# Coffeehouses in Abu Dhabi

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## 1. Introduction

#### 1.1 Introduction:

Since Covid-19 Hit the world earlier this year, lot of countries in the world got into lockdown status, and since restrictions are being lifted, lot of people are heading back to coffee places to enjoy having their drinks as usual as they did before this pandemic.

AD is a the Capital of UAE and the second-most populous city of the United Arab Emirates, neighborhoods or "Areas" are close to each other compacted together, recently new areas were developed a bit far from the center ,were its becoming more occupied, and since coffee shops are usually visited for various reasons whether to enjoy your daily cup of coffee, or to sit in a friendly environment with your friends, it's usually a place where people spends an hour or two on a daily base there.

#### 1.2 Problem:

These new developed areas and some of the less dense area lack the availability of these international coffeehouse places, and local coffee shops took over to compensate this lack.

This project is focused on three of the international coffeehouse places "Starbucks, Tim Hortons & Costa" on their distribution in the Capital City. The project will highlight on the location of these coffeehouses and the will show where future branches can be suggested for future.

#### 1.3 Interest

Business developer for these coffeehouse places mentioned above, or anyone interested in opening a coffee shop might be interested in this project.

## 2. Data Acquisition and Cleaning

#### 2.1 Data Sources

Unfortunately, accurate Free data on the City major areas and location latitude & longitude are not available online, these was the first challenge it to find reliable data that cover the most common city area.

Since I live in the city, it was better to do this from scratch and to create geo file for the City where major areas included in this file.

Foursquare API was used for obtaining the coffee houses data & location in the city.

### 2.2 Data Cleaning

Creating the data from scratch was not easy, you need to create an imaginary point to defy it as a center of the neighborhood and set a radius that is acceptable for all areas.

On Foursquare API for some reason imported data were mixed when searching for specific Coffeehouse Name, Data needed to be cleaned to create Dataframe for each coffeehouse.