APPLIED DATA SCIENCE CAPSTONE

(COURSERA)

BATTLE OF NEIGHBORHOODS

MOST PREFERED BOROUGH FOR GLUTEN-INTOLERANT PEOPLE

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1. Introduction

1.1 Background

New York City shortly referred to as NYC is the most popular city in the United States. NYC has been entitled as the financial, cultural and media capital of the world, significantly influencing various fields like business, entertainment, research tech, education, politics, tourism, art, fashion, and sports. The state also comprises of a variety of cuisines since people from all around the world reside and frequently pay visits. Situated at one of the world's largest natural harbors, NYC consists namely of five boroughs which are Bronx, Manhattan, Brooklyn, Queens and Staten Island. All around the year tourists keep visiting NYC for a blissful experience of different art forms and cultures. If a tourist who is gluten-intolerant visits New York, he/she would prefer a borough where gluten-free food is easily available.

To give a brief outline, gluten allergy is medically known as Coeliac Disease. It is described as an immune reaction which occurs by consuming gluten, which is a type of protein found in wheat, barley and rye. This condition is highly common with over 1 to 2 million cases every year. This condition cannot be cured but only treated with medical care. Therefore, tourists suffering from such conditions should be taken care of, as this can not only spoil their vacation but also affect their health in a serious way.

1.2 Problem

This research problem is for such a tourist who wants to visit NYC for a trip and is gluten-intolerant. Henceforth, he or she would appreciate a borough where gluten-free food is easily accessible. The solution is to find a borough which has a maximum number and as well as high density of gluten-free restaurants.

1.3 Stake holders

This research would benefit people who are gluten-intolerant and would like to pay a visit to New York. This will help them choose a borough which would give them access to restaurants which serve gluten-free food.

2. Data acquisition

For this research, the following will be required:
a. The number of gluten-free restaurants in all of the boroughs
b. Data of the borough and neighborhoods with their respective geographical coordinates (latitude and longitude)

The Geographical Data will be taken by Foursquare API as well as the following links have also been used in the study:

a. https://geo.nyu.edu/catalog/nyu_2451_34572
b. https://cocl.us/new_york_dataset