

# 1.Introduction :

**Problem background:** Toronto is the one of the most popular city of the Canada. With a population of over 29 lakh million (as of January 2016), Toronto is the provincial capital of Ontario.

The diversity of the cuisine available is reflective of the social and economic diversity of Toronto. Roadside vendors, tea stalls, South Indian, North Indian, Muslim food, Chinese and Western fast food are all very popular in the city. The Chinese food and the Thai food served in most of the restaurants are can be customized to cater to the tastes of the Canadian population. Toronto can also be called a foodie's paradise because of its vast variety of foods and edibles with a touch of Toronto's uniqueness and tradition.

**Problem description:** Suppose I travel and keep changing places very frequently. This is very hectic and plus i get to experience very different types of environment, of which I do not have much knowledge about. In such situation, food can be an important factor for decided how you rate your trips and plus also recommending it to the people. Food can also attract people around to world to try it out if it were to be the best. In such scenarios, we need to find the right place, at reasonable cost, to serve us the best possible way. So there are few questions that must be addressed, such as:

1. How many types of foods are available in the restaurant?
2. Which is the most nearest to me with good rating?
3. How many "similar" restaurants are available nearby me?
4. Do the "similar" restaurants cost more?

If so, what specialty do that have?

To address such question, XXYZ Company's manager 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 a particular area?
2. Where are the similar restaurant present based on a preference to particular food?
3. How do different restaurants rank with respect to my preferences?

**Interested Audience:** Target audiences for this project does not limit to a person who keeps travelling but everyone. 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 to have 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.

**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 and every one about their visit to a particular 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.