**Problem Statement**

In the modern world, a number of applications are there that suggest what is most appropriate for the user. Recommendation systems are widely used to suggest the appropriate, relevant, according to mood and best content to the user. Tech giants like Facebook, YouTube, and Netflix used RS to show what is according to the pattern of users. On the other hand applications like Yelp, Food Panda, etc. use the RS to show the results which are according to the reviews and ratings of other users that have been previously experienced that place. Each of the platforms uses a different type of RS for different types of recommendations. But most of the applications are handling a single domain, like food, cars, entertainment, etc.

Our project is to come up with a generic recommendation system that would be able to recommend any field of the second type explained i.e. Recommendation on the basis of feedback. The generic model would analyze textual data (reviews) and after that, we will generate the final rating on the basis of the combination of user ratings and rating generated by the model on the basis of reviews. Moreover, we will add Reinforcement Learning so that this process of ratings becomes dynamic i.e. as more reviews come, ratings will be changed according to reviews.

**Assumptions**

The project is supposed to be a user-friendly web and mobile application, which can be able to provide the recommendation of places in your surrounding on the basis of the feedback about that. The advantages of using the application are:

* Users will get recommendations on the basis of the experience of other users.
* Recommendations given to users will be dynamic, which will be changed over the period time.
* Users will be able to see the place's profile and read comments to get a better idea about the place.
* Users will be able to share his/her experience in terms of feedback.

**Project Scope**

Natural Language processing is a vast field that acts as an umbrella for many different fields. Recommendations by using reviews are also one of the things which come under this.

Recommendation applications are widely used on daily basis, to get the best recommendations of things. One of the best examples in our region is Food Panda, on which just by giving location, you are able to see top restaurants in your surroundings. Each of the platforms considers a different way to show these recommendations. Some use an average of ratings other use the most visited/ordered place while some use the feedbacks. We are going to develop such a system which will help in the following:

* Generate recommendations on the basis of feedback i.e. ratings and reviews.
* Make a dynamic system by introducing Reinforcement learning, so that ratings will be changed over the period of time according to new feedbacks.