Capstone Project - The Battle of Neighborhoods

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Launch of a network of fitness clubs in Saint Petersburg

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Introduction/Business Problem

Saint Petersburg is a large city in Russia. A healthy lifestyle is becoming more and more popular among residents of Saint Petersburg. Residents want to play sports, but there are not many places for this. There is a lack of sports clubs in the city.

Investors plan to open a network of sports clubs in St. Petersburg. To do this, they need to find out the most favorable points for placing clubs in the new network. The main mode of transport in the city is the metro, so you need to understand at which metro stations there is a high density of sports clubs, at which stations there is a shortage of sports clubs and at which stations residents are eager to open a gym.

A very important point is the number of available places for opening clubs. Investors believe that to maintain the profitability of the network, it is necessary to open at least seven clubs in different parts of the city. It is necessary to check whether the necessary number of places for new gyms is available.

Data

To solve the problem we will use the following data:
- list of Saint Petersburg metro stations
- latitude and longitude coordinates of stations
- foursquare venue data, especially data about gyms, sport clubs.

Sourses:
https://en.wikipedia.org/wiki/List_of_Saint_Petersburg_Metro_stations - Wikipedia page with list of Saint Petersburg Metro stations.
The Saint Petersburg Metro is a rapid transit system in Saint Petersburg and Leningrad Oblast, Russia. It has been open since 15 November 1955. The network currently consists of 5 lines with a total length of 124 kilometres (77 mi). It has 72 stations including 7 transfer points. Latitude and longitude coordinates of stations are taken from parsing by python geocoder library.
Foursquare venue data were taken from location-based service Foursquare API.

App: Saint Petersburg metro Map

METRO SAN PIETROBURGO

Ⓜ1

- DEVYATKINO — RR STATION "DEVYATKINO"
- GRAZHDANSKY PROSPEKT
- AKADEMICHESKAYA
- POLITEKHNICHESKAYA
- PLOSCHAD MUZHESTVA
- LESNAYA
- VYBORGSKAYA
- PLOSHAD LENINA — RR STATION "FINLANDSKY VOKZAL"
- CHERNYSHEVSKAYA
- PLOSHAD VOSSTANIA — RR STATION "MOSCOVSKY VOKZAL" / MAYAKOVSKAYA

Ⓜ2

- PARNAS
- PROSPEKT PROSVESHENIYA
- OZERKI
- UDELNAYA — RR STATION "UDELNAYA"
- PIONERSKAYA
- CHERNAYA RECHKA
- PETROGRADSKAYA
- GORKOVSKAYA
- NEVSKY PROSPEKT / GOSTINY DVOR

Ⓜ5

- KOMENDANTSKY PROSPEKT
- STARAYA DEREVNYA — RR STATION "STARAYA DEREVNYA"
- KRESTOVSKY OSTROV
- CHKALOVSKAYA
- SPORTIVNAYA

Ⓜ3

- PRIMORSKAYA — SEA PORT
- VASILEOSTROVSKAYA

VLADIMIRSKAYA / DOSTOYEVSKAYA

SENNAYA PLOSHAD / SPASSKAYA / SADOVAYA
Ⓜ4

PLOSHAD ALEKSANDRA NEVSKOGO 1 / PLOSHAD ALEKSANDRA NEVSKOGO 2

- LIGOVSKY PROSPEKT
- NOVOCHERKASSKAYA
- LADOZHSKAYA — RR STATION "LADOZHSKY VOKZAL"
- PROSPEKT BOLSHEVIKOV
- ULITSA DYBENKO

PUSHKINSKAYA — RR STATION "VITEBSKYSKY VOKZAL" / ZVENIGORODSKAYA

- TEKHNOLOGICHESKY INSTITUT 1 / TEKHNOLOGICHESKY INSTITUT 2
- BALTIYSKAYA — RR STATION "BALTIYSKY VOKZAL"
- NARVSKAYA
- KIROVSKY ZAVOD
- AVTOVO
- LENINSKY PROSPEKT
- PROSPEKT VETERANOV
- FRUNZENSKAYA
- MOSKOVSKIE VOROTA
- ELECTROSILA
- PARK POBEDY
- MOSKOVSKAYA — BUS TO AIRPORT
- ZVEZDNAYA
- KUPCHINO — RR STATION "KUPCHINO"
- VOLKOVSKAYA
Ⓜ5

- ELIZAROVSKAYA
- LOMONOSOVSKAYA
- PROLETARSKAYA — RIVER PORT
- OBUKHOVO — RR STATION "OBUKHOVO"
- RYBATSKOE — RR STATION "RYBATSKOE"
Ⓜ3

Ⓜ1

Ⓜ2

Ⓜ4

Ⓜ1 Ⓜ2 Ⓜ3 Ⓜ4 Ⓜ5 METRO LINES

🚂 RAILROAD STATIONS

CROSSING STATIONS

⛴ SEA AND RIVER PORTS

🚌 BUS TO AIRPORT