Film Catalog

A Film Database in Django

A Final Project for the Python Development Program

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General Project Presentation

What is Film Catalog?

A complete and dynamic web application, designed to manage and display a collection of films. It offers a user interface to browse and search for films, supported by a secure and powerful backend for content management.

Main Objective

Create a user-friendly interface for browsing and searching films, supported by a secure and powerful backend for content management. Ensure a smooth and modern experience for users.

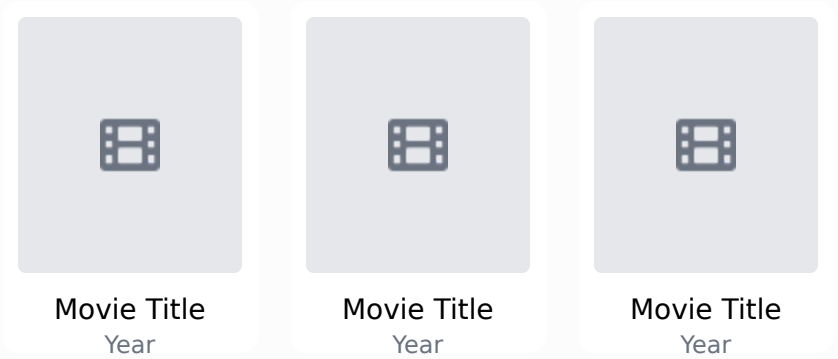
Technology

Built from scratch using the Django framework with Python. Django allows creating a robust and secure web application, with a relational database managed by the ORM (Object-Relationship Mapping).

Key Feature - Navigation and Filtering

Dynamic Movie Display

The main page automatically populates with all movies from the database, displayed in a clean and intuitive layout.



Genre Filtering System

Users can instantly sort the catalog by clicking on genre buttons, such as "Drama", "Action" or "Sci-Fi".

Drama Action Sci-Fi Comedy Thriller

This feature offers a smooth and fast discovery experience, without page reloading.

Key Feature - Powerful Search

Instant Search

- A prominent search bar at the top of the page allows users to search for specific titles across the entire database.
- The search function sends a query to the Django backend which filters the database.
- Only matching results are returned, making the search fast and efficient.

How It Works

1. User Input
Entering the movie title in the search bar

2. Backend Request
Sending a request to the Django backend

3. Results
Filtering the database and returning matching results

Admin Panel - Secure Content Management

Secure Authentication

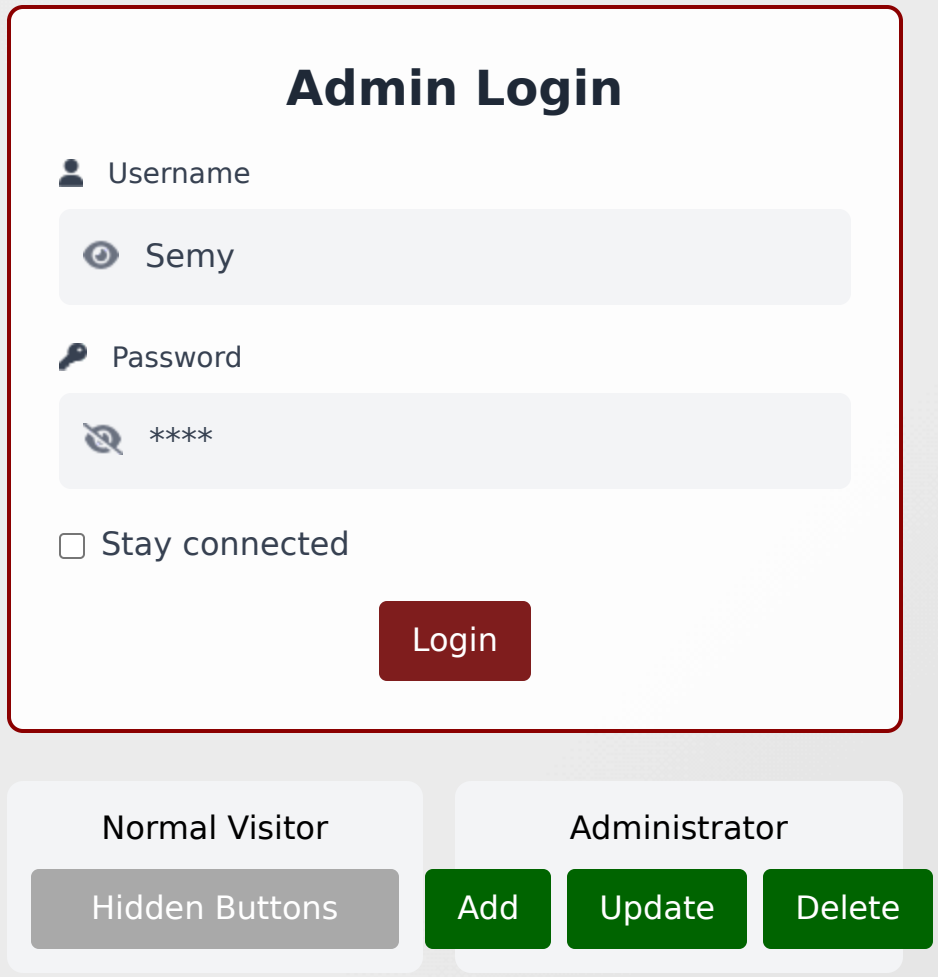
Robust login and logout system for administrators. Content management controls are completely hidden from ordinary visitors.

Role-Based Access

The buttons for "Add a Movie", "Update a Movie" and "Delete a Movie" only become visible after successful authentication as an administrator.

Database Integrity

This approach ensures the integrity and security of the movie database, preventing unauthorized modifications by unidentified users.



Admin Features - Complete CRUD Operations

Control your movie database with the four fundamental operations

Create

Administrators can add new movies to the database via a simple and dedicated form. This feature allows the film collection to be expanded intuitively.

Read

All movies are displayed on the main page, which allows for a quick and easy visualization of the complete collection. Users can browse all movies without restriction.

Update

Details of existing movies can be easily modified using the "Update" function on each movie card. This helps maintain the database with accurate information.

Delete

Movies can be permanently deleted from the database using the "Delete" function. This feature helps maintain a clean and up-to-date database.

Pages Support

Pages that complete the professional aspect of the application

"About Me" Page

This section is dedicated to information about the developer, Emanuel Panait, and the project context.

- Presentation of the developer's skills and experience
- Description of the project context and objective
- Addition of personal elements to humanize the application

Contact Page

Offers a method for users or visitors to make contact, completing the professional aspect of the application.

- Contact form for communications
- Additional contact information (email, social media)
- Automatic thank you message after submission

These pages add a professional and personal touch to the application, complementing the overall user experience.

User Experience - Smooth Transitions

User-Centered Approach

The Film Catalog application was designed with special attention to user experience. We emphasized the fluidity and professionalism of navigation.

Modern Look

The modern and professional design enhances the overall appeal of the application and strengthens users' perception of quality.

Seamless Navigation

Smooth transitions between page loads and filtering actions avoid abrupt screen refreshes.

Smooth and professional experience

Technologies Used

Backend

Python with the Django framework. Django allows creating a robust and secure web application, with a relational database managed by the ORM (Object-Relationship Mapping).

Frontend

HTML, CSS (with Tailwind CSS) and JavaScript for interactivity and transitions. These technologies create a modern and responsive user interface.

Database

Relational database like PostgreSQL or SQLite, managed by Django's ORM. This allows for simple database abstraction and easy migration between different systems.

Architecture

Model-View-Template (MVT) design pattern, which is standard for Django applications. This model separates logic, presentation, and data, facilitating development and maintenance.

Conclusions

Film Catalog Project - Summary

The Film Catalog project has successfully demonstrated a complete web application, with key features for both users and administrators.

Dynamic Filtering

Successful implementation of dynamic filtering and search, providing a smooth and intuitive user experience.

Application Security

Ensuring the security of the application through a robust authentication system and secure content management.

Thank you for your attention

Any questions?