Milestone 4 – Q&A

Topic: Movie Recommendation Web Application

Can you elaborate on the Collaborative Filtering method used in this project?

Collaborative filtering is a method of making predictions about the interests of a user by collecting preferences from many users. The assumption is that if a person A has the same opinion as person B on an issue, A is more likely to have B's opinion on a different issue.

What were the most significant challenges encountered during this project?

Some of the challenges included dealing with a large amount of data and ensuring that the model can provide relevant and personalized recommendations. Also, testing the model's performance and ensuring its effectiveness was quite challenging.

Could the system handle new users or movies that have not been rated yet?

Currently, our system might struggle with new users or movies that have not been rated yet, often referred to as the Cold Start problem. However, it's an area we're looking into for future improvements, perhaps by implementing techniques such as content-based filtering or using metadata.

How was the dataset obtained for this project?

The dataset was obtained from the MovieLens website, a movie recommendation service, and it contains millions of movie ratings.

How was the system evaluated?

The system was evaluated based on the relevance of its recommendations, user feedback, and its performance metrics, like accuracy and computation time.

How can user feedback be incorporated into the system?

User feedback can be incorporated as an additional layer of data to refine the recommendations. For example, users can give explicit feedback through ratings or implicit feedback through their interaction with the system.

Can the system recommend movies from a specific genre?

Currently, the system doesn't take genre into account explicitly. It is based on user ratings and movie similarities. However, it's one of the aspects we're considering for future enhancements.

What is the significance of feature selection in this project?

Feature selection is critical as it defines the input for the model. In our case, user ID, movie ID, and ratings were crucial to understand user behavior and their movie preferences.

How can the system handle biases in user ratings?

Bias in user ratings is a common issue in recommender systems. Techniques such as normalizing user ratings or using a more robust algorithm can help manage this bias.

How scalable is this recommender system as the number of users and movies increases?

Our system is designed to be scalable. However, as the dataset size increases, computational resources and efficiency could become challenges. Hence, optimizing the system for larger datasets is one area we're looking into for future improvements.