

Exploring Towns in Newfoundland



Capstone Project

Introduction

- In Newfoundland, there are a variety of different places you should visit.
- Each town has many places to visit from restaurants, marinas, and Scenic avenues.
- What City should you stay in?

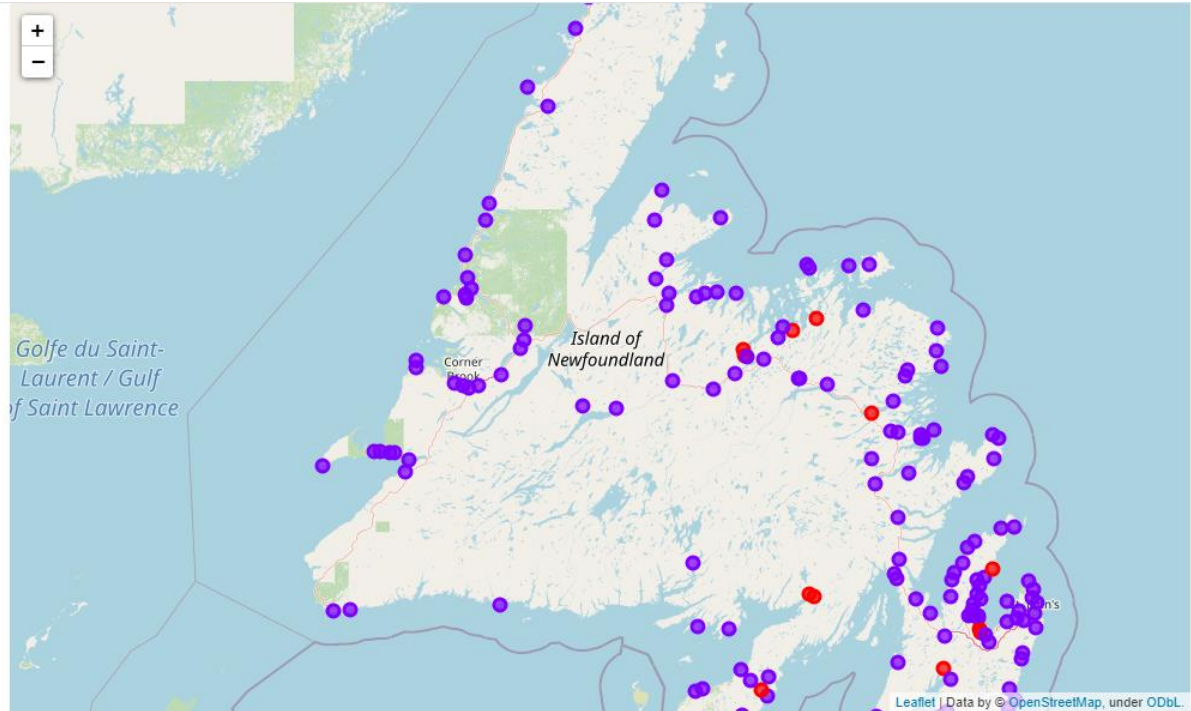
Data Sources

- Newfoundland town and city names and area:
https://en.wikipedia.org/wiki/List_of_municipalities_in_Newfoundland_and_Labrador
- Geographical locations of towns and cities: ArcGIS
- Geospatial data – Common venues in each town and city: Foursquare

Methodology

- Web Scraping
 - List of Towns/Cities
 - Area of each Town/City
- Geocoding
 - Longitude and Latitude
- Foursquare API
 - Request for 100 most common venues
- Engineering
 - Convert variables to numerical values
 - Find top 10 most common venues
- Learning
 - K-means clustering
 - Number of clusters using elbow method

Results and Discussions



- Cluster 1 (red)
 - Convenience Stores, ATMs, Fishing spots are very common
- Cluster 2 (purple)
 - Coffee shops, Restaurants, Marinas very common

Conclusion

- The findings of this study gives a good starting point to consider the ideal town/city to stay
 - Cluster 1 provides Convenience stores and ATMs, but not much else
 - Cluster 2 provides restaurants and coffee shops and other neat places to visit.
- With further data analysis we could incorporate many other factors such as hospitals and schools for people looking to move to Newfoundland

References

- Slide 1 image:
https://images.dailyhive.com/20180918102924/shutterstock_144308257.jpg