

Software Design A3 documentation

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1 Introduction

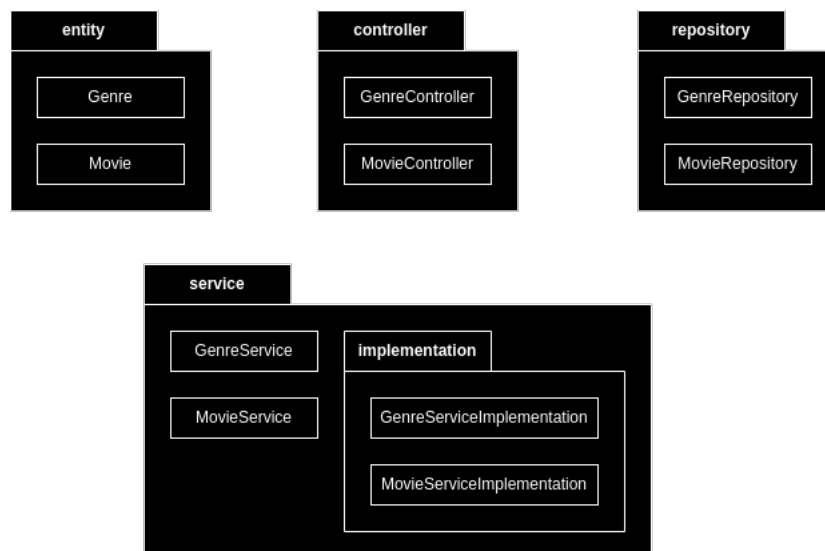
In this assignment I implemented CRUD operations for a REST web app. The app consists of a movie database where each movie is assigned a genre.

2 Technology

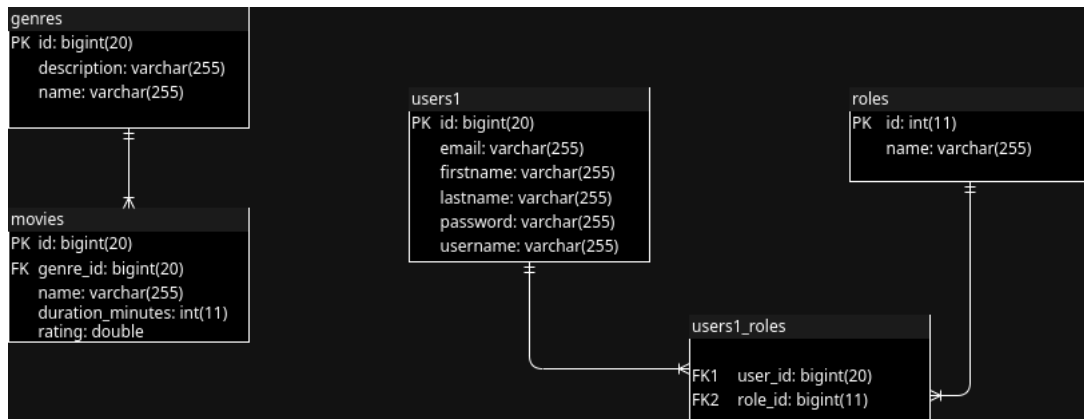
The web app was written in **Java** using **Spring** web framework. For the database, I used **MySQL** CLI client, and **Postman** for checking the requests.

3 Implementation

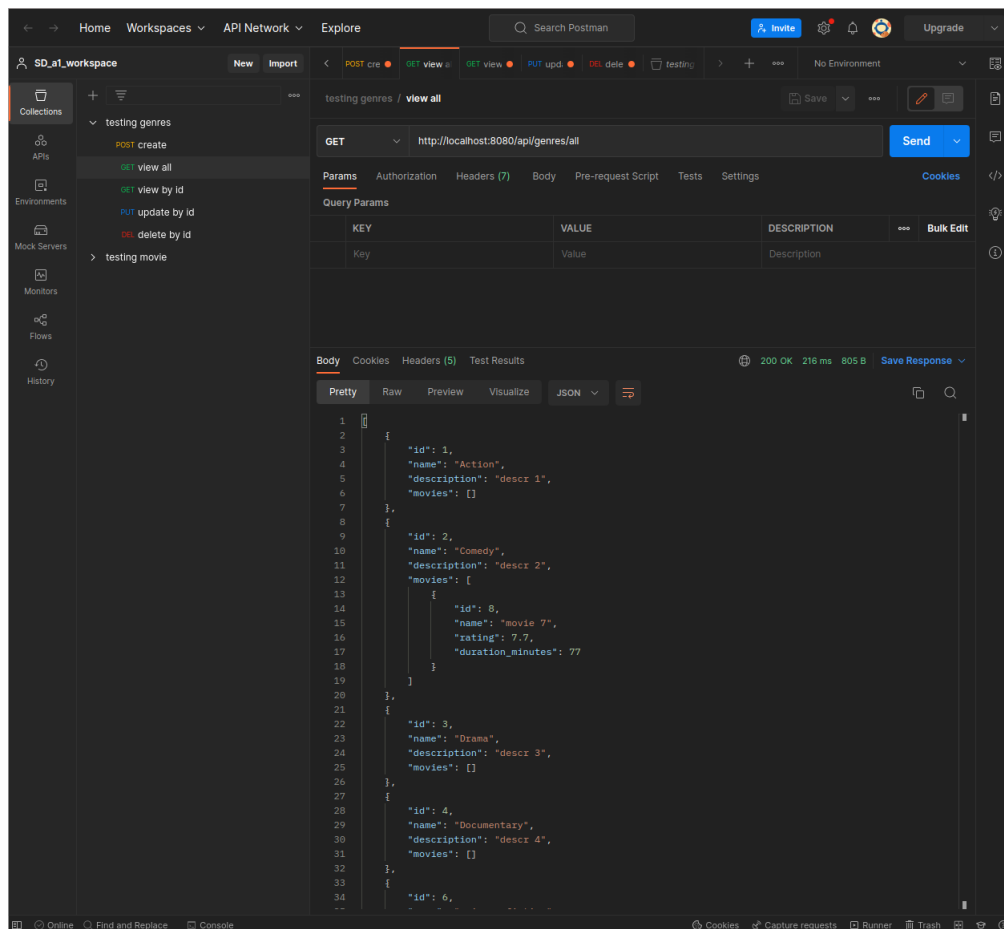
The **entity** classes contain their respective fields (ex. id, name, rating, ...), constructors and getters and setters. The **Controller** maps the CRUD(Create, Read, Update, Delete) operations to a unique URL, so that the operation can be performed with a request. The **Service** specifies each CRUD method implemented by the JpaRepository, using the **Repository** interface.

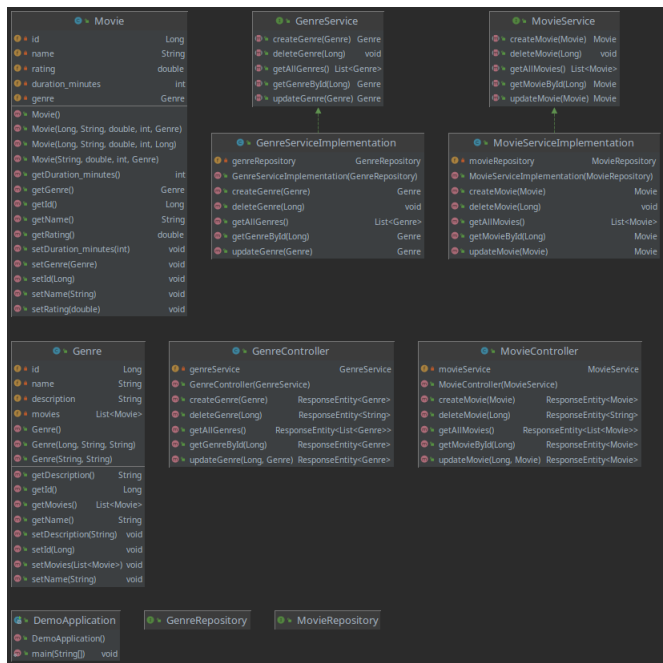


The database contains two tables: **movies** and **genres**. Each movie is assigned a single genre, while one genre can be assigned by multiple movies. Therefore, a **One-To-Many** relation is established between genres and movies, with the **genre_id** field from the movies table as the foreign key.



The requests were sent in the **JSON** format and sent using the **Postman** program.





use case diagram:

