



This is the ER diagram of a Journal application.

Entities:

1. Users
2. Event

3. Schedule: join table between Users and Event
4. Roles
5. User_Roles: join table between Users and Roles
6. Expertise
7. User_Expertise: join table between users and expertise
8. Performance Reports

There are 5 packages in the Spring boot application.

1. Entity
2. DTO
3. Repository
4. Service
5. Controller

- The DTO (Data Transfer Object) package contains classes that represent the data entities in a simplified form. The purpose of a DTO is to expose only the necessary information when requesting or transferring data, for example, through an API or in Postman.
- The UserExpertiseId class is an embeddable composite key entity used to represent the unique identifier for the UserExpertise entity.
- It consists of the userId and expertiseId fields, which together form the primary key for the relationship between users and their areas of expertise.
- This composite key is not represented as a separate table in the database schema, but rather as a part of the UserExpertise entity
- Similarly, there is also a UserRolesId class, serving the same purpose.

Apart from the inbuilt methods, this application contains the following methods:

1. Assign & remove expertise to & from user
2. Assign & remove role to & from user
3. Assign & remove event to & from user
4. Get all event assigned to a user
5. Get all users assigned to an event
6. Get the performance report of a particular user
7. Get roles of a particular user.