# **Rate Book**

Overview

**1.** **Introduction and Context**

*This web-application will let people rate everything/anything possible. Ex: Universities, Professors, Food, Products, Cities, courses, services. Like Quora lets people ask any Question/Query and other people give their opinions, similarly this web-app will let people rate and share their experiences with anything they want. This may act as a centralized one-stop shop to see reviews, feedbacks of anything people are interested to buy or get associated with. This would let people add categories or topics to give reviews too, moreover, they can add their reviews to already existing topics. Currently, there are many websites that provide ratings but they are limited to a particular category like Amazon for the products they sell, RateMyProfessor for professors, Glassdoor for companies etc, but we think that with application like this it will be very easy for consumers to see everything at one place.*

*Required Resources:*

* *Database for storing metadata and reviews, Memory(cache) for storing most current data to reduce latency, CPU utilization between multiple threads*
* *A queue for doing the asynchronous task(Rabbit MQ)*
* *Producer processes which will take the user reviews and write to cache and put into the queue for asynchronous processing*
* *Consumer processes which will consume the reviews, aggregate them and update the cache with total star ratings and update the DB*
* *Backend server which will listen to client events and hand them to the producer processes based on different requirements*
* *A Memory Cache for faster reading.*

**2.** **Actors and their Goals**

*This section contains identities of the actors (e.g., users) of the proposed system and their goals. Context diagrams and UML Use Case diagrams are good tools to help communicate these ideas. Here “actors” is a board term that could include other software systems or hardware devices. They can be anything outside the scope of the software you are building that has a goal relative to your distributed application. This section should be less than one page.*

***Actors****:*

* *End user*
* *Products / things to be rated*
* *Feeds*

***Goals****:*

1. ***Log in*** *- Users will have to login to rate something.*
2. ***Rate Something*** *- Registered users will rate something they bought or got to know about.*
3. ***Search rating category*** *- Users can search a category of product to want to know about or share their views about.*
4. ***Leave Reviews*** *- Only registered users can leave reviews and rate an item.*
5. ***View Reviews*** *- All the web users can view reviews and rating about anything.*
6. ***Sign Up*** *- New web users can sign up if they want to rate anything and share their experiences about an item.*
7. *Can create product and rate them if they don’t exist*.