# Tianen Liu Final Project Proposal

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| **Project Title: User Defined Hybrid Movie Recommender System** |
| My Project focuses on building a hybrid movie recommender that allows users to set their own recommendation weight for each movie attribute considered. I’ll be using movie information I get from the OMDB web API and movie taglines scraped off from the IMDB website. My project aims to solve the problem of a lack of customization in general movies recommenders. Technologies used would be collaborative filtering techniques based on cosine similarity and content based recommendation techniques based on TF-IDF. |
| **Impact** |
| Potential business benefits could be direct financial benefits from paid subscribers, or ad revenues. Social benefits could be helping people find movies that they enjoy but didn’t know of before using the recommender. |
| **Project Goals** |
| Learning goals:  Learn and familiarize myself with the complete process to building a hybrid recommender system that I could hopefully apply to other topics in future studies as well.  Project goals:  Build an easy to use and highly customizable hybrid movie recommender system that help people pick what movies to watch. |
| **Datasets** |
| OMDB web API: <https://www.omdbapi.com/>   |  | | --- | | **Conceptual Architecture** | | * The OMDB web API service would be used in data preparation part of this project * There are no known networking considerations yet, and to obtain the data we’ll focus on IMDB’s top 1000 movies (since they are the most popular/well known movies and people are more likely to know about them, so we can have somewhere to start to recommend movies) and call on OMDB’s web api to gain detailed information. | | **Data Exchange/Processing Framework** | | * After adopting the original data from OMDB, we’ll keep all rating and other numeric attributes * Part of the data obtaining process is I will be employing in this project is also part of my work that I submitted for Professor Topor’s DAV5400 Analytics Programming in Fall 2022 semester, I’ve made available the work I submitted in my github repo: <https://github.com/fbhsaid/DAV6300/blob/main/T_Liu_Final_Project.ipynb> |   IMDB movie taglines: <https://www.imdb.com/list/ls000333120/?sort=moviemeter,asc&st_dt=&mode=detail&page=1>  IMDB top 1000 movies:  <https://www.imdb.com/search/title/?count=100&groups=top_1000&sort=user_rating> |

Thank you!