



Department of Computer Science & Engineering  
UE17CS355 - Web Tech II Laboratory

# Project Evaluation

Project Title : Forums and Microblogging Site Reddit Clone

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## Project Description

### Forums and Microblogging Reddit Clone

This project is an online platform for users to see, publish and review posts on various forums published by other users. **Forums/Subreddits** can be created about different subjects and **Posts** can be created on these forums by various users. Some of the features include:

- Posts can be **upvoted/downvoted** by other users, these votes represent how good or bad the post is to the followers of that content
- Users are awarded **Karma points** based on the activity of the user on the website to promote healthy activity
- Posts are **recommended** to users based on similar posts and similar forums that are likely to be of similar interest to them
- Auto-complete enabled search bar to suggest various inputs to the user
- The Project uses the **RESTful API** for efficient performance and decreased errors along with modularized code (backend as well as frontend)



# TECHNOLOGIES

The following frameworks and technologies have been used to implement the project.

- Front End - **React.js**
- Backend - **Flask RESTful**
- Database and Querying - **MongoDB + mongoengine**
- Basic Structure - **RESTful APIs on a single server**



## Techniques Implemented

### TECHNIQUES

The following techniques have been used to implement the features of the project:

- Search Functionality
  - Backend Services
  - Recommendations
  - UI / UX (front end)
  - Frontend-Backend Communication-
  - Additional AJAX Pattern
- **Submission Throttling**
  - **Flask RESTful (Python)**
  - **Content Based Filtering of Posts**
  - **ReactJS w/ material UI and bootstrap**
  - **Axios**
  - **Periodic Refresh**





### POST RECOMMENDATIONS

The intelligent feature idea is to recommend posts to users similar to the ones that the user is interested in based on the users' activities on the website, the type of posts they like and the type of subreddit they follow implementing the general idea of - "If you like this then you might also find this interesting".

- This is achieved by using the concept of **content** based filtering by calculating **similarity** between posts
- The textual content of posts are compared to find out which posts are similar to one another
- This is achieved by calculating the **cosine similarity** between different posts and sorting the posts based on it
- The posts are then shown to the user in the order of similarity to other posts the user views/publishes



THANK YOU

