

1. What are the names and NetIDs of all your team members? Who is the captain? The captain will have more administrative duties than team members.

Minjun Gao (minjun2)

Yixiang Cao (yixiang9)

Captain: Minjun Gao (minjun2)

2. What is your free topic? Please give a detailed description. What is the task? Why is it important or interesting? What is your planned approach? What tools, systems or datasets are involved? What is the expected outcome? How are you going to evaluate your work?

We plan to design a movie recommendation system. We think it would be an interesting and useful one because many of our friends, including ourselves, like watching movies. When we want to look for a new movie to watch, it is good to have a movie recommendation system help us find one instead of blindly look for one manually. Although nowadays, there are already many powerful movie recommendation system, we still want to create one. We plan to first fetch related movie information from the Internet, and then use MySQL database to store those information, such as user information and corresponding movie lists. Ideally, we will build a platform to provide users with accurate movie recommendation based on the input movie preference. To evaluate our work, we will compare the movie recommended by the platform with their actual movie preferences.

3. Which programming language do you plan to use?

We will use mainly Python, SQL, and Javascript to do the coding

4. Please justify that the workload of your topic is at least  $20 \times N$  hours,  $N$  being the total number of students in your team. You may list the main tasks to be completed, and the estimated time cost for each task.

Estimated time: 40 hours

Fetch data of lists of movies on the Internet movie platform: 5 hours

Create database and link it to the backend code part: 10 hours

Design related algorithm to recommend movies: 8 hours

Write frontend code to have a user interface: 7 hours

Test the functionality of the movie recommendation algorithm: 6 hours

Work on final document and presentation: 4 hours