Project Proposal

Development Track

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Functions and Users

We plan to build a web-based anime recommendation system that uses user "list" data that contains shows watched, currently watched, planned to watch, etc. A user is able to input their user ID in order to compile recommendations based on these features. The primary user base is MyAnimeList users. The major functions of the envisioned tool include user profiling, content-based filtering, collaborative filtering, and recommendation generation. We also hope to produce recommendations based on the shows itself. Users of our tool would include anime enthusiasts, casual viewers, and anyone seeking personalized recommendations based on their preferences.

Significance

Our recommendation system seeks to address the challenge of discovering new anime titles. With the enormous amount of anime content, users often struggle to find anime that align with their tastes and preferences. By providing personalized recommendations, we are able to simplify the anime selection process which helps save users' time and effort while fostering exploration in diverse genres and themes.

Approach

We will build this project using Django to create a user interface. We will either use a MyAnimeList database. Leveraging existing resources such as MyAnimeList database and user interaction data will enable us to train an accurate recommendation model. We will use Python libraries to create our recommendation system model. We will integrate data from the main website alongside an API to collect user data.

Evaluation

We will evaluate our recommendations against a list of recommendations manually created by the users of MyAnimeList. Metrics we may use are precision, recall, and accuracy. We will also conduct user satisfaction surveys to collect user feedback and improve upon these feedbacks.

Timeline

- Week 1: Data collection and pre-processing
- Week 2: Model Development and Training
- Week 3: User Interface Design and Implementation
- Week 4: Testing and Evaluation

Task Division

Daniel Xu - Model Development Sarang Mohaniraj - Data collection and preprocessing Rutuja Narwade - UI Design and Evaluation