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**CS470**

### **Project Summary**

For my term project I plan to use reinforcement learning to develop a movie recommendation system. This recommendation system will store results from user searched movies and will display recommended movies which the user might like on the search page. I am using database from Themoviedb website, currently using only 5000 movies. I am using Flask to deploy my machine learning algorithm to a web base platform. Also, using JavaScript to make call to the API and HTML/CSS to design the website. Python libraries currently used are pandas and sklearn.

### **Accomplished part in the project: -**

- Basic machine learning recommendation system is working.
- Implemented it on the web platform using Flask.
- Website design is almost completed.
- API calls are properly working.
- Searching movies and getting recommendations is working perfectly.
- Posters and videos for recommended movies are visible
- On the front page current popular movies are shown using the moviedb API.

### **Detailed Timeline for completion of the project:-**

- Use the multi arm bandit system or some algorithm like that to show the movies on the front page. I will try to complete that in the next two weeks. This algorithm will show about 10 movies on the front page based on the user search data.
- After implementing the algorithm then I will be working to clean the design of the website.
- Right now, the recommendation system recommends three movies with their following posters and videos, I might want to increase the number of recommended movies.
- After Implementation of the algorithm and cleaning the website I will be ready to make the video of my project.