Restaurant Recommendation System

This case study covers a very important business problem which is recommender systems. as we are in rapid consumption of content and commodities ordered by online delivery apps. Challenges for these apps increase as they always want to keep their customer happy and wants to reduce their time.One major place where customer spends lots of their time is in searching for products. Sometimes a consumer may know what product they are willing to buy but mostly don't.Remember last time you ordered food online what took you most time whether it was to order your food, make the payment or it was to hunt for the best vendor from where you can order your food or which caters to all your taste buds. mostly your answer will be you struggle most in hunting for the best vendors or restaurants.

Yelp !, Zomato develops a recommendation engine which helps the users to find their preferences based on what other users browsed, clicked, and rated. Users use some questions about zomato.

1) Zomato recommends your favorite restaurant?

2)How youtube recommends videos that you most likely to watch?

3)If the person is interested in watching House of Cards in netflix, how the netflix knows that you are interested in Nacros?

4)All the shopping sites makes our life easier by showing recommendation on front page. 5)How do they know which items you most likely to buy?

6)Do you think any magic happening? Hold on reading for a second and think about it.

TWO TYPES OF RECOMMENDATION SYSTEMS:

1) **Content-Based Filtering**

   This systems recommends based on comparison between the descriptors of the items and a user profile.

2) **Collaborative Filtering**

   Unlike content-based filtering, this systems doesn't require description of the data hence it recommends without knowing anything about the products.

   Then, how does this system works?

   The idea is that, if two users have same opinion on visiting one restaurant and they likely to have the same opinion on visiting other restaurants too.

   There are lot of other articles are available on the website developing restaurant recommendation system using only user Id, business Id, and rating. In this article, we will move to the next level and consider the review text to develop a recommendation system. we will extract the features from the text which helps to

make better recommendations and use them to build recommendation model.

A restaurant recommendation system is an application that recommends similar restaurants to a customer according to the customer's taste. To build a restaurant recommender system using Python, I have collected data from the internship site.

Recommender systems are algorithms aimed at suggesting relevant items to users (items being movies to watch, text to read, products to buy or anything else depending on industries).

This project tells you about content based filtering which shows the recommendation system and moving forward to the platforms that require recommendation based on filtering techniques.

Fig. 1) Restaurant Recommendation

Functionalities of Restaurant Recommendation

- **Get All Restaurants data:** Initially user can see all the list of restaurants which present in the database.
- **Location:** User can select a location from the location dropdown.Based on the location selected by the user , list of restaurants gets changed. User can only the restaurants that contains the location selected by the user.
- **Cuisines:** User can select a cuisine from the Cuisines dropdown.Based on the selected cuisines the list gets updated.
- **Rating:** User can select a rating such as above 3 and above 4. If user selects above 3 then user gets list of restaurants above 3 rating and same goes for above 4. Based on user preference, user can select ratings.

So this is how to build a restaurant recommender system using the Python programming language. A restaurant recommender system is an application that recommends similar restaurants to a customer according to the customer's taste. I hope you liked this article on building a restaurant recommender system using Python. Feel free to ask valuable questions!