

Movie Management System Assignment

Overview

Welcome to the Movie Management System assignment! This assignment will help you build a console-based application using TypeScript and Prisma to manage movies and genres. You will implement various functionalities such as adding, updating, deleting movies, and querying movies based on different criteria.

Setup Instructions

Follow these steps to set up the development environment:

Install Dependencies:

Install the necessary dependencies using npm:

```
npm install
```

Configure Environment Variables:

Create a .env file in the root directory.

Provide your PostgreSQL connection string in the .env file:

```
DATABASE_URL="postgresql://username:password@localhost:5432/database\_name?schema=public"
```

Replace username, password, and database_name with your PostgreSQL credentials.

Create Database in pgAdmin:

Open pgAdmin and connect to your PostgreSQL server.

Right-click on "Databases" and choose "Create" > "Database..."

Enter a database_name and click "Save" to create the database.

Run Migrations:

Apply database migrations using Prisma:

```
npx prisma migrate dev --name init
```

Generate Prisma Client:

Generate the Prisma client to reflect your schema changes:

```
npx prisma generate
```

Start the Application:

Start the application using the following command:

```
npm run start
```

Usage

Functionality Overview

The Movie Management System provides the following functionalities:

Add Movie: Allows adding a new movie with title and year.

Update Movie: Allows updating an existing movie by providing its ID and new details.

Delete Movie: Allows deleting a movie by providing its ID.

List All Movies: Lists all movies along with their genres.

List Movie by ID: Lists details of a movie by providing its ID.

List Movies by Year: Lists movies released in a specific year.

List Movies by Genre: Lists movies belonging to a specific genre.

Add Genre: Allows adding a new genre to the system.

Add Genre to Movie: Allows adding one or more genres to an existing movie.

Additional Tools

You can use Prisma Studio to visualize and interact with your database. Start Prisma Studio using the following command:

```
npx prisma studio
```

Open your browser and navigate to <http://localhost:5555> to access Prisma Studio.