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A

MINI PROJECT REPORT ON

"MOVIE RECOMMENDATION SYSTEM"

Submitted in partial fulfillment Management of the Bachelor Degree

In

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

V SEMESTER

Mini Project (BAI586)

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CERTIFICATE

This is to certify that the mini project entitled **"MOVIE RECOMMENDATION SYSTEM"** is a Bonafide`work conducted by **KESHAV M [1HK22AI020], SONVI NORONHA[1HK22AI053],SOURABH KHOT[1HK22AI054],SUMITH CHOUGALE [1HK22AI056]** in partial fulfilment for the award of Degree of Bachelor of Engineering in Artificial Intelligence and Machine Learning of the Visvesvaraya Technological University, Belagavi during the year 2024-25. It is certified that all corrections/suggestions indicated for the Internal Assessment have been incorporated in the mini project report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of **MINI PROJECT (BAI586)** prescribed for the Bachelor of Engineering Degree.

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DECLARATION

We hereby declare that the entire work embodied in this Project work **"MOVIE RECOMMENDATION SYSTEM"** has been carried out by us during the 5th semester of Bachelor of Engineering in Artificial Intelligence and Machine Learning at HKBK College of Engineering, Bengaluru, affiliated to Visvesvaraya Technological University, Belagavi, under the guidance of **SHABEENA LYLATH**, HKBK College of Engineering, Bengaluru. The work embodied in this project work is original and it has not been submitted in part time or full-time completion for any other degree in any other university.

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ABSTRACT

The recommendation system of today has made getting the stuff we need simple. The Recommendation systems are used to help people make decisions about movies to assist movie fans by making recommendations for movies to watch without the burden reducing the time-consuming process of choosing films. There are different ways, or we can say techniques and most of the OTT platforms and other movies sites depend upon the collaborative filtering technique (CB) which has some problems like cold start problem, scalability issue, etc. In this paper we aim to make movie recommendations based on the user's interests and preferences, we want to reduce the amount of human effort required.

We developed a model based on a content-based approach and sentiment analysis. This system suggests movies by comparing examples supplied by the user to the contents of the movies. It does this without using any human-generated metadata and instead uses information about the director, cast, and genre of the movies as well as information about how positive or negative the reviews are plus also give additional details about the films you searched for. The rating of the film, its premiere date, cast, and genres are among the supplementary information.

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ABBREVIATION

1) **MRS** - Movie Recommender System (Title of the project).
2) **ML -** Machine Learning (used for the recommendation logic).
3) **PKL-**Pickle (file format for saving serialized Python objects like models and data).
4) **API -** Application Programming Interface (used for fetching movie posters from the TMDB API).
5) **TMDB -** The Movie Database (API used for movie data and posters).
6) **ST -** Streamlit (Python library used for building the web application).
7) **JSON -** JavaScript Object Notation (format for fetching and parsing data from the TMDB API