

Create a Movie Entity

Objective:

Familiarize yourself with creating an entity and mapping to a database table.

1. Create a new Spring Boot project with Spring Web, Spring Data JPA and MySQL database dependencies. Use [Spring Initializr](#)
2. Inside of phpMyAdmin, create a database called movie_studio. The database movie_studio should contain a table called movies. The movies table has to have these columns:
 - id (BIGINT, PRIMARY KEY, AUTO_INCREMENT)
 - title (VARCHAR(100), NOT NULL)
 - director (VARCHAR(50), NOT NULL)
3. Define an entity Movie in the Spring Boot app, with the following fields (class should be created in model package):
 - Look at the database table movies and convert the columns to class fields in Java, by yourself
 - Use [this link](#) for reference
 - Don't forget constructor, getters and setters
 - You should also add a parameterless constructor
4. Annotate the Movie class with @Entity, as well as @Table(name = "movies"), and configure the primary key using @Id and @GeneratedValue(strategy = GenerationType.IDENTITY)
5. Create a repository package. In it, create a MovieRepository interface. It should extend JpaRepository<Movie, Long>
6. Create a service package. In it, create a MovieService class. The class should have a field MovieRepository, it should be final. Use constructor injection to wire it with the class, don't forget @Autowired annotation
7. Inside MovieService class, create a public List<Movie> findAllMovies() method. It should call the findAll() method of MovieRepository, which is injected as a field
8. Run the application and verify that Spring Boot starts successfully
9. Manually add some rows to the table movies, in phpMyAdmin
10. In MovieController class, add a field MovieService, it should be final. Use constructor injection to wire it with the class, don't forget @Autowired annotation

11. Add a `getMovies` controller with GET endpoint in `MovieController` class:
 - The method is similar to what you have created yesterday
 - Don't forget to use `ResponseEntity<List<Movie>>` as return type
 - The controller should call the `findAllMovies()` method of `MovieService` class object, that is, field
12. If successful, you should get a list of movies from the database, when calling the endpoint from a client