Movie Statistics Dashboard

This project is a Movie Statistics Dashboard that displays top grossing, top rated, and top voted movies. The stack includes a Django backend and a React frontend.

Technologies and Stack

Data Preprocessing

- **Pandas**: Data processing library in python .

Frontend

- **React**: JavaScript library for building user interfaces
- **CSS**: Styling
- **Axios**: Promise-based HTTP client for making requests to the backend

Backend

- **Django**: High-level Python web framework
- **Django REST Framework**: Toolkit for building Web APIs
- **SQLite**: Lightweight database for development

DevOps

- **Docker**: Containerization platform
- **Docker Compose**: Tool for defining and running multi-container Docker applications

Prerequisites

Before you begin, ensure you have the following installed on your machine:

- Docker
- Docker Compose

Installation

Follow these steps to set up and run the application:

1. Clone the Repository

Clone the repository to your local machine using the following command:

```
git clone https://github.com/Akshaymitra/movie_dashboard.git
cd movie_dashboard
```

2. Build and run the stack using the following command :

```
docker compose up --build
```

This command will:

- Pull the necessary images
- Build the Docker images if there are any changes
- Start the backend and frontend containers

3. Access the Application

Once the containers are up and running, you can access the application in your browser:

- Frontend: http://localhost
- Backend: http://localhost:8001

4. API Endpoints

The backend provides the following API endpoints:

- `/api/top-gross-movies/`
- `/api/top-rated-movies/`
- `/api/top-voted-movies/`
- `/api/available-years/`

5. Stopping the Application

```
docker compose down
```

6. Important Guidelines

- In windows check your firewall settings to see if the necessary ports are opened . (80,8001)
- This manual assumes that Docker and Docker Compose are installed in the respective machine .
- If using Ubuntu or any Debian distribution , consider using the bash commands using sudo to prevent permission denial for any command .

7. Sample Screenshots

React App

localhost   90%

Movie Statistics Dashboard

Top Grossing Movies
Select Year:
2014

Gross

16,00,00,000
16,00,00,000
14,00,00,000
12,00,00,000
10,00,00,000
8,00,00,000
6,00,00,000
4,00,00,000
2,00,00,000
0

Gone Girl   300: Rise of an Empire   Noah   Taken 3   Birdman or (The Unexpected Virtue of Ignorance)

Top Rated Movies
Select Year:
2012

Rating

McCullin   Kamasri   ma Culpa: Sleeve in the House of God   Arthur   The Hobbit: An Unexpected Journey   Moonrise Kingdom   Beneath, Oggun (Bûchen II : Doubeline Kernels)   The King 2 Hearts   Aluna   La imposible

Top Voted Movies of all time

Votes

18,00,000
17,00,000
16,00,000
15,00,000

React App

localhost   90%

Gone Girl   300: Rise of an Empire   Noah   Taken 3   Birdman or (The Unexpected Virtue of Ignorance)   ma Culpa: Sle...   The Hobbit...   Beneath, Oggun (Bûchen...

Top Voted Movies of all time

Votes

18,00,000
17,00,000
16,00,000
15,00,000
14,00,000
13,00,000
12,00,000
11,00,000
10,00,000

The Lord of the Rings: The Fellowship of the Ring   The Lord of the Rings: The Return of the King   The Lord of the Rings: The Two Towers   The Departed   Kill Bill: Vol. 1

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