Abstract—The development of online news services has offered users numerous choices, resulting in information overload. This makes it challenging for users to locate desired news within a specific timeframe. To address this, recommender systems have been developed to help users discover and select news articles. These systems analyze user preferences and utilize various algorithms to suggest relevant information. Recommender systems have proven effective in domains like movies and music, enhancing user experiences and decision-making. This study presents a recommender system that combines content-based and collaborative filtering techniques to provide accurate and diverse news recommenders. Content-based filtering suggests articles based on their attributes, while collaborative filtering analyzes user behaviour and preferences. The system combines recommenders from both approaches using weighted ranking. Evaluation metrics, such as recall, assess the system's efficacy by measuring the proportion of relevant news articles suggested. The hybrid model outperforms individual approaches, achieving a recall of 0.5 in Recall@5 and 0.6 in Recall@10. The hybrid model that combines content-based & collaborative filter models produces better performance than the two original models.

Keywords: News; Recommender Systems; Hybrid Recommender; Content-Based Filtering; Collaborative Filtering; Recall