1. **Introduction**

**Toronto Clustering is project which uses various data manipulation techniques like Web Scraping, Data Analysis, Foursquare API request, Clustering and Data Visualization to suggest the best possible choice of a neighborhood for its users according to their preferences.**

**1.1 Business Problem**

**Sometimes choosing a neighbourhood can be a difficult choice for a person while buying a house. Using a dataset I can solve this problem. If someone is looking to buy a house in Toronto, I can suggest him a neighbourhood suitable for him according to the things that he prefers. For example, if person likes to eat, then I can suggest him a neighbourhood which has the highest number of restaurants in it.**

**1.2 Prospects**

**This project is basically meant for people who looking to buy a house in Toronto. Also, this project will prove to be very beneficial for any real estate agent who can use this as a tool to sell houses to their customers according to their preferences. This application might boost their sales. Also, this project can be integrated with any online real estate website which will suggest the best suitable neighborhood for its users.**

1. **Data**

**I used the data about the neighborhoods in Toronto from Wikipedia. I will use web scraping to extract that data from Wikipedia. After that I will use Foursquare API to extract information about the common venues of various neighborhoods in Toronto. I will use this data to perform the final search for the stated problem.**

1. **Methodology**
2. **Result**
3. **Discussion**
4. **Conclusion**
5. Introduction where you discuss the business problem and who would be interested in this project.
6. Data where you describe the data that will be used to solve the problem and the source of the data.
7. Methodology section which represents the main component of the report where you discuss and describe any exploratory data analysis that you did, any inferential statistical testing that you performed, if any, and what machine learnings were used and why.
8. Results section where you discuss the results.
9. Discussion section where you discuss any observations you noted and any recommendations you can make based on the results.
10. Conclusion section where you conclude the report.