

A machine learning model system that recommend a Restaurant to setup in Bengaluru based on user’s likes and dislikes, developed to demonstrate part of a capstone project to IBM through coursera.

**Introduction:**

Bangalore is the capital for Karnataka state. With a population of over 15 million (as of January 2016), Bangalore is the third largest city in India.

The diversity of the cuisine available is reflective of the social and economic diversity of Bangalore. Roadside vendors, tea stalls, South Indian, North Indian, Muslim food, Chinese and Western fast food are all very popular in the city. Udupi restaurants are very popular and serve predominantly vegetarian cuisine. Bangalore can also be called a foodie's paradise because of its vast variety of foods and edibles with a touch of Bangalore's uniqueness and tradition.

**Problem description:**

Frequent travelers get to experience with very different types of environment, of which traveler may not have much knowledge about the availability of good food of his/her choice. Food is essential factor to keep good health of traveler, a factor for decided how you rate your trips and plus also recommending it to the people. Best Food can also attract people around to world to try it out.

Frequent traveler or a common man is the Target audiences for this project. People could simply decide to look for a similar restaurant all the time because they are addicted to a specific category of food. People who rarely use restaurants would prefer the most rated restaurants nearby them and all this could be easily handled by our recommender system. So, target for this project is basically everyone who is exploring different places or similar places. Let us find answers to the below Questions:

1. What is best location in Bengaluru City for Cuisine to setup?

2. How many types of foods are available in the restaurant?

3. Which is the nearest to me with good rating?

4. How many "similar" restaurants are available nearby me?

5. Do the "similar" restaurants cost more? If so, what specialty do that have?

To address such above questions, Cynovate company decides to allocate this project to me not just to find out solutions to the questions but also build a system that can help in recommending new places based on their rankings compared to the previously visited by me.

Expectations from this recommender system is to get answer for the questions, and in such a way that it uncovers all the perspective of managing recommendations. It is sighted to show:

1. What types of restaurants are present in an area?

2. Where are the similar restaurant present based on a preference to food?

3. How do different restaurants rank with respect to my preferences?

**Target Audience:**

Target for this project is basically everyone who is exploring different places or similar places.

**Success Rate:**

With restaurants evolving, new food categories emerge, hybrid food starts to be more popular, we need a system that could help us access vast number of food varieties. It is impossible for a person to ask each one about their visit to a place and also not everyone remembers everything. On the other hand, Computers are good at remembering things, and with Machine learning to its peak, it high time technology will by our personal guidance and help us personally based on our likes and dislikes. So, people would care about this project as their personal assistance and success rate could certainly increase with time.