Introduction to
Robotic Process Automation

Entertainment Rating and Recommendation Bot

Your Register No: 220701036
Name: G.Balaji
Guide Name
Designation and Department:CSE-A

RAJALAKSHMI
ENGINEERING COLLEGE

Abstract

The "Entertainment Rating and Recommendation Bot" is a RPA solution developed using UiPath that enhances the movie selection experience. This bot provides users with comprehensive movie details, including ratings, reviews, release dates, budgets, and story summaries. It offers personalized movie recommendations, sends curated suggestions via email, and facilitates ticket booking for chosen movies. The system streamlines entertainment planning with convenience and efficiency, creating a seamless user experience.

Need for the Proposed System

The proposed solution addresses the challenge of finding accurate and comprehensive movie information from multiple sources, which can be time-consuming and inefficient. It simplifies the decision-making process by providing a centralized platform to access detailed movie insights, personalized recommendations, and ticket booking options. This automation saves time, enhances user convenience, and ensures an enjoyable entertainment planning experience.

Advantages of the Proposed System

- Streamlines the movie selection and booking process for greater convenience.

.

- Eliminates the need for manual searches by consolidating ratings, reviews, and other details in one place.
- Provides personalized recommendations to help users discover movies that match their preferences.
- Sends email updates to keep users informed about recommended movies.

Literature Survey

- Automation in Entertainment: A Comprehensive Approach to Movie Recommendation and Ticket Booking Using RPA

  - ADVANTAGES

    - Automates movie details retrieval, saving user time and effort
    - Provides tailored recommendations, enhancing user satisfaction.

  - DISADVANTAGES

    - Relies on accurate external data, risking inconsistencies.
    - Raises data privacy concerns due to sensitive user information.

Literature Survey

- Enhancing User Experience in Movie Selection and Booking through UiPath-Based Intelligent Bots

ADVANTAGES

- High accuracy due to deep reinforcement learning.
- Real-time adaptability to changing user preferences.

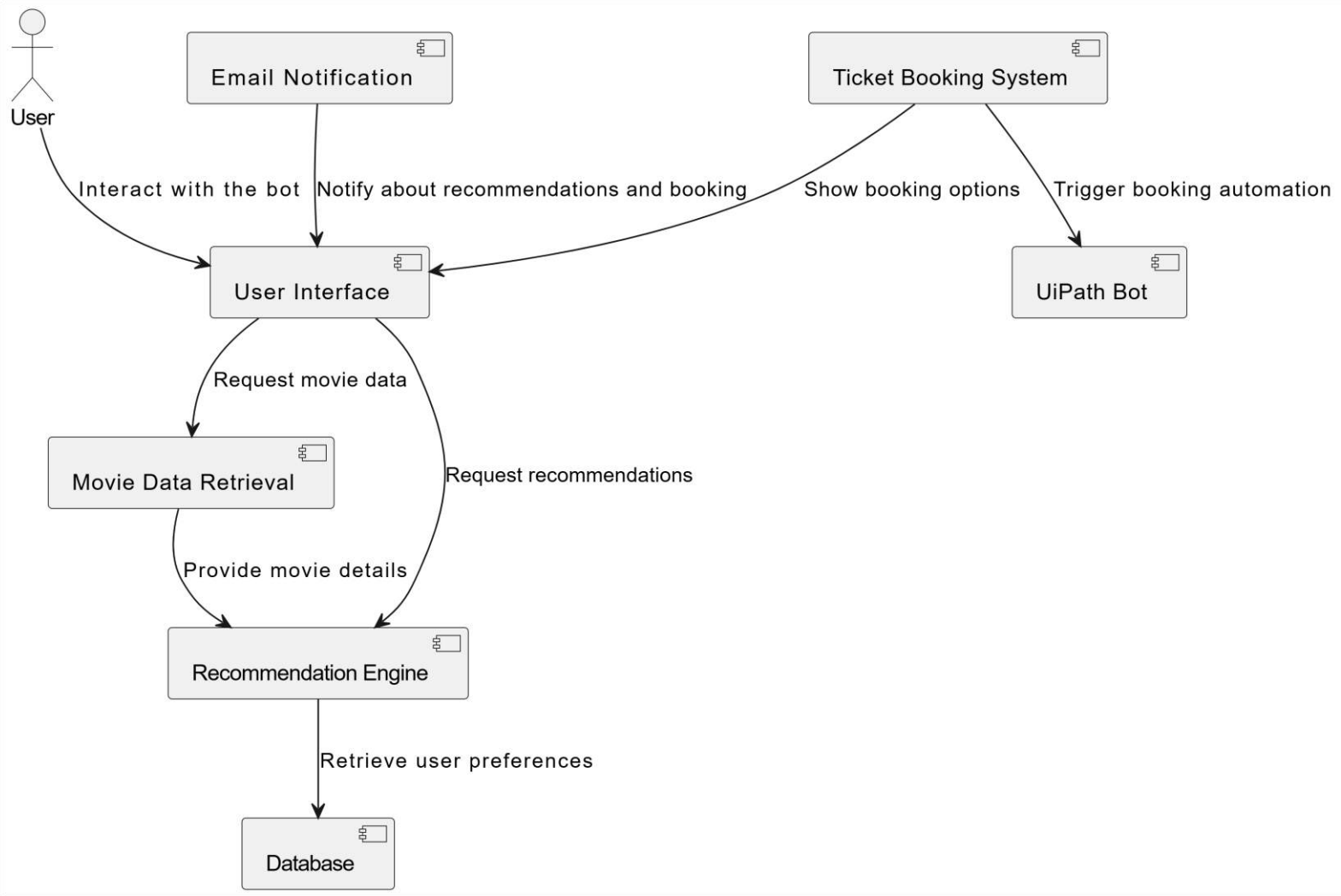
DISADVANTAGES

- Data dependency: The model requires extensive, high-quality datasets
- High reliance on computational resources for real-time processing

Main Objective

The main objective of the proposed solution is to streamline the movie selection process by automating the retrieval of movie details, including ratings, reviews, release dates, and budgets. By providing users with all relevant information in one place, it reduces the time and effort spent searching across multiple platforms.
Additionally, the solution offers personalized movie recommendations tailored to individual preferences, improving user satisfaction. It further enhances convenience by integrating ticket booking and email notifications, creating a seamless experience for users from selection to booking.

Architecture



System Requirements

- **HARDWARE REQUIREMENTS**

- **UiPath Studio**: Latest version
- **Operating System**: Windows 10 (64-bit) or later
- **Microsoft Excel**: 2016 or later
- **Email Service**: SMTP (Gmail, Outlook)

- **SOFTWARE REQUIREMENTS**

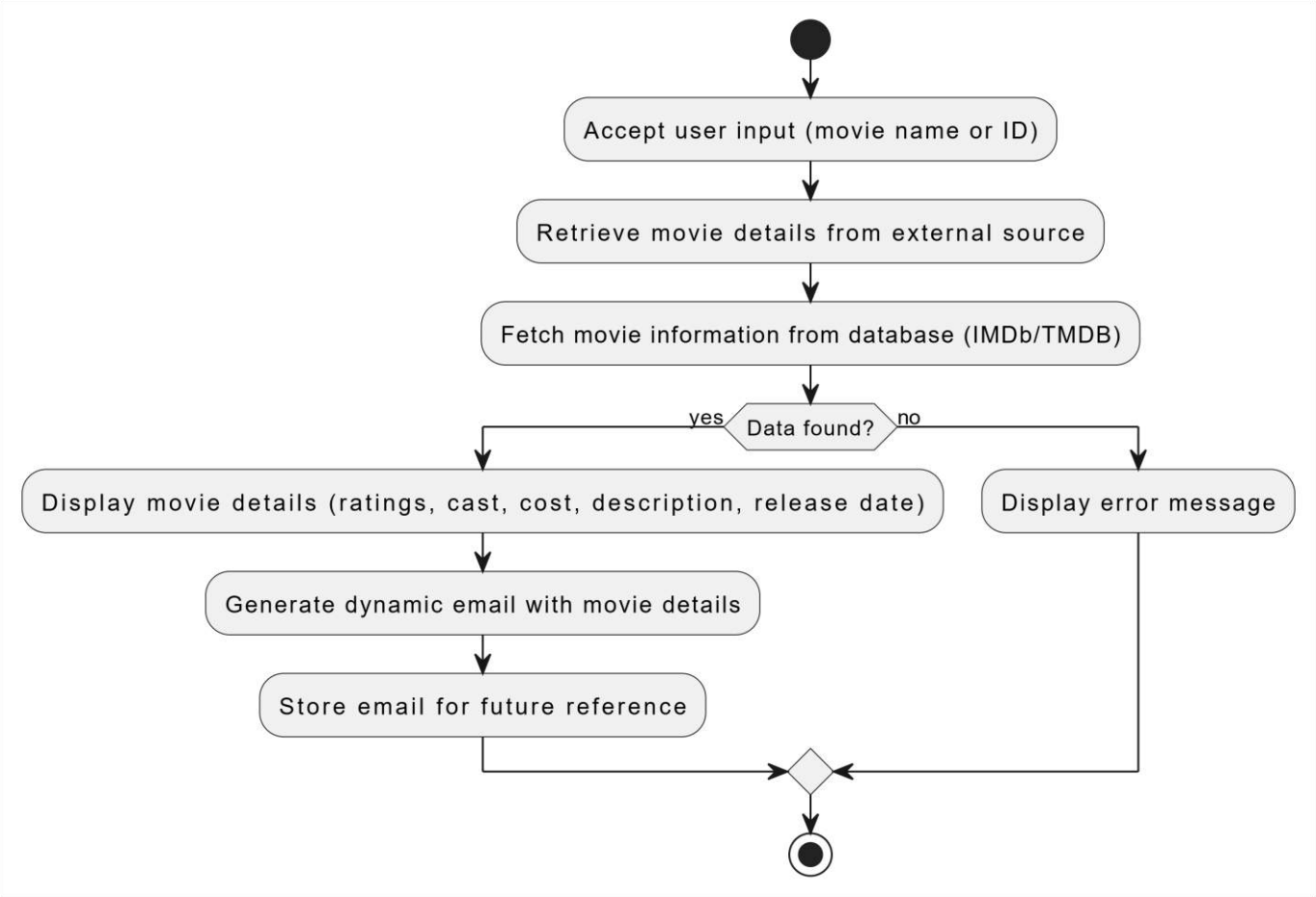
- **Web Browser**: Chrome, Firefox, Edge
- **Processor**: Intel i5 or higher
- **Storage**: 10 GB free space
- **Network**: Stable internet
- **Display**: 1366x768 resolution

Functional Description

MODULE 1:INPUT HANDLING AND INITIALIZATION:

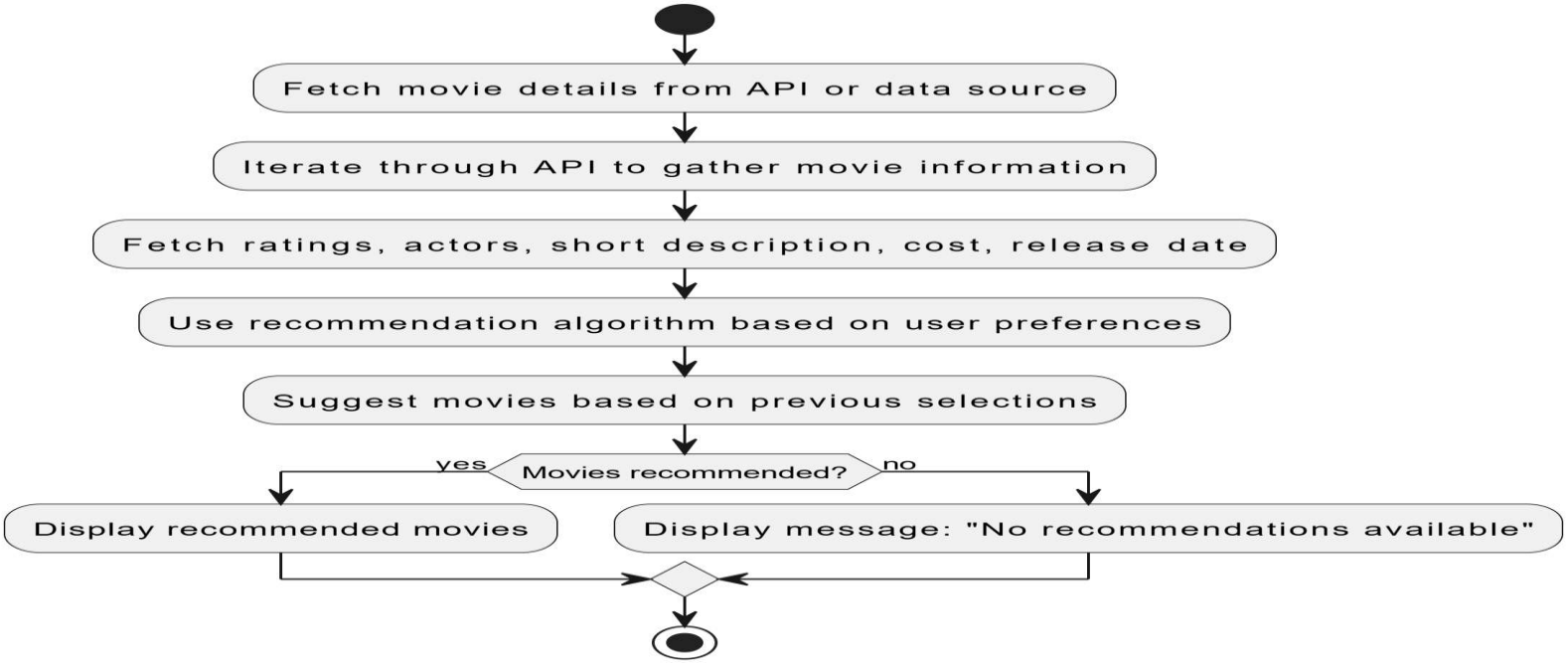
The system allows users to select a movie by name or ID, retrieving corresponding movie details from an external source. It automatically fetches key information such as ratings, cast, cost, story description, and release date from a movie database (e.g., IMDb or TMDB). Additionally, the system generates a dynamic email containing the fetched movie details and stores it for future reference.

ACTIVITY DIAGRAM

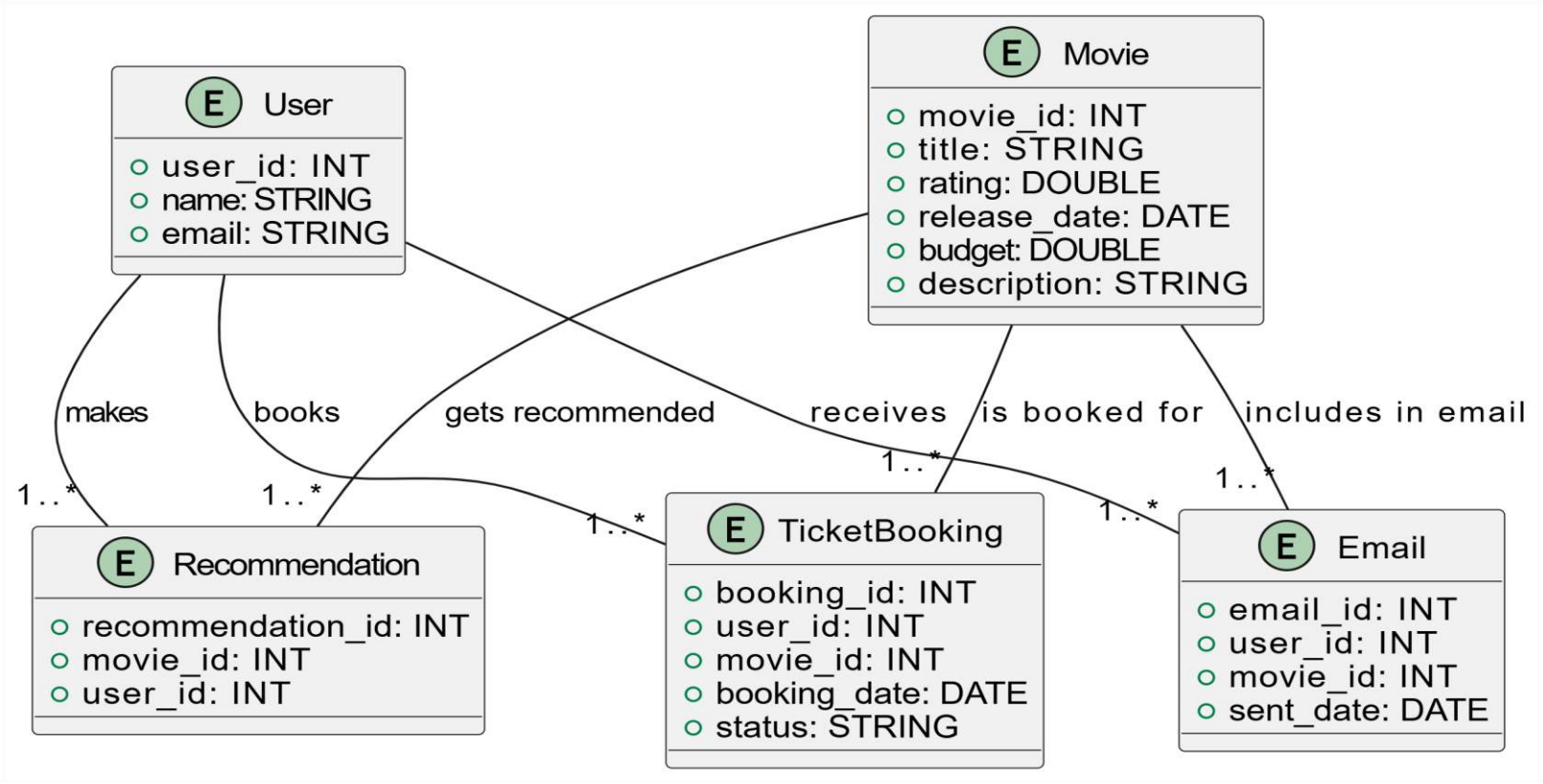


MODULE 2: CONTENT ANALYSIS

The system fetches detailed movie content by iterating through the movie's API or data source, gathering information such as ratings, actors, short description, cost, and release date. Additionally, it uses a recommendation algorithm to suggest movies based on the user's preferences or previous selections, enhancing the user's movie selection experience.



ENTITY RELATIONSHIP DIAGRAM



Process Design

- **MAIN PROCESS**

The Entertainment Rating and Recommendation Bot automates the movie selection process by accepting user input to search for a movie by name or ID. It retrieves detailed movie data, such as ratings, reviews, release date, and budget, from external databases like IMDb or TMDB. The system then uses a recommendation algorithm to suggest similar movies based on user preferences. When a movie is selected, the bot generates and sends an email with movie details to the user and offers an option to book tickets. The entire process runs automatically, providing users with recommendations, reviews, and booking options without manual intervention.

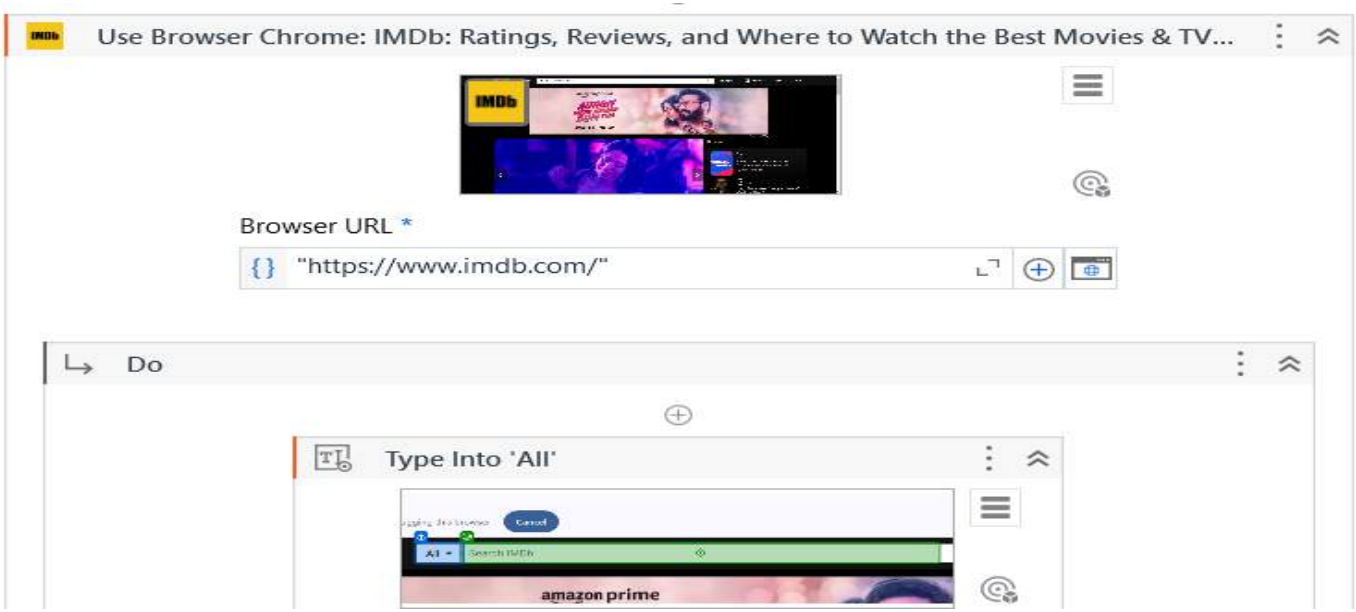
SUB PROCESS

- **Movie Selection**: Accepts user input to search for a movie by name or ID and validates the input data.
- **Movie Data Fetching**: Fetches detailed information about the selected movie, such as ratings, reviews, release date, budget, and a short description from an external movie database (IMDb, TMDB).
- **Movie Recommendation**: Uses a recommendation algorithm to suggest movies based on the user's preferences or previous selections, ensuring relevant recommendations are provided.
- **Email Generation**: Dynamically generates an email containing the selected movie's details and sends it to the user for future reference.
- **Ticket Booking**: Assists the user in booking tickets for the selected movie, providing a seamless and automated reservation process.
- **Recheck and Updates**: Periodically checks the status of recommendations, updates the movie database for new releases, and sends updated recommendations as necessary.

Implementation

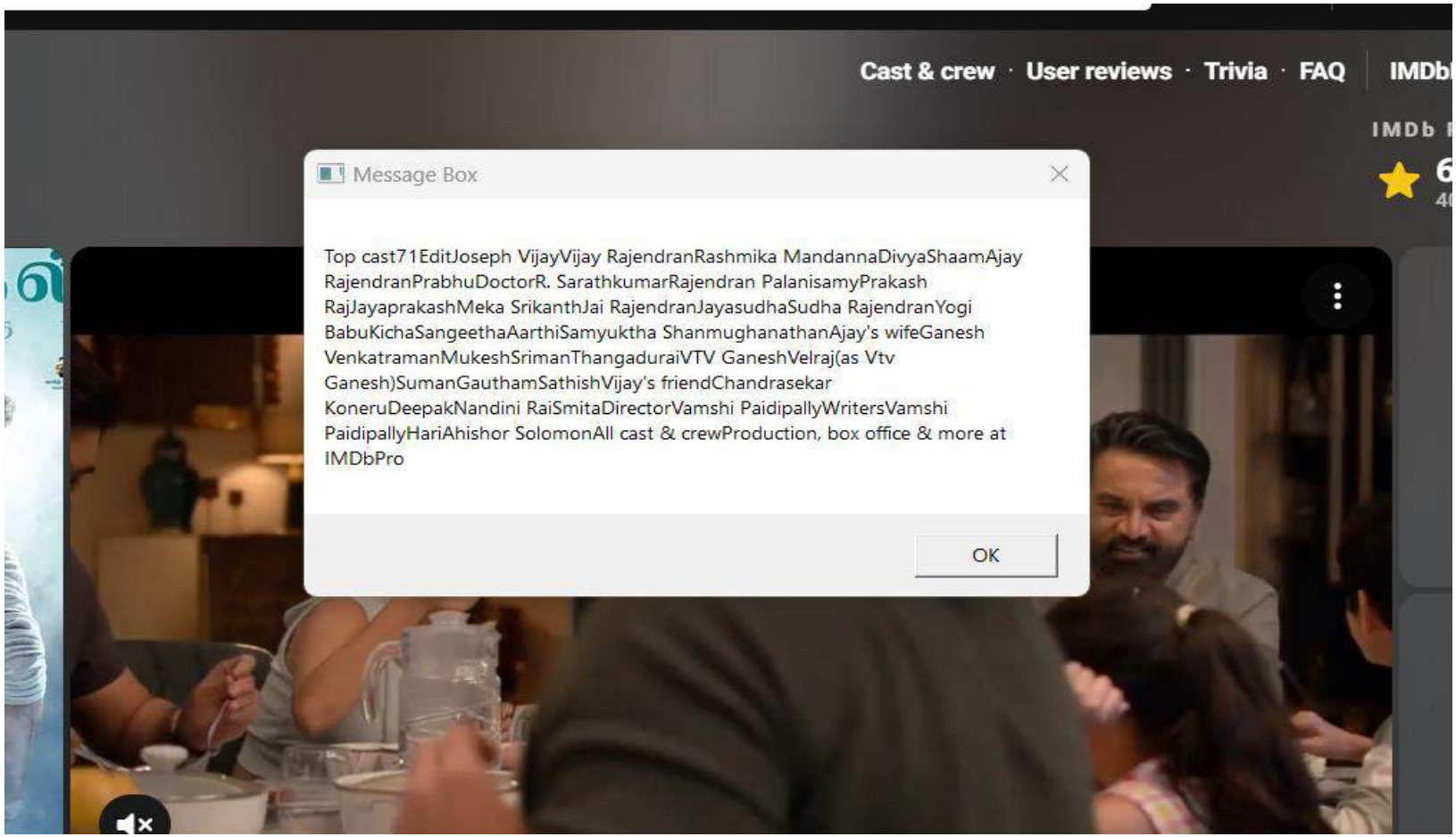
MODULE 1:

The system allows users to select a movie by name or ID, retrieving corresponding movie details from an external source

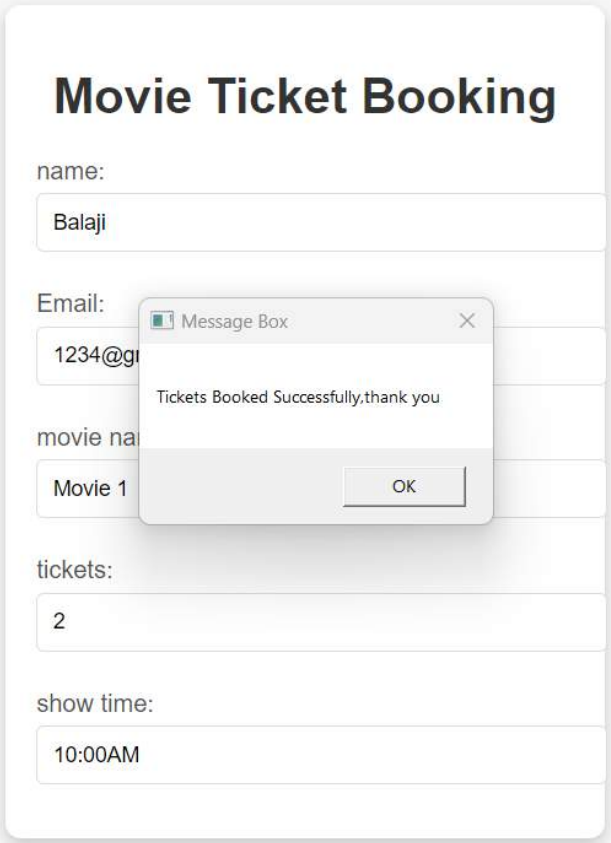


MODULE 2:

The system fetches detailed movie content by iterating through the movie's API or data source, gathering information such as ratings, actors, short description, cost, and release date

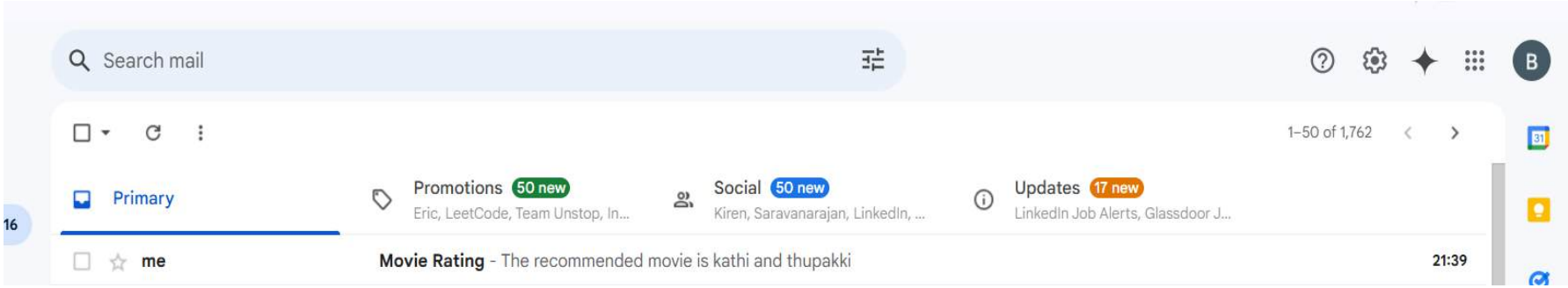


The movie tickets booking process is being automated.



Testing

The bot will send the recommended movies via email to the registered mail account



Conclusions

The Entertainment Rating and Recommendation Bot offers a seamless and automated movie discovery experience by fetching detailed movie information, providing personalized recommendations, and assisting with ticket bookings. It enhances user convenience by continuously updating movie data and offering real-time recommendations, ensuring an efficient and engaging movie selection process.

Future Enhancement

- **Multi-platform Integration**: Extend support for streaming services like Netflix, Disney+, and Hulu for broader movie recommendations.
- **Social Sharing**: Enable users to share movie recommendations and reviews on social media platforms.

IEEE Paper

- "Content-Based Movie Recommendation System Using Machine Learning Algorithm" Authors: IEEE Xplore - Link

- "Research and Implementation of Movie Recommendation System Based on Deep Learning" Authors: IEEE Xplore – Link

- "A Hybrid Movie Recommendation System Based on User Preferences and Collaborative Filtering" Authors: IEEE Xplore - Link

References

- "Content-Based Movie Recommendation System Using Machine Learning Algorithm“
  Read more on IEEE

"A Hybrid Movie Recommendation System Based on User Preferences and Collaborative Filtering"
Read more on IEEEI

Queries

Demonstration

Thank You