

CS 410

## Final Project Proposal

Team: Abracadabra

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Movie has proven to be the world's most popular form of entertainment. Due to this pandemic, a large number of movie fans are unable to go to the theater to enjoy the optimal movie-viewing experience. Our target audience include movie lovers who are currently stuck at home. Our tool aims to find the perfect movie that wouldn't waste two hours of their time. There are some currently existing movie recommender systems available on the market, such as Movielens or Suggestme that learn users' movie preference based on their viewing history. However, our tool is going to be designed based on users' emotion of the moment: if a user feels sad, the tool would suggest a dramatic movie that freezes their miserableness for a moment; if a user feels depressed, we would offer an inspirational movie to cheer him up. Our team believes it is a very useful tool because movie choices are very personal and context-dependent, therefore our tool is going to find users the best match using emotion as a hint.

For existing resources, we would primarily use the movie data from two main-stream movie-rating websites: IMDB and Rotten Tomatoes. Our team is going to develop an algorithm that takes both movies' rating and the number of reviews into consideration and select thirty movies from the genre that best fit users' emotion of the moment. The tool is going to present all kinds of information about each movie to facilitate users' decision, which will include title, cast, length, rating, and link to the movie. We would demonstrate the usefulness of our tool by inviting our friends to use our tool and help them make movie decisions to improve their mood.

Our proposed timeline:

- Week 10: research on currently available movie recommender systems
- Week 12: build information retrieval system to gather movie information
- Week 14: build recommendation algorithm
- Week 15: build user interface and polish the project