**RESTAURANT RECOMMENDER SYSTEM**

* IBM Applied Data Science Capstone Project
* **INTRODUCTION :**

**PROBLEM:**

To develop a recommender system that will help the restaurant manager to find the best suitable place to open a restaurant.

**PROBLEM BACKGROUND:**

Pune is the second largest city in the Indian state of Maharashtra.  It is the ninth most populous city in the country with an estimated population of 6.4 million. The Pune city is considered to be the cultural capital of Maharashtra.  It is also known as the "Oxford of the East" due to the presence of several well-known educational institutions. The city has emerged as a major educational hub in recent decades, with nearly half of the total international students in the country studying in Pune. The city has many IT companies.

Thus, many people such as students and employees travel and stay in Pune for studies or business reasons. Thus, diversity of the cuisine is available is reflective of social and economical diversity of Pune. Street food vendors, South Indian, North Indian, Chinese food, and western food is popular in the city. Maharashtrian ( traditional ) food restaurants are specially popular in the city. Variety of foods and edibles can be experienced in the city.

**PROBLEM DESCRIPTION:**

If the manager of restaurant decides to open a restaurant in Pune, then following questions must be addressed –

1. Which place is the most suitable and popular for the restaurant ?
2. What type of food should be provided ? What type is preferred by people in that area ?
3. What type of people live in that area ( students, company employees, etc ) ?
4. How many similar restaurants are present in that area ?
5. What other specialities should be provided to attract customers ?
6. What should be the cost of the food provided ?

To get answers of above questions, a recommender system can be implemented. This system can help the managers to decide the best place to open a restaurant based on the rankings of places.

The recommender system should be able to answer the all questions and provide best solution. It should provide – popular food items in that area, target audience, cost estimation of food, etc.

**TARGET AUDIENCE:**

Target audience for this system are the managers or people who want to open a restaurant in the specific city or area. These people expect the place which is most popular and well known in the city. They also need the information about popular food items, categories, other specialities, etc. Thus using this recommendation system, the managers can decide the most suitable place for the restaurant.