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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 -d
```

This command will:

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

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



