also the location data of venues of all the neighborhoods in each of the 5 Boroughs, namely

Manhattan, The Bronx, Brooklyn, Queens and Staten Island, is extracted using separate API calls to *Foursquare* database.

API call URL- https://api.foursquare.com/v2/venues/explore?oauth\_token=<my\_access\_token>&v=20180301&ll=<latitude>,<Longitude>&radius=500&limit=100

Extracted data includes a venues’ Name, Venue Category, Latitude and Longitude. The number of venues on which the above data points are extracted as below into separate datasets for each borough.

Manhattan – 2332

Bronx – 2679

Brooklyn - 3496

Queens - 2138

Staten Island – 3998

The venues that are related to the fitness and health activity are separated out from these datasets based on the venue categories - 'Gym', 'Gym / Fitness Center', 'Climbing Gym', 'Gymnastics Gym', 'Boxing Gym', 'Pilates Studio', 'Martial Arts Dojo', 'Physical Therapist', 'College Gym', 'Weight Loss Center', 'Cycle Studio', 'Yoga Studio', 'Tennis Stadium', 'Sports Club', Athletics & Sports', 'Tennis Court', 'Golf Course', 'Volleyball Court', 'Mini Golf', 'Basketball Court', 'Soccer Field', ’Baseball Field', 'Soccer Field', 'Baseball Stadium', 'Golf Course', 'Stadium', 'Squash Court', 'Hockey Field', ‘College Basketball Court', 'College Stadium', 'Pool', 'Gym Pool', 'Pool Hall', 'Bike Trail', ‘Track', 'Trail', 'Skate Park', 'Skating Rink', 'Surf Spot', 'Ski Area', 'Roller Rink', 'Park', 'Playground', 'Dance Studio', 'Bowling Alley', 'Indoor Play Area', 'Outdoors & Recreation', 'Rock Climbing Spot', 'Other Great Outdoors'. This data is stored in separate datasets namely <Borough>\_fitness\_venues for further analysis.

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| Borough | Fitness Venues |
| Manhattan | 344 |
| The Bronx | 141 |
| Brooklyn | 272 |
| Queens | 149 |
| Staten Island | 216 |