Coursera IBM Data Science Capstone Project

Using ML to help Drug Enforcement Agency to examine the Toronto area.

1.Introduction

1.1 Background

The drug enforcement Agency wants to search for areas where drugs are been excessively used and to stop the supply chains. The idea behind this project is to help the department in Toronto with the needed information, that the drug dealers might be running their supply chains in or around pubs. With this project its easy to find the locations of the pubs and the nearest neighborhoods. So, that the drug enforcement agency could break the supply chain Since it's the matter of youth and nation interest to stop the drugs.

1.2. Business problem

The aim objective of this capstone project is to help the Drug enforcement Agency to find and stop the drug dealers in the city of Toronto. With machine learning algorithms like clustering we can solve this problem. It's illegal so that the pub owner can lose their license and to face further worst consequences. And this data also helps NGO'S and other organization to organize Awareness camps. If DAE got to know that there are people who wants to get out the drug addiction could help organizations to open re-habitation centers.

1.3 Target Audience

The Drug enforcement Agency, Health commission, NGO'S and other public related organization

2. Data

1. List of neighborhoods in Toronto, Canada.

2. Latitude and Longitude of these neighborhoods.

3. Venue data related to Pub's in Toronto, Canada.

3. Data Extraction

1. Collecting the data provided by Wikipedia about the list of Toronto neighborhoods with web scraping.

2. Data of Latitudes and Longitudes of these neighborhoods with the help of Geocoder package

3. Finally, to get the venue data related to neighborhood using Foursquare API.