

Optimized Location for Dairy in Karachi

1 – Introduction

1.1 - Description of the Problem

Nowadays, Covid-19 has impacted million of lives around the whole globe with the word **Stay at Home** so there's shortage of milk in Karachi, the capital city of Sindh, Pakistan. Although there are many Dairies in Karachi but our aim is to open one at suitable location so that we can optimize home delivery of milk.

1.2 - Background

My Client is the owner of the large **Dairy Milk** company providing its services at **Hyderabad**. She would like to expand her business in Karachi and she has *decided to open her company's branch in Karachi*. She asked me to analyse the data and find the suitable location for her company.

1.3 - Target Audience

Karachi is the most diversified city of Pakistan and people across the all Pakistan have their business here. So, our target audience is all Pakistani currently living in Karachi.

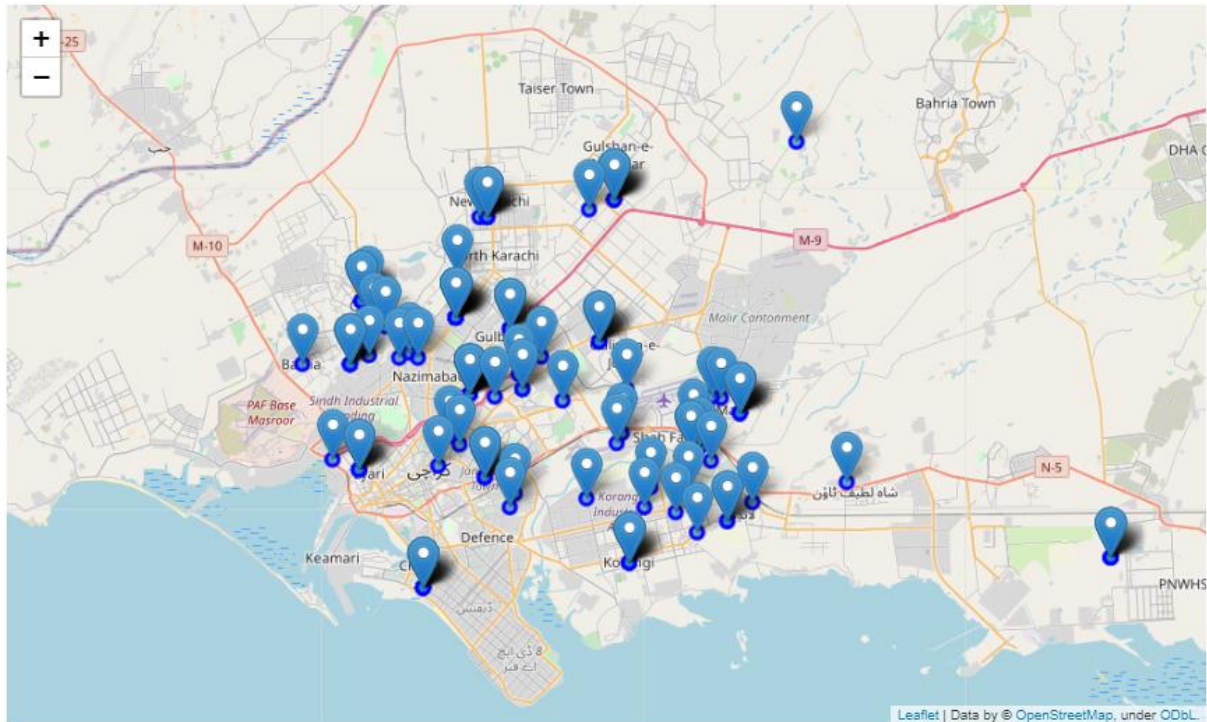
2 – Data

We have access to **List of Union Councils of Karachi** [here](#) then we will use **BeautifulSoup** to extract the data and pre-process for further evaluation and visualizations.

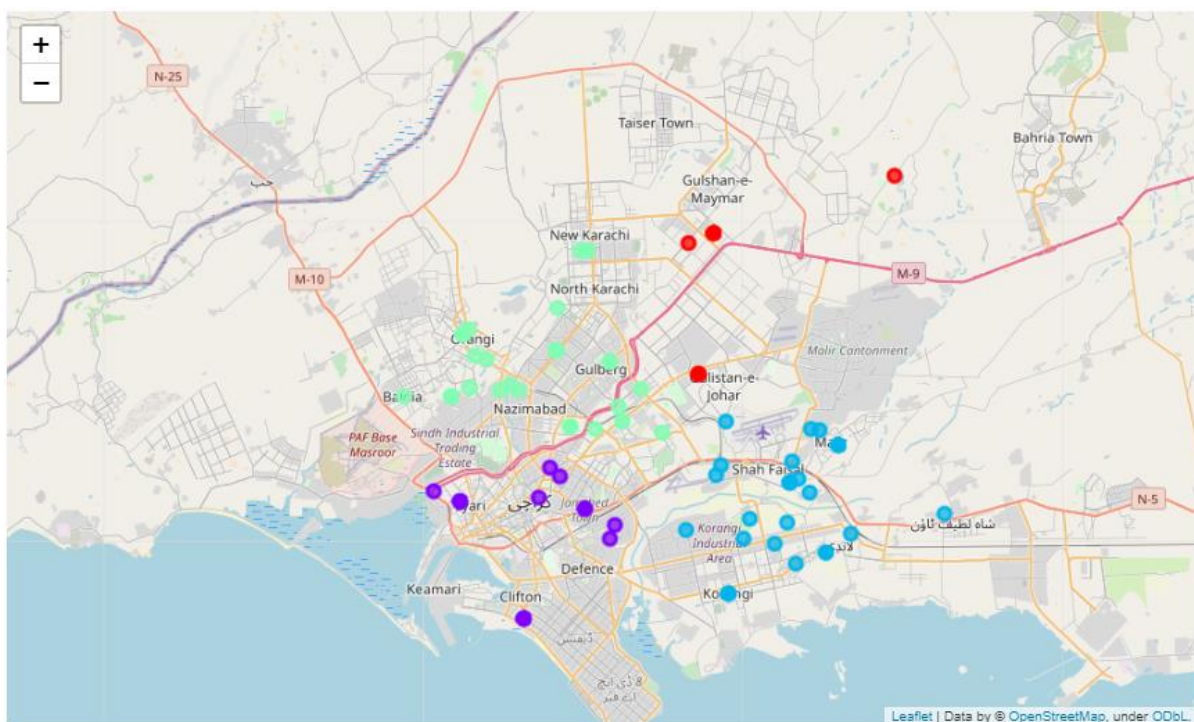
Union Name	No. of Towns
Gulberg Town	14
Gulshan Town	13
North Nazimabad Town	13
Liaquatabad Town	12
Korangi Town	12
Orangi Town	12
Malir Town	11
New Karachi Town	10
Saddar Town	9
Gadap Town	8
Bin Qasim Town	8
Shah Faisal Town	7
Baldia Town	7
Lyari Town	7
Jamshed Town	6
Landhi Town	5

3 – Methodology

- Extracted Data from website link given above.
- Pre-processed (to make a data-frame for easier analysis)
- Found location using FourSquare API
- Displayed Map of Neighborhoods as shown below:

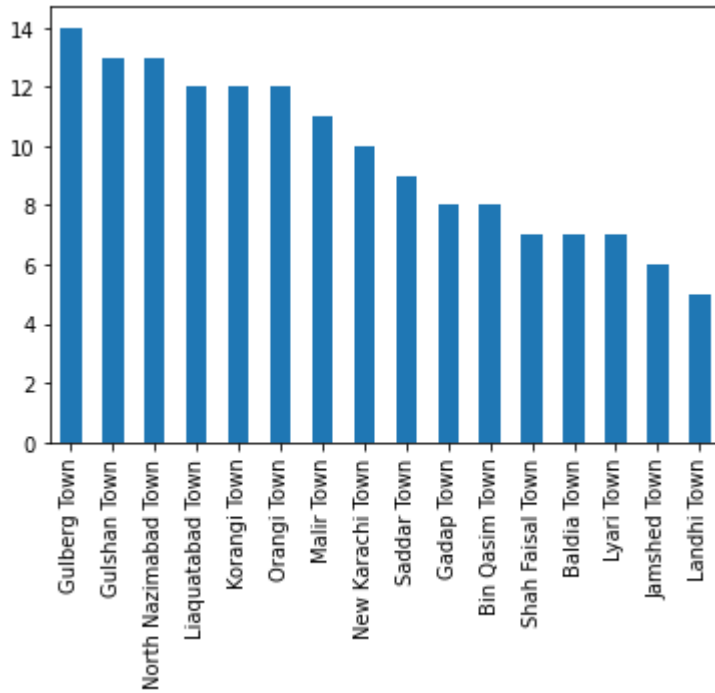


- Used k-means for Clustering and found following cluster:



4 - Result and Discussion

After looking at the **Neighbourhoods** and above **Exploratory Data Analysis** we can estimate that "**Gulberg Town Karachi**" contains 14 towns and also our clustering shows that as well therefore I suggested her to open her start-up at **Gulberg Town**. because it's the suitable place in **Karachi** to settle her **Dairy**.



5 – Conclusion

My boss had an *idea* and wanted to decide where she should start her ***Dairy in Karachi***. She assigned me the job to analyse the data of Karachi and help her decide. After complete process through wrapping data and processing it for data that we need to analyse and after analysis we found an optimized location for her business and it's "***Gulberg Town, Karachi***".