

MOVIE RECOMMENDATION SYSTEM USING MULTI-OBJECTIVE OPTIMIZATION BY RATIO ANALYSIS (MOORA) BASED ON MOBILE TMDB API

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ABSTRACT

An effective movie recommendation system is essential for assisting users in selecting films that align with their preferences amid the vast array of available options. This study employs the Multi-Objective Optimization by Ratio Analysis (MOORA) method to enhance movie recommendations based on various criteria, including ratings, popularity, and user-preferred genres. The system is developed as a mobile application integrated with The Movie Database (TMDB) API, allowing for real-time presentation of movie information. The application was developed using Flutter for the front end, Flask for the backend, and MySQL for the database. Key features of the application include MOORA-based movie recommendations, a movie search function, synopsis displays, and bookmarks and favorites lists. Test results indicate that this application provides more accurate movie recommendations and improves user efficiency in discovering films that match their preferences. According to the results of the User Acceptance Test (UAT), the application achieved a user satisfaction rate of 89.6%, demonstrating that it is well-received and valuable for users.

Keywords: Recommendation system, MOORA, Movies, TMDB