WeOwn Backend Development Interview Task

Goal

Implement the application for managing a library of movies/tv shows available at some online streaming platform.

Description

The application should be a Web API project containing a collection of endpoints that provide an insight into the current state of the library together with some analytics and the ability to modify that state by adding, updating or deleting specified records.

The following endpoints should be implemented:

- Retrieval of all movies/tv shows together with their properties ordered by the release year in descending order (a big plus would be to implement pagination as well).
- Retrieval of all movies for a specified director ordered by rating in descending order (a big plus would be to implemented a fallback in case a specified director did not direct any movies where the endpoint would then return tv shows for that director if any).
- Adding a new movie/tv show with implemented validation: type, title, director, release_year, the rating cannot be empty, the rating, if provided, cannot exceed 10 nor can it be lower than 1, the description, if provided, cannot be longer than 250 characters (bonus would be to implement this validation on the database level as well).
- Update and delete functionalities bring a bonus as well. Feel free to define and implement how they should behave.

Instructions

Implement the application following the Clean Architecture approach where the domain, infrastructure and presentation would be separate independent layers. Try to utilize concepts such as DI and IoC, Repository pattern, DTOs and ValueObjects. Try not to expose implementation details among layers (implement a level of abstraction and write honest code).

The dataset that you will be working on will be provided as a separate file. Feel free to use any underlying database (relational, non-relational, in memory). During the start of the application, the data seeder should be triggered if the database is empty which should import the data from the provided dataset. Feel free to document the code but try to write it in a way that is readable and understandable without the additional documentation.