

USER INSTRUCTIONS: Movie Trends Dashboard

Welcome to the **Movie Trends Dashboard**, a Python-based web application built with Streamlit that lets users explore movie data, predict success, manage their watchlist, and personalize cinematic experience! This guide will highlight how to use the dashboard, step-by-step, with screenshots to illustrate each feature. No matter what background you are, this tool has something for you.

A. SYSTEM REQUIREMENTS

To operate the Movie Trends Dashboard, the following prerequisites must be met:

- **Operating System:** Compatible with Windows, macOS, or Linux.
- **Python Version:** Python 3.8 or higher.
- **Dependencies:** Required Python libraries include streamlit, pandas, plotly, pickle, requests, and numpy. Install these via the command:
pip install streamlit pandas plotly requests numpy
- **Project Files:** Source code (Welcome.py, GrossEarnings.py, GlobalTrend.py, MovieChecklist.py, SucessPredictor.py, auth.py, predictor.py) and datasets (imdb_top_1000.csv, netflix_titles.csv) must be present in the working directory.

B. LAUNCHING THE APPLICATION

To initiate the Movie Trends Dashboard:

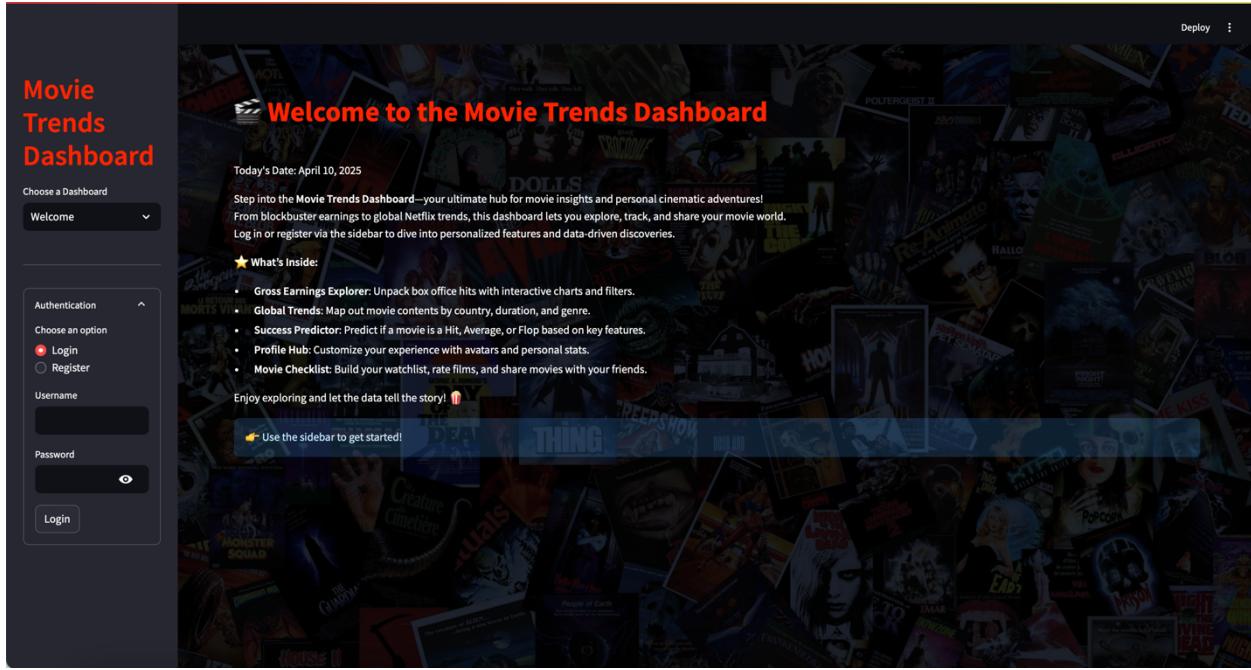
1. Open a terminal or command prompt.
2. Navigate to the directory containing Welcome.py (e.g., Implementation/).
3. Execute the following command: *streamlit run Welcome.py*
4. Access the application by opening a web browser and navigating to <http://localhost:8501>.
5. Upon launching the application, the user is directed to the Welcome page by default.

C. OPERATIONAL PROCEDURES

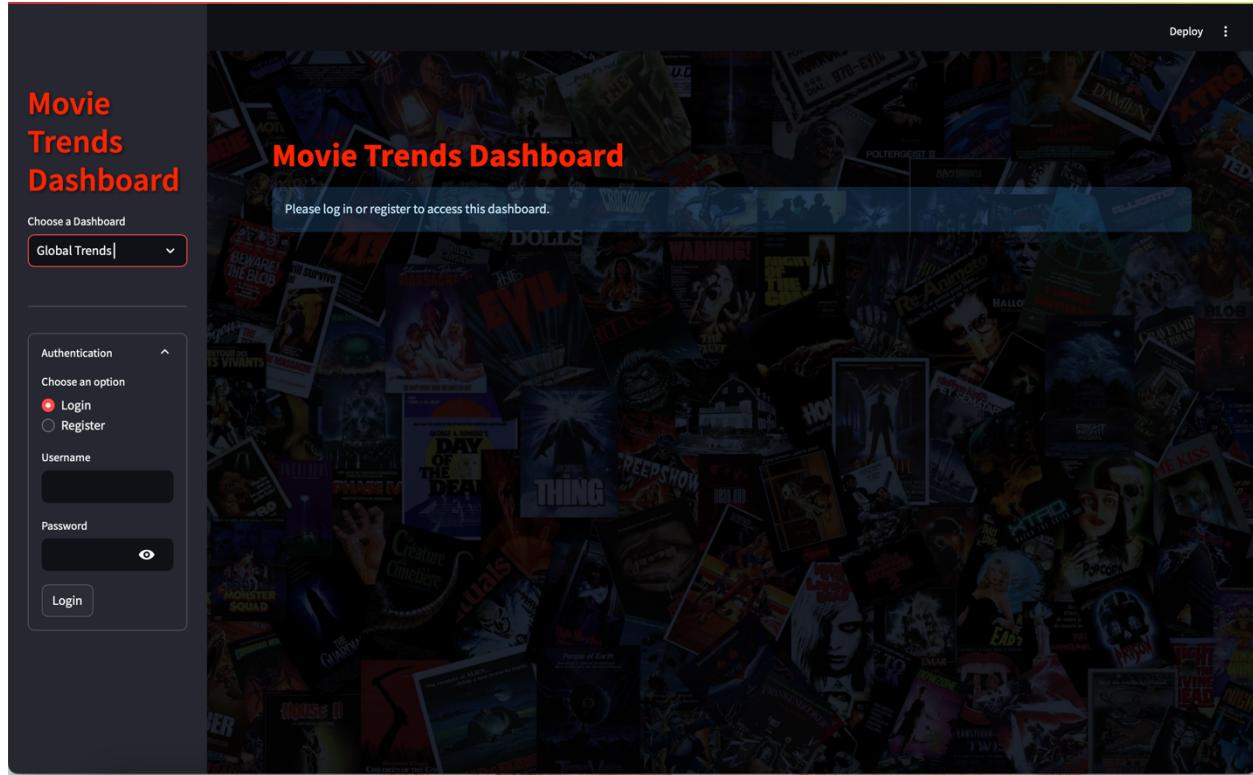
1. WELCOME PAGE

The Welcome page provides an overview of the dashboard's capabilities.

The interface displays a title, the current date (e.g., "April 10, 2025"), and a detailed summary of available features, including Gross Earnings Explorer, Global Trends, Success Predictor, Profile Hub, and Movie Checklist. Users are prompted to authenticate via the sidebar.



If users do not log in or register, access is limited to the Welcome and Gross Earnings dashboards only. To unlock the full range of functionalities, users must complete the authentication process.



2. USER AUTHENTICATION

Authentication enables access to personalized and restricted features.

Procedure:

- Registration (for new users):
 - Select "Register" from the radio options.
 - Input a unique username, password, full name, and email address.
 - Click the "Register" button to create an account. A success message will confirm registration.

- Login (for existing users):
 - Select "Login" from the radio options.
 - Enter the registered username and password.
 - Click the "Login" button. Upon successful authentication, the sidebar updates to display the user's username and expanded dashboard options.

The image displays two wireframe prototypes of a mobile application's authentication interface. Both screens have a dark background with light-colored text and input fields.

Left Screen (Register Mode):

- Section:** Authentication
- Text:** Choose an option
- Buttons:** Login (unselected), Register (selected)
- Text:** New Username
- Text:** New Password
- Text:** Confirm Password
- Text:** Full Name
- Text:** Email
- Text:** Register

Right Screen (Login Mode):

- Section:** Authentication
- Text:** Choose an option
- Buttons:** Login (selected), Register (unselected)
- Text:** Username
- Text:** Password
- Text:** Login

For testing purposes, users may utilize the following pre-existing account credentials:

Username: admin

Password: admin123

3. GROSS EARNINGS EXPLORER

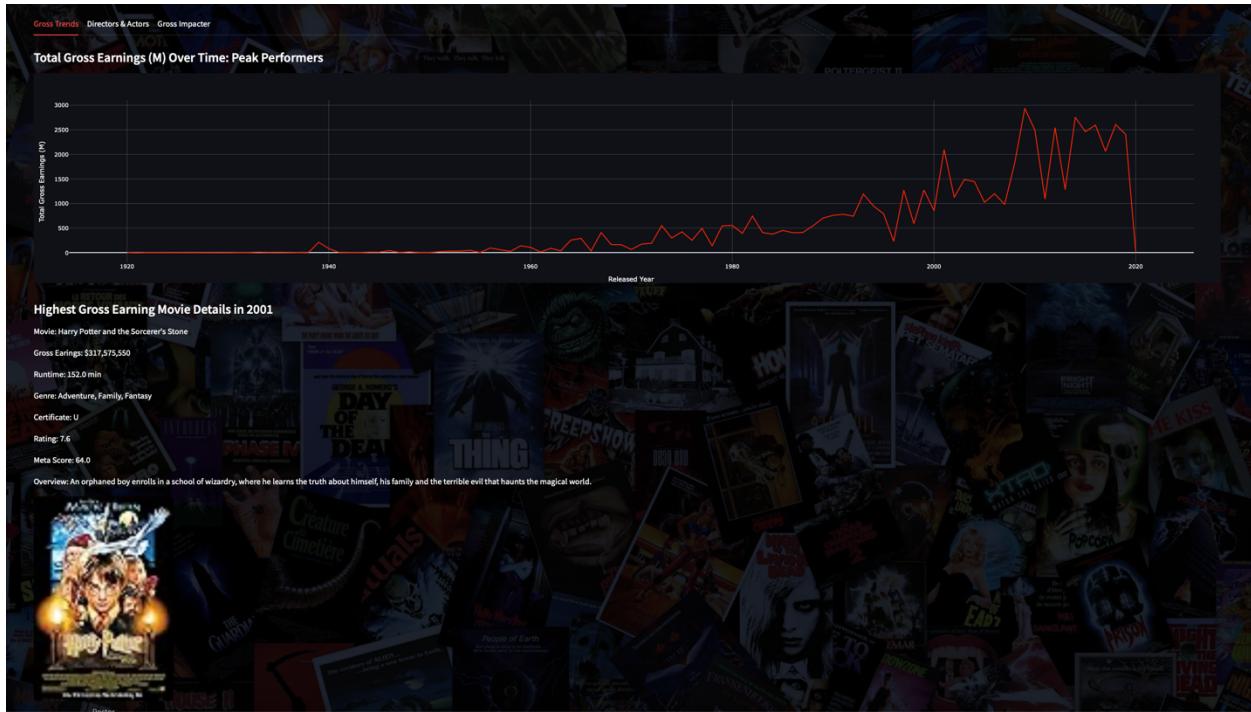
This module analyzes box office performance data from IMDb's top 1000 movies. Users can access this by selecting "Gross Earnings" from the sidebar dropdown menu.

Begin with the Dataset Snapshot, it displays four essential metrics in a four-column layout, calculated based on the user's applied filters (e.g., IMDb Rating, Meta Score, Released Year, and Genres).

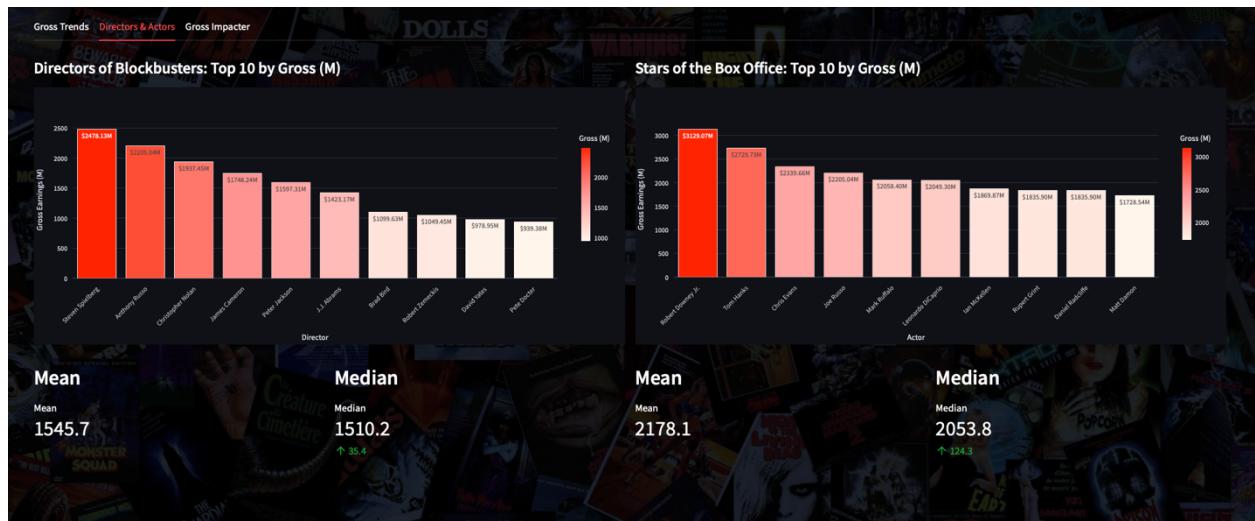
Functionalities:

- Sidebar Filters:
 - Adjust sliders for IMDb Rating (e.g., 7.0–9.0), Meta Score (e.g., 50–100), and Released Year (e.g., 2000–2020).
 - Select multiple genres (e.g., Action, Drama) via a multiselect widget.
- Tabs:

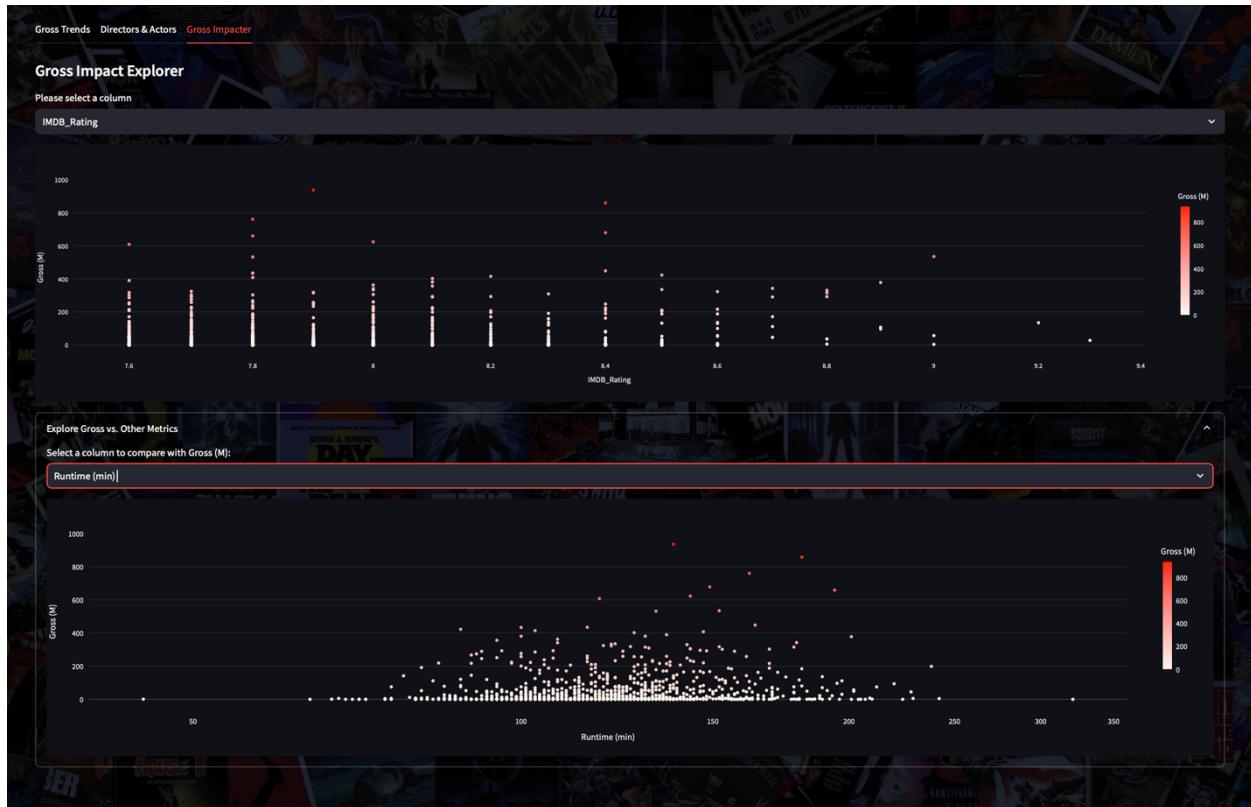
- **Gross Trends:** Displays a line chart of total gross earnings over time. Clicking a peak reveals details of the highest-grossing movie for that year (e.g., title, gross, poster).



- **Directors & Actors:** Presents bar charts of the top 10 directors and actors by gross earnings, with hover-over statistics, plus mean and median earnings below each chart.



- **Gross Impactor:** Offers scatter plots to explore correlations between gross earnings and variables such as runtime or IMDb rating.

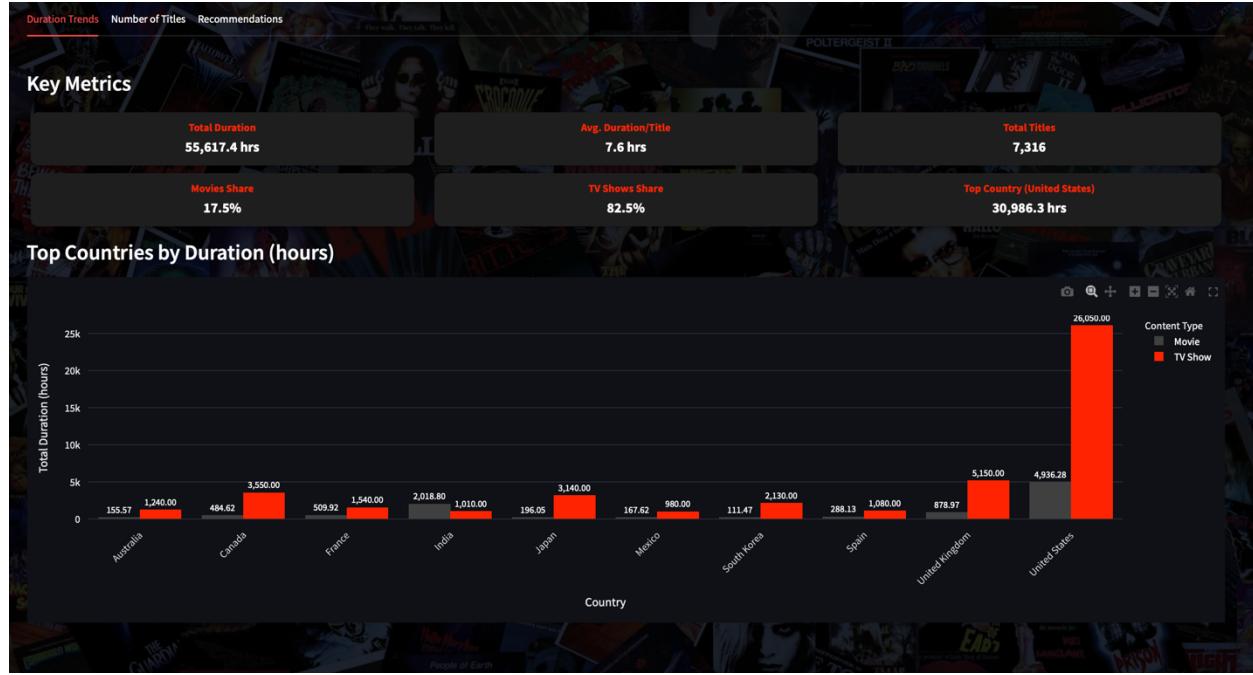


4. GLOBAL TRENDS

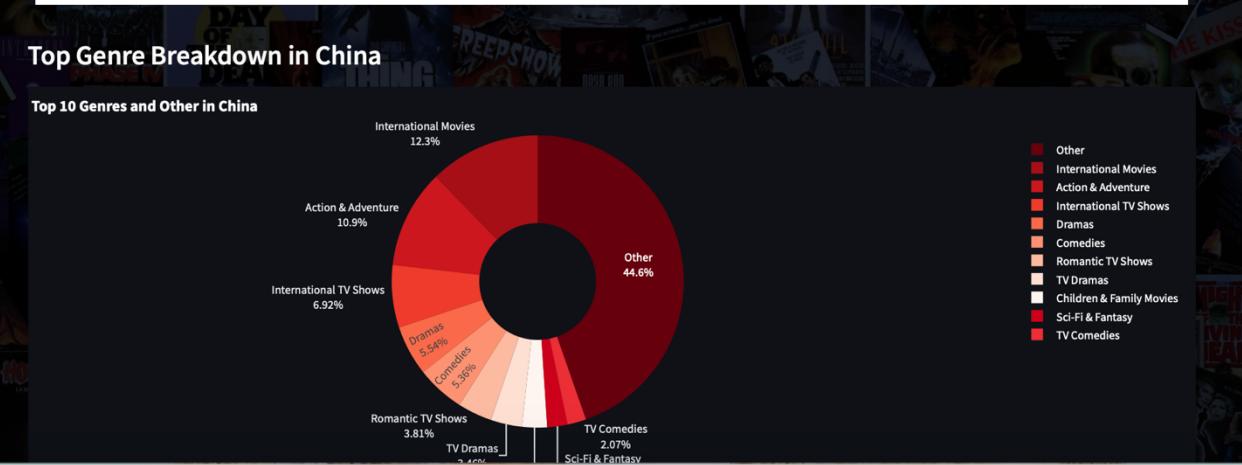
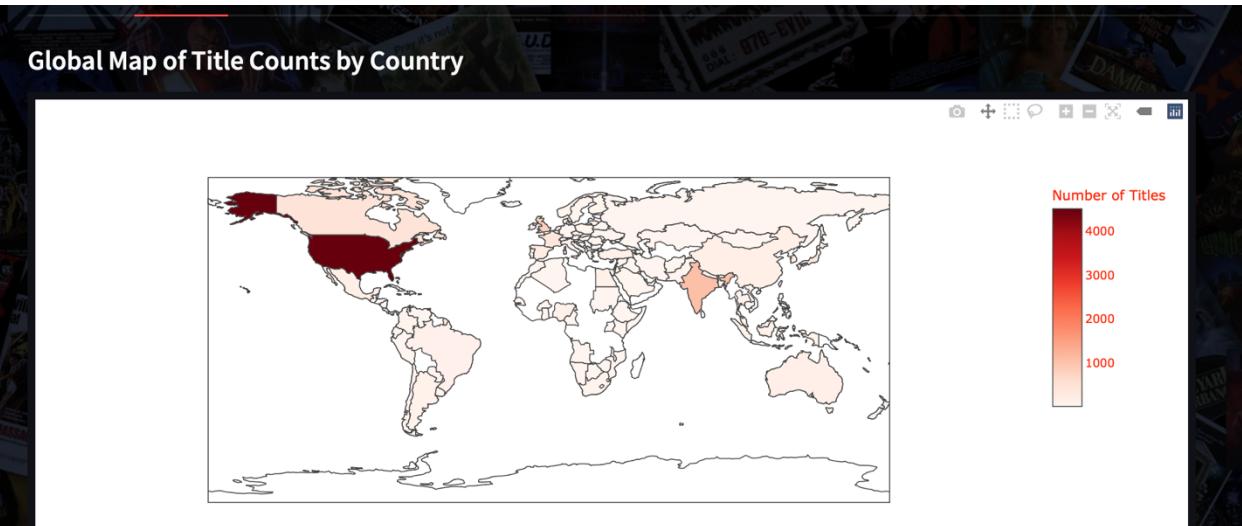
This module examines Netflix content trends across countries and genres. Users can access this by selecting “Global Trends” from the sidebar dropdown menu (requires authentication).

Functionalities:

- Sidebar Filters:
- Specify a date range, content type (Movie/TV Show), rating category (e.g., Kids, Adult), and countries.
- Tabs:
- **Duration Trends:** Features a bar chart of total duration (hours) for the top 10 countries, accompanied by key metrics (e.g., total duration, average per title).



- **Number of Titles:** Displays a choropleth map of title counts by country. Clicking a country generates a genre breakdown donut chart.



- **Recommendations:** Provides five random title recommendations based on a selected genre, exportable as a CSV file.

The screenshot shows a user interface for movie recommendations. At the top, there are three tabs: "Duration Trends", "Number of Titles", and "Recommendations". The "Recommendations" tab is selected, indicated by a red underline. Below the tabs, the title "Personalized Recommendations" is displayed. A dropdown menu titled "Select a genre you prefer:" shows "Action & Adventure" as the selected option. A table titled "Recommended titles for Action & Adventure in all countries:" lists five movies with their details:

Title	Type	Genre	Rating	Release Year
Acts of Violence	Movie	Action & Adventure	R	2018
Charlie's Angels	Movie	Action & Adventure, Comedies	PG-13	2000
Krishna Cottage	Movie	Action & Adventure, Horror Movies, International Movies	TV-14	2004
Sniper: Legacy	Movie	Action & Adventure	R	2014
The Art of the Steal	Movie	Action & Adventure, Comedies, Independent Movies	R	2013

At the bottom left of the table area, there is a button labeled "Download Recommendations as CSV".

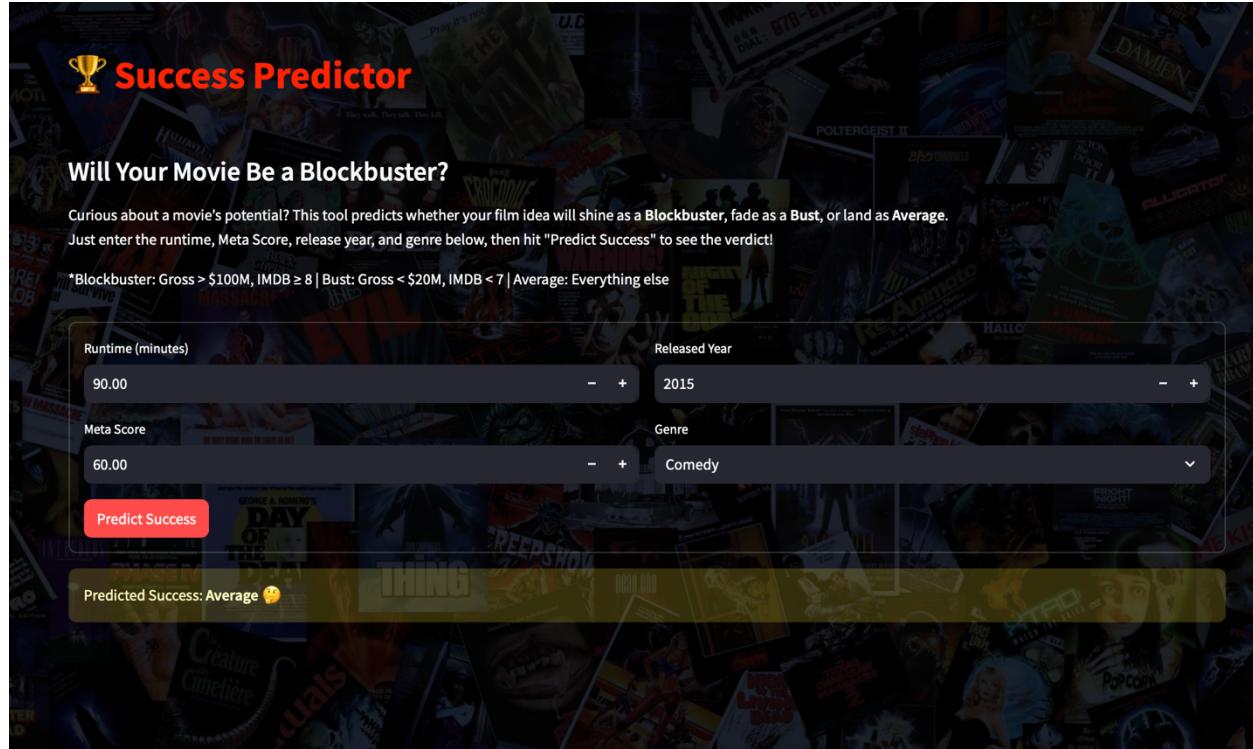
5. SUCCESS PREDICTOR

Predicts a movie's success category (Blockbuster, Bust, or Average) based on input features, utilizing a pre-trained machine learning model. Users can access this by selecting "Success Predictor" from the sidebar dropdown menu (requires authentication).

Procedure:

- Review the introductory text outlining the prediction process.
- Input the following parameters:
 - Runtime (e.g., 120 minutes).
 - Meta Score (e.g., 75).
 - Released Year (e.g., 2020).
 - Genre (e.g., Action).
- Click "Predict Success" to generate a prediction.

A result is displayed in a colored box: green for "Blockbuster" red for "Bust" or yellow for "Average" alongside the input parameters. A Blockbuster represents movies with gross earnings exceeding \$100 million and IMDb ratings of 8 or higher; a Bust represents movies with gross earnings below \$20 million and IMDb ratings below 7; an Average encompasses all other movies not meeting the Blockbuster or Bust criteria.



6. PROFILE MANAGEMENT

Allows users to manage their profile and maintain a movielist (search for movies, build a watchlist, rate films, and share recommendations.). Users can access this by selecting “Profile” from the sidebar dropdown menu (requires authentication).

Tabs:

- My Profile Tab:
- Displays user details (username, full name, DOB, email, avatar).
- Edit by clicking "Update My Profile" :
 - Updating *Full Name, Date of Birth, or Email.*
 - Uploading a new *Avatar* (PNG/JPG).
 - Optionally changing *Password.*
 - Clicking *Save Changes* to confirm or *Close* to cancel.

Profile Details



Your Avatar

Username: admin
Full Name: User 1
Date of Birth: 2000-05-15
Email: admin15@example.com

[Update My Profile](#)

Update Profile

Full Name

Date of Birth

Email

New Password

Confirm New Password

Upload Avatar (PNG/JPG)
 Drag and drop file here
Limit 200MB per file • PNG, JPG, JPEG [Browse files](#)

[Save Changes](#) [Close](#)

- My Movielist Tab:
- **Discover Movies:** Search for movies or browse popular titles, adding them to the watchlist.

My Movielist

Discover Movies To Watchlist History

Search Movies

Enter movie title

Popular Movies

MINECRAFT MOVIE

IN THE LOST LANDS

DEVA

Discover Movies To Watchlist History

Search Movies

Enter movie title

avatar

Previous Next

Did you mean:

Avatar: Creating the World of Pandora The King's Avatar: For the Glory Avataro Sentai Donbrothers vs. Zenkaiger

Avatar (2009)

Release Date: 2009-12-15

Rating: 7.588/10

Overview: In the 22nd century, a paraplegic Marine is dispatched to the moon Pandora on a unique mission, but becomes torn between following orders and protecting an alien civilization.

Add to Checklist

Avatar (2006)

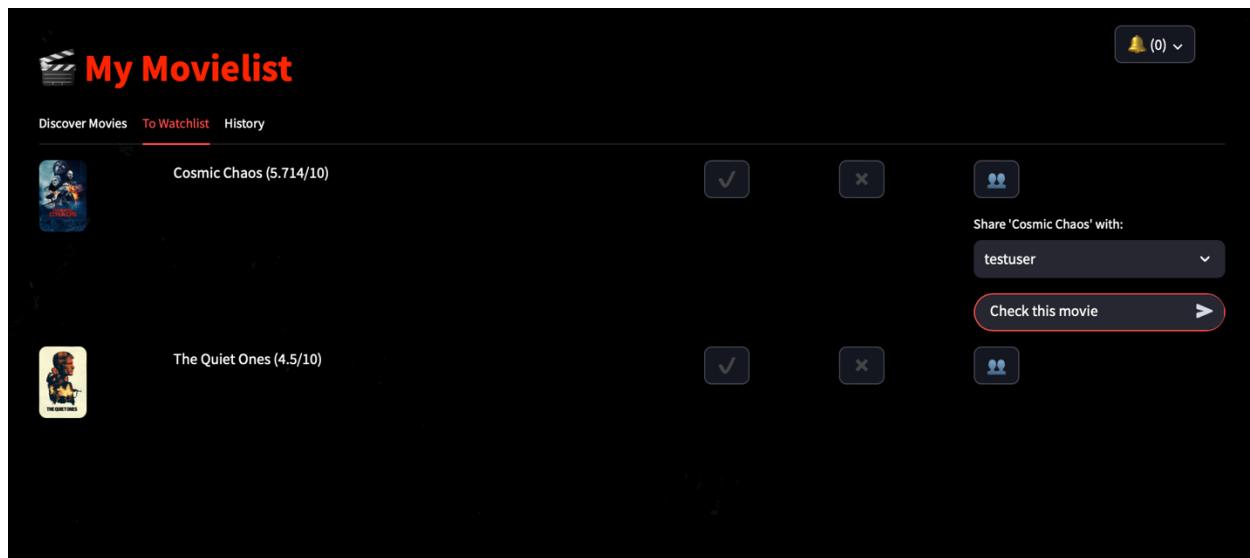
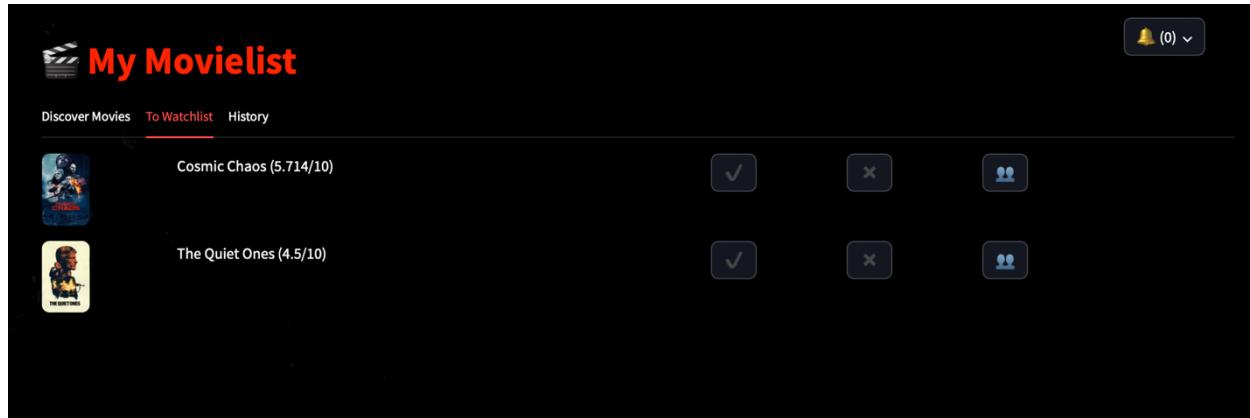
Release Date: 2006-04-11

Rating: 5.941/10

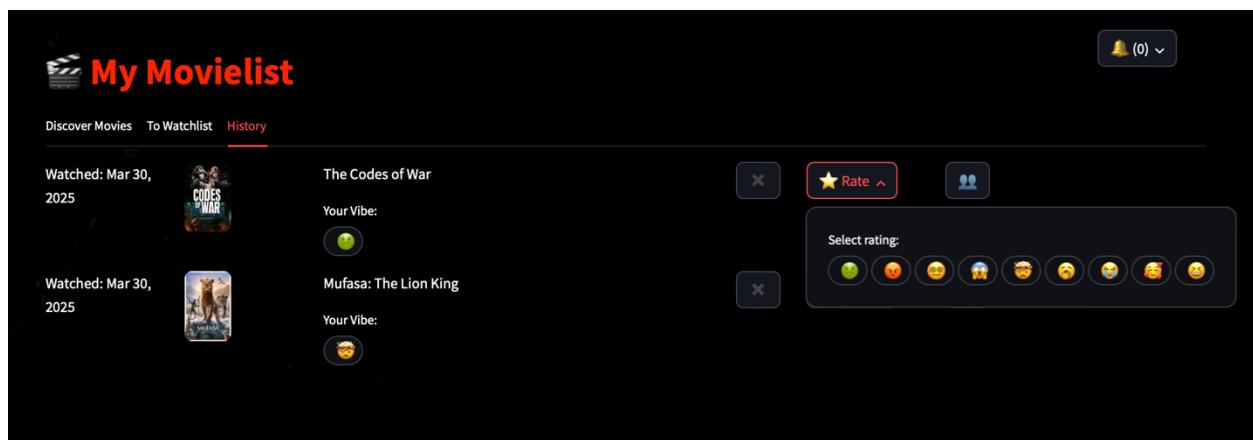
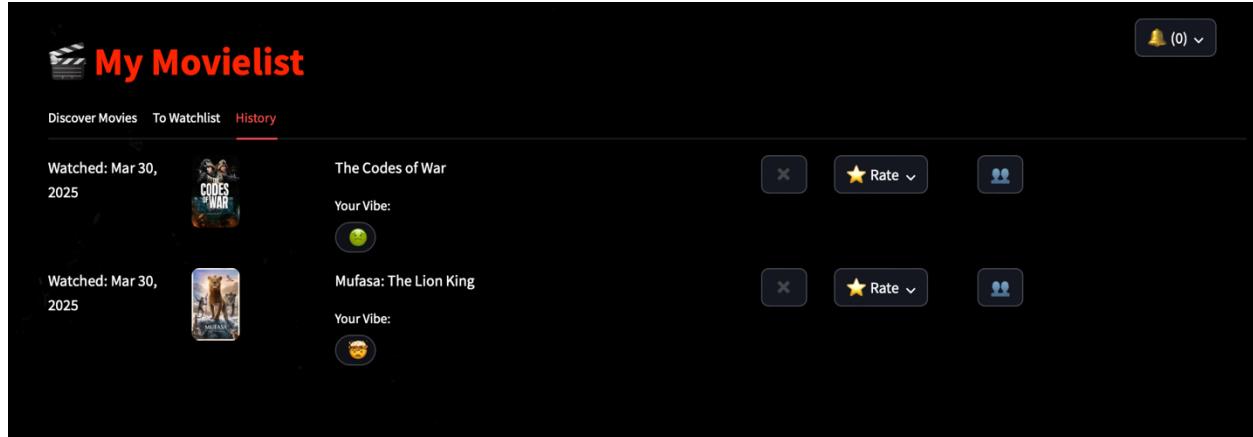
Overview: Tension mounts between a quadriplegic man and his wife as she prepares a bath for him.

Add to Checklist

- **To Watchlist:** Manage movies added to the watchlist with the following capabilities:
 - View movies users added but haven't watched, displayed with details such as title, rating (e.g., 8.5/10), and a poster image if available.
 - Click ✓ to mark a movie as watched, which updates its status and moves it to the "History" tab with the current date.
 - Click ✘ to remove a movie from the watchlist, deleting it from your list entirely.
 - Click 🚪 to share a movie with another user. Here, Users can select a friend's username from a dropdown list of registered users and type a custom message in a text input field and send it, notifying the selected friend via their notifications panel



- **History:** Rate watched movies (1–9 with emojis) or remove them from the list.



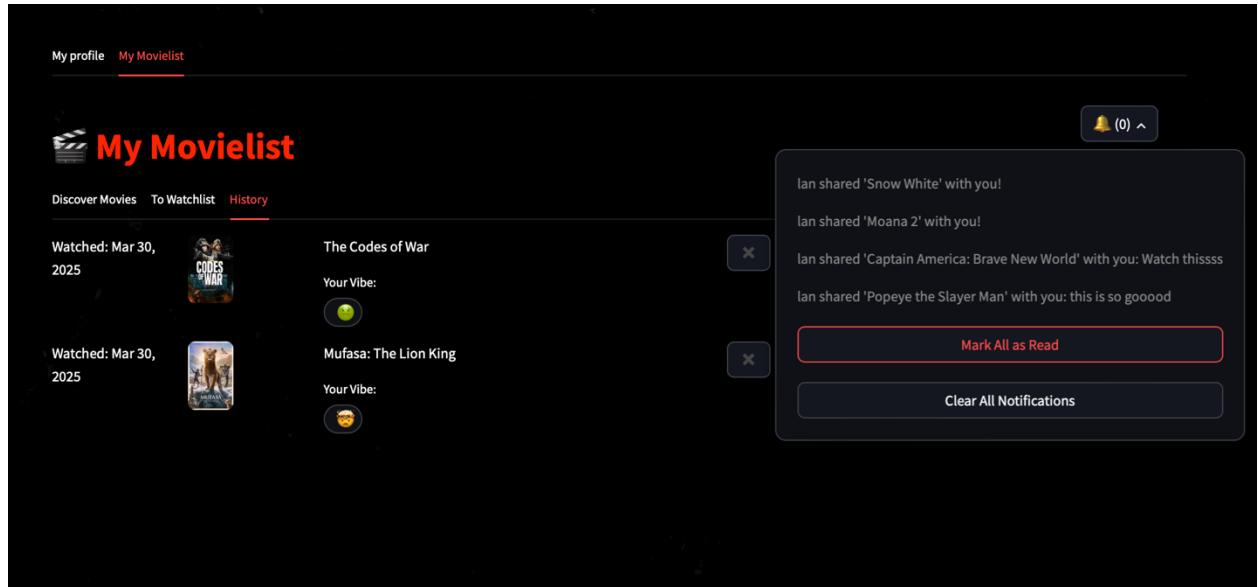
7. NOTIFICATION MANAGEMENT

The Notification feature enables users to receive, view, and manage messages related to movie sharing. Notifications are accessed via a bell icon (🔔) located at the top-right of the interface, displaying the count of unread messages.

Functionalities:

- **View Notifications:** Clicking the bell icon opens a popover displaying a list of messages (e.g., "User1 shared 'Inception' with you: Check this out!"), with unread messages in bold red text and read messages in gray.
- **Mark as Read:** Click "Mark All as Read" within the popover to update all unread notifications to read status, changing their appearance to gray.

- **Clear Notifications:** Click "Clear All Notifications" to remove all messages from the list, resetting the notification count to zero.



D. CONCLUSION

The Movie Trends Dashboard offers a robust platform for movie data analysis and personal movie management. By following this guide, users can effectively navigate its features, from exploring gross earnings to predicting movie success and maintaining a watchlist. For further assistance, consult the project documentation or contact the development team.