



# “CHATBOT MOVIE RECOMMENDATION SYSTEM”

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**Abstract:** A movies recommendation chatbot is an essential component of developing an effective and reliable platform for users. The chatbot should be able to provide impressive movie recommendations depending on user preferences, such as genre, year of release, language, director, actor/actress, rating and other variables. The abstract should detail the specific features of the chatbot that make it unique and more convenient than other movie recommendation platforms. Integration with various databases such as IMDB will aid in providing accurate and sufficient recommendations without causing delays by taking advantage of state-of-the-art machine learning algorithms ensuring quality service delivery. Incorporating human-like dialogue structure and suggestions built on past movies recommended can further improve user satisfaction levels. By providing comprehensive information in the abstract about a movie recommendation chatbot's design and functionality, developers can ensure more successful implementation while allowing audiences to have tailored entertainment options readily available at their fingertips.

**Keywords:** Movie recommendation, Language preferences, IMDB integration, Machine learning algorithms, User feedback, User history, similar movies, User-friendly interface etc.

## I. INTRODUCTION

"A Chatbot Movie Recommender System" is an intelligent and interactive chatbot that recommends personalized movies to users based on their preferences. It uses advanced machine learning algorithms and integrates with popular movie databases like IMDb, TMDb, or Rotten Tomatoes [1]. The chatbot is highly responsive and can learn from user feedback to improve its recommendations over time [4]. Additionally, the chatbot offers other useful features like movie trailers, reviews, and suggestions for movies to watch with friends or family. Chatbot movie recommendation systems can use different types of recommendation algorithms, including collaborative filtering, content-based filtering, and hybrid filtering, to provide personalized recommendations to users. Chatbots can also learn from user feedback [1], including ratings and reviews, to improve their recommendation accuracy and provide more relevant movie suggestions over time. Some chatbot movie recommendation systems can be accessed through popular messaging platforms like Telegram [9], making it convenient for users to access recommendations without having to download a separate app. These systems can also be integrated with voice assistants like Alexa, Google Assistant, or Siri, allowing users to access movie recommendations using voice commands. Overall, this chatbot is a powerful tool for anyone looking to enhance their movie-watching experience. With its intelligent recommendation engine and highly interactive user interface, the chatbot is the perfect way to discover new and exciting movies tailored to your preferences.

## II. RELATED WORK

Ahmed and Choi (2019) propose a hybrid approach that combines collaborative filtering and deep learning techniques to improve the accuracy of movie recommendations [1].

Chowdhury et al. (2019) use a deep learning approach with a hybrid filtering technique to improve the accuracy of movie recommendations and address some of the limitations of traditional collaborative filtering methods [2].

Sarkar et al. (2019) develop a deep learning framework for movie recommendation using long short-term memory networks, which are well-suited for processing sequences of data and can capture temporal dependencies in user behavior [3].

Yang et al. (2018) propose a movie recommendation system based on hybrid collaborative filtering and deep learning,



which combines the strengths of both approaches to improve recommendation accuracy [4].

Chen et al. (2018) develop a new movie recommendation model based on ensemble learning and deep learning, which combines multiple models to improve recommendation accuracy [5].

Yao and Wang (2018) propose a hybrid movie recommendation system based on matrix factorization with collaborative filtering and implicit feedback. The system is designed to handle sparse and incomplete data and can incorporate both explicit and implicit user feedback [6].

### III. PROPOSED METHODOLOGY

The proposed system is implement in this workflow:-

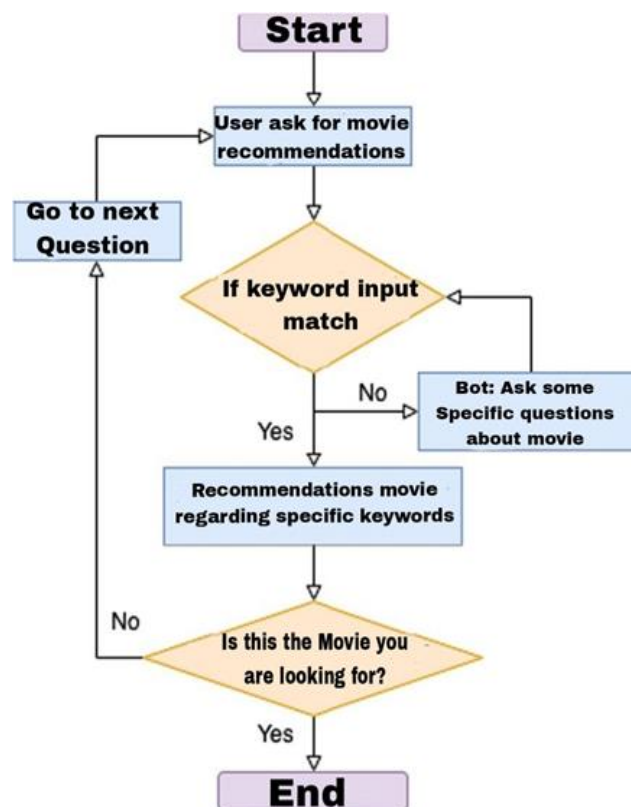


Figure 1: - Steps of proposed System

**Process Framework:** The process framework that can be used in the development of the movie recommendation chatbot is the agile methodology. This framework allows for an iterative approach to development, which involves continuous feedback and improvement from users. The development process can be broken down into sprints, each lasting about 1-2 weeks, where specific features and functionalities are implemented and tested.

**Algorithm:** The algorithm that is employed in the development of the recommendation engine is a content-based filtering. Content-based filtering recommends movies based on the user's preferences and the characteristics of the movie.

**Source of Data Collection:** The data required for the movie recommendation chatbot can be collected from public datasets like kaggle. The data collected includes information about each movie such as the genre, actors, director, and ratings. The data can be preprocessed to remove irrelevant information, correct errors, and ensure that the data is formatted correctly.

**Flowchart:** Flowcharts are used to illustrate the different steps involved in the development of the movie recommendation chatbot. This can include the data collection process, data preprocessing, algorithm implementation, user interface design, and testing and refinement.

**IV. CONCLUSION**

In conclusion, a movie recommendation system chatbot can be a useful tool for helping users discover new movies based on their preferences. By utilizing machine learning algorithms and natural language processing, the chatbot can analyze the user's responses and provide personalized recommendations. Additionally, the chatbot can gather feedback from the user to improve its recommendations over time. Overall, a movie recommendation system chatbot has the potential to enhance the user experience and increase engagement with movie content

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