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IBM Data Science Capstone Project

# **SUBWAY SURFING: WHICH SUBWAY STATION SHOULD I LIVE NEAR?**

Which subway stop should I  
centre my house hunting  
on?

# Context

- ◎ Currently live in the suburb's of Toronto
- ◎ Looking to move near a subway station to shorten commute
- ◎ Ideal station should be within walking distance of 5 types of amenities that are important to me

# Data



## Walking Distance

- Self calculated -> 1500 m



## City of Toronto Open Data

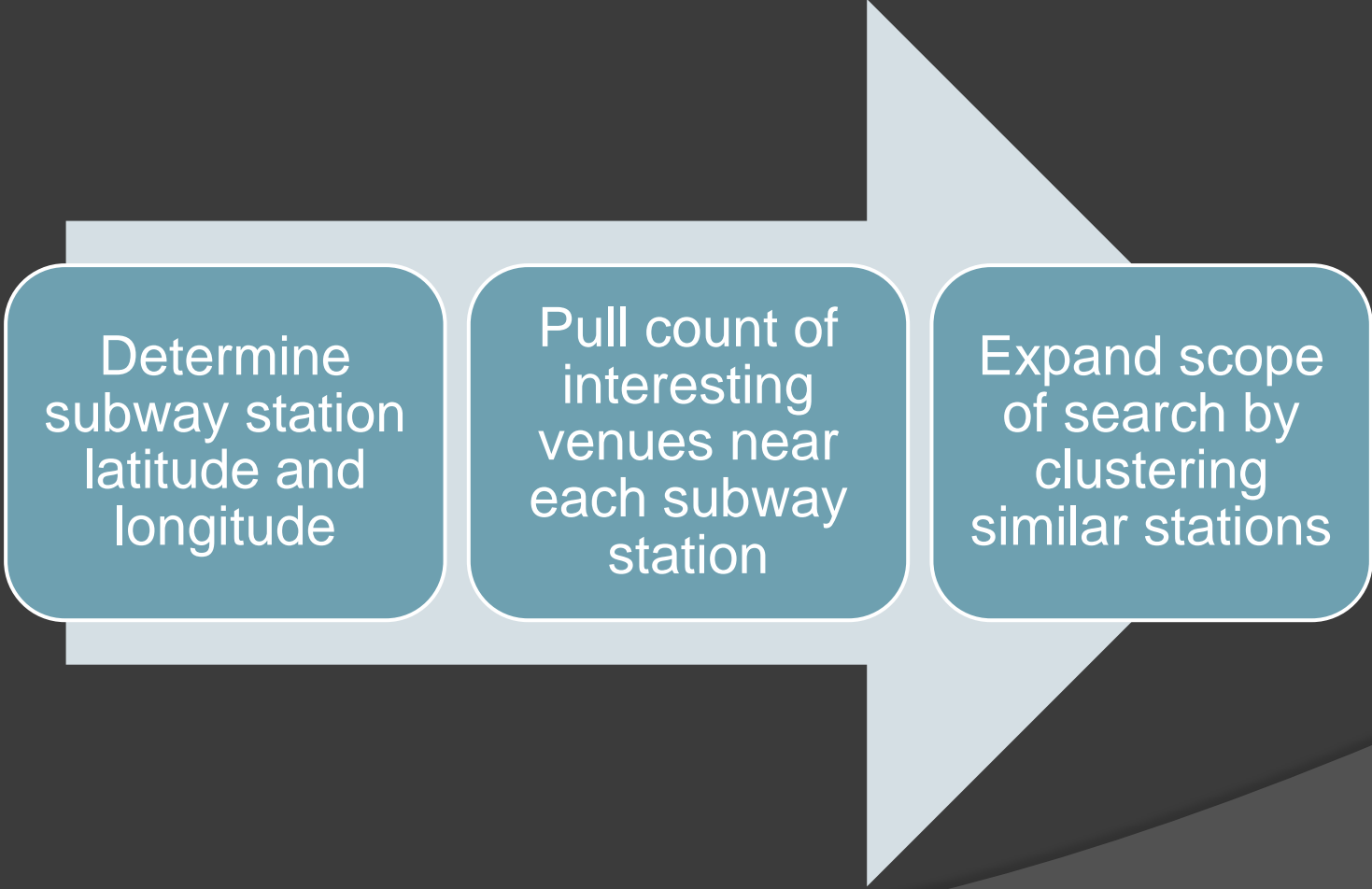
- Subway station location data



## Foursquare API

- Venues surrounding each station

# Methodology

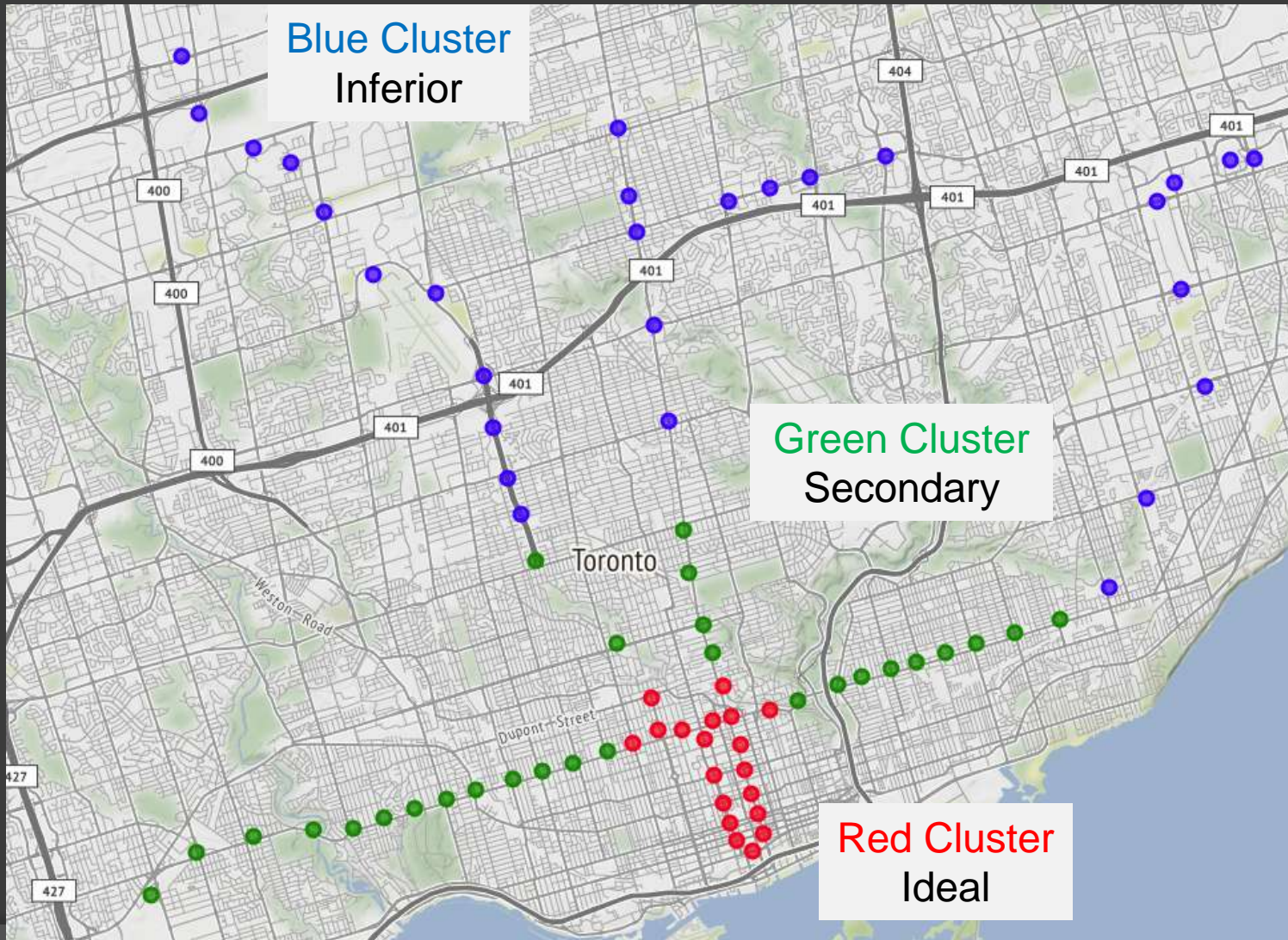


Determine  
subway station  
latitude and  
longitude

Pull count of  
interesting  
venues near  
each subway  
station

Expand scope  
of search by  
clustering  
similar stations

# Results / Discussion



# Conclusion

## ◎ 76 Subway Stations In Toronto

## ◎ 19 Stations in ideal cluster

- BATHURST, BAY, BLOOR-YONGE, COLLEGE, **DUNDAS**, DUPONT, KING, MUSEUM, OSGOODE, QUEEN, QUEEN'S PARK, ROSEDALE, SHERBOURNE, SPADINA, ST ANDREW, ST GEORGE, ST PATRICK, UNION, or WELLESLEY

## ◎ First choice: Dundas Station

- By number of amenities in walking distance