# Coursera Capstone Project Week 4

Opening a New Movie Theatre in Boston, MA
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### **Introduction:**

Going to the movies is a beloved past time. Many decisions go into which movie theater people will choose to go see the latest film. One of the most important factors is location. Questions one asks themselves before picking which movie theater to go to may include: Is the theater near my home? Easy to get to via public transit? Is the theater going to be too crowded? For a property developer in Boston, MA, the task of finding the perfect location for a new movie theater is quite overwhelming.

### **Business Problem:**

The question this project aims to solve is: Where is the best location for a property developer to open a brand new movie theater in Boston, MA?

## **Target Audience:**

The target audience is Boston property developers interested in opening new movie theaters in the Boston area.

### Data:

### **Data Needed:**

- Neighborhoods of Boston
- Latitude and Longitude values for Boston Neighborhoods
- Venue Data from Foursquare

#### **Data Sources and Methods for Extraction:**

I will be using data from the following Wikipedia page which contains a list of 56 neighborhoods in Boston. (<a href="https://en.wikipedia.org/wiki/Category:Neighborhoods\_in\_Boston">https://en.wikipedia.org/wiki/Category:Neighborhoods\_in\_Boston</a>). I will use web scraping to extract the data. Next, I will use the Python Geocoder package to get both the latitude and longitude coordinates. With these coordinates I will use Foursquare API to get the relevant venue data. During analysis, I will be using k-means clustering and map visualization with Folium.