


03-Rest With JPA

 , RestAPI
 , API .

Entity

User	Group
<pre>@Entity public class User { @Id @GeneratedValue @Column(name = "USER_ID") private Integer id; private String name; private String email; @ManyToOne @JoinColumn(name = "GROUP_ID") private GroupInfo groupInfo;</pre>	<pre>@Entity public class GroupInfo { @Id @GeneratedValue @Column(name = "GROUP_ID") private Integer id; private String name; @OneToMany(mappedBy = "groupInfo", cascade = {CascadeType.PERSIST}, fetch=FetchType.EAGER) private Set<User> users;</pre>

, List<User> Json . Entity ?

User ManyToOne Group , GroupInfo OnToMay User .

, .

List<GroupInfo> ,

Group Json .

JPA Table - CLASS -Json 3

JSON .()

JSON .

:

- https://groups.google.com/forum/#!topic/ksug/7OR_QxxVVjE
- <http://kwonnam.pe.kr/wiki/java/jackson>

, GroupInfo users .(@JsonBackReference)

```

@Entity
public class GroupInfo {
    @Id
    @GeneratedValue
    @Column(name = "GROUP_ID")
    private Integer id;

    private String name;

    @JsonIgnore
    @OneToMany(mappedBy = "groupInfo", cascade = {CascadeType.PERSIST}, fetch=FetchType.EAGER)
    private Set<User> users;
}

```

UserPageRepo

```

public interface UserPageRepo extends Repository<User, Long>{

    Page<User> findByNameContaining(String name,Pageable pageRequest);

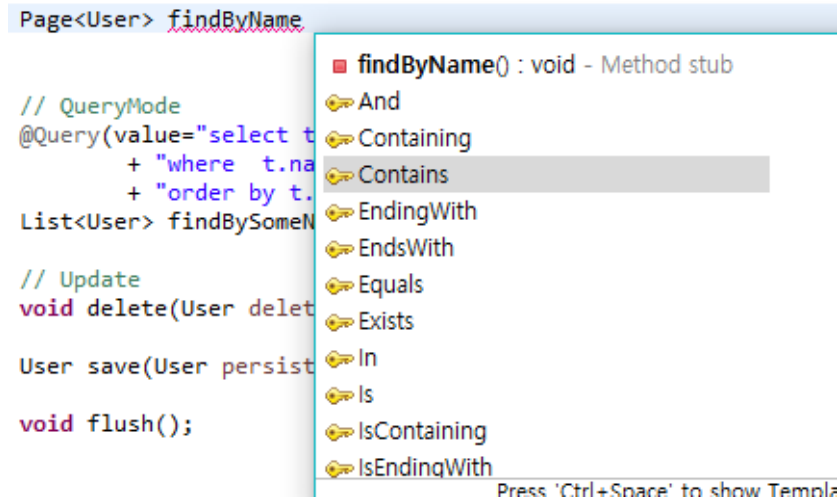
}

```

UserPagerepo ,

... SQL .

- findByName : where name = ??
- findByNameContaining : where name like '%??%'



```

Page<User> findByName

```

findByName() : void - Method stub
 And
 Containing
 Contains
 EndingWith
 EndsWith
 Equals
 Exists
 In
 Is
 IsContaining
 IsEndingWith

Press 'Ctrl+Space' to show Templates

STS(Spring Tool Suite) , +Space ,

..., SQL .

UserSearchAPI

```

package com.example.demo;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.data.domain.Page;
import org.springframework.data.domain.PageRequest;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.ResponseBody;

@Controller
@RequestMapping(path="/") // Router .
public class UserSearchAPI {

    @Autowired
    private UserPageRepo userPageRepo;

    @GetMapping(path="/usersearch") // .
    public @ResponseBody List<User> userSearch(
        @RequestParam String name,
        @RequestParam int pagenum,
        @RequestParam int pagesize

    ){
        PageRequest pageReq = new PageRequest(pagenum, pagesize);
        Page<User> userPage =userPageRepo.findByNameContaining(name,pageReq);
        return userPage.getContent();
    }

}

```

RestAPI , Class Full .

- Controller : WebAPI
- RequestMapping : Route .
- GetMapping : Route .
- ResponseBody :

REST API API .

```

http://localhost:8080/usersearch?name=minsu&pagenum=0&pagesize=5

```

```

==>
[{"id":1,"name":"minsu7","email":"min7@x.com","groupInfo":{"id":1,"name":""}},
{"id":2,"name":"minsu11","email":"min11@x.com","groupInfo":{"id":1,"name":""}},
{"id":3,"name":"minsu75","email":"min75@x.com","groupInfo":{"id":1,"name":""}},
{"id":4,"name":"minsu80","email":"min80@x.com","groupInfo":{"id":1,"name":""}},
{"id":5,"name":"minsu83","email":"min83@x.com","groupInfo":{"id":1,"name":""}}]

```

