

Spring Boot - Data Rest

Spring Data Rest is a spring boot project but it's like a more advanced and less coding application. There are three new concepts in Spring Data Rest -

- Configuration
It adds 's' automatically to the entity. You can also give path for your URL
Add `@RepositoryRestResource(path="members")` annotation at top of Repository interface.
- Pagination
change default page size
`spring.data.rest.default-page-size=3`
- Sorting
`http://localhost:8080/magic-api/members?sort=age` ---default in ascending
`http://localhost:8080/magic-api/members?sort=age` ---in descending

Steps to develop CRUD application-

1. Go to <https://start.spring.io/> and kick start your project. Add necessary dependencies like Spring Data JPA, Spring Web, Spring Boot DevTools, MySql Driver, `spring-boot-starter-data-rest`. Select as maven and enter.
2. Import as maven project and check pom for dependencies we added.
3. Create entity class in entity package and write the required code with annotations, getters and setters, toString() and constructors.
4. Create a JpaRepository interface extending
"org.springframework.data.jpa.repository.JpaRepository<T, ID>" extension. After this just replace <T, ID> with <Entity_name, Integer>, Add
`@RepositoryRestResource(path="members")` annotation at top of Repository interface.
5. In resources>application.properties file add the highlighted code below in your existing CURD properties code

```
spring.datasource.url=jdbc:mysql://localhost:3306/employee_directory?useSSL=false
spring.datasource.username=root
spring.datasource.password=root
spring.datasource.hikari.maximum-pool-size=100
spring.datasource.hikari.minimum-idle=10

spring.jpa.show-sql=true
logging.level.web=DEBUG

# Spring Data Rest Properties
spring.data.rest.base-path=/magic-api //for url path use magic-api/members
# change default page size
spring.data.rest.default-page-size=20
```

Spring Boot - Data Rest

6. After doing the necessary coding in the above classes, run the project as an application and after it is up in IDE, check localhost:8080/ in Browser.
7. Do CRUD operations in postman with the same URL from the browser and verify from the database.

<http://localhost:8080/employees>

GET- <http://localhost:8080/magic-api/employees>

POST- <http://localhost:8080/magic-api/employees>

PUT- <http://localhost:8080/magic-api/employees/13>

DELETE- <http://localhost:8080/magic-api/employees/13>

8. Find the code, postman collections and SQL query here:
<https://github.com/Leaf-Co-Kb/Employee-Managment-Data-Rest>.