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The Movie Recommendation System using Content Based Filtering with TF-IDF-Vectorization and Levenshtein Distance

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Abstract: *In this busy life people like to do things to make their mind calm and watching movies is one of the thing but due to large data of a movie exist in the world it is very difficult for the user to select a movie. They have to spend a lot of time in searching and selecting movie. This procedure is time consuming and difficult. So recommendation system make the things easy. Recommendation engines are trained to produce fast and accurate suggestions to users. This paper describes a movie recommendation system using content based filtering and data is processed using Term-frequency Inverse document frequency technique (TF-IDF) for vectorization. Cosine similarity method is used for similarity measure. The system is presented to the user through a web-hosted user-interface which offers a system architecture by considering the initial problem usually faced by recommendation systems, namely the cold start problem. The problem of lack of user preferences data is trying to be overcome by utilizing movies data. The raw data is processed using the TF-IDF algorithm and Vector Space Model to generate a data model. Then levenshtien distance with cosine similarity will improve the performance of existing system. Advantages of the system include efficient recommendations, correct suggestions. Future enhancements include user profiling, documentations and data acquirement through web scraping.*

Keywords: Movie Recommendation, TF-IDF Vectorization, Content Based Filtering, Vector Space Model, Cosine Similarity, Levenshtein Distance.

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