Backend Coding Challenge: NestJS Movie API

In this challenge, you are to create a Movie REST API using NestJS, a typescript framework for building efficient and scalable Node.js applications. You will be implementing CRUD operations for movies and related genres.

Requirements

- Use NestJS framework to create the API.
- UseTypescriptastheprogramminglanguage.
- A SQL database of your choice(PostgreSQL,MySQL,etc.)

Challenge

Create a simple REST API for a movie database. The API should allow users to perform the following operations:

- ListMovies:TheAPIshouldprovidearoutethatallowsuserstolistall movies in the database.

- AddMovie:TheAPIshouldprovidearoutethatallowsuserstoadda movie to the database. Each movie should have the following attributes:

  - Title(String,required)
  - Description(String,required)
  - Releasedate(Date,required)
  - Genre(ArrayofString,required)

- UpdateMovie: The API should provide a route that allows users to update the details of a specific movie.

- DeleteMovie: The API should provide a route that allows users to delete a specific movie from the database.

- ListGenres: The API should provide a route that allows users to list all genres in the database.

- AddGenre: The API should provide a route that allows users to add a genre to the database. Each genre should have the following attributes:

  ○ Name (String, required)

- DeleteGenre
The API should provide a route that allows users to delete a specific genre from the database. The genre should be also removed from all movies that have it.

- SearchMovies: The API should provide a route that allows users to search movies by title or genre.

Bonus Tasks

- Implement pagination for the movies list.
- Add middleware for request logging.
- Implement data validation and error handling.

Deliverables

- The source code of the application using GitHub public repo
- A README file that describes how to run the application,the implemented functionalities, and the API endpoints.
- Postman collection file (or any other API testing tool) for testing the API endpoints.(Adding swagger to the app would be ideal)

Please ensure your code is properly formatted and well-commented. Good luck!