Movie Ticket based Restaurant Recommendation System

Sachin Dhande
Application Architect

Table of contents

1.	Introduction	1
2.	Data sources	2
3.	Methodology	3
4.	Results	4
5.	Discussion	5
6.	Conclusion	6
7	Reference	7

1. Introduction:

There are many recommendation systems available for problems like shopping, online video entertainment, games etc. Restaurants & Dining is one area where there is a big opportunity to recommend dining options to users based on their preferences as well as present geographic location.

The goal for this project is to recommend Restaurant, Bar, Café which are nearby Movie Theater and people who has booked movie ticket in particular Movie Theater. Mostly people who go for movies in Theater eat in Restaurant, Bar, Cafe after movies show. Probability of people eating out after Movie show is very high.

This system will recommend targeted customers (who has booked Movie Show) a Restaurant, Bar, Café nearby to Movie Theater. Recommendation will be before end of movie show so that customer can readily choose from recommended option instead manual looking out for restaurant after show.

This predictive recommendation will improve business of Restaurant, Bar, Café in nearby location to Movie Theater. It will also provide commission profit to Movies Theater. Also Movie watcher customer satisfaction will be improved as he will not have to manually search for Restaurant it will be readily available in form of SMS on their Mobiles before show end time.

This system will predict recommendation based on people's Age, Gender, Movies category (language) and Movie's show end time.

Below are few sample example of recommendation

- i) If movie show end time is in after noon it will recommend Restaurant for dinner,
- ii) If movie show time is evening it will recommend Café shop.
- iii) If booked movie is Chinese movie it will recommend Chinese Restaurant

2. Data:

The customers who have booked online movie ticket using different websites or mobile application like BookMyShow, TicketBooking are readily available in movie theater database. Those Movie Theater data consists of basic booking information like Name of customer, age of customer, movies name, movies theater address, pin code of Movies Theater, Address of Movie's Theater, Movie's show time, Movies category, Ticket ID, No of seats booked. This data has good insight to predict recommendation to Movie watching customers.

Other source of data, Foursqure APIs will provide the details about Restaurants, Bars, Café with in radius of 500 m from Movie Theater's geographic location (latitude, longitude). Foursquare APIs lets the user search for restaurants, nightlife spots, shops and other places of interest in their surrounding area. It is also possible to search other areas by entering the name of a remote location.

Regular endpoints include basic venue firmographic data, category, and ID. Premium endpoints include rich content such as ratings, URLs, photos, tips, menus, etc. Restrictions apply based on your account type, with further details documented on our rate limits page. Foursquare APIs lets the user search for restaurants, nightlife spots, shops and other places of interest in their surrounding area. It is also possible to search other areas by entering the name of a remote location.