

SpringBoot Add Authorities To UserAccount

Authority.java

```
package org.studyeasy.SpringBlog.models;

import jakarta.persistence.Entity;
import jakarta.persistence.Id;
import lombok.Getter;
import lombok.NoArgsConstructor;
import lombok.Setter;

@Entity
@Getter
@Setter
@NoArgsConstructor
public class Authority {

    @Id
    private Long id;

    private String name;
}
```

AuthorityRepository.java

```
package org.studyeasy.SpringBlog.repositories;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import org.studyeasy.SpringBlog.models.Authority;

@Repository
public interface AuthorityRepository extends JpaRepository<Authority, Long>{

}
```

AuthorityService.java

```
package org.studyeasy.SpringBlog.services;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.studyeasy.SpringBlog.models.Authority;
import org.studyeasy.SpringBlog.repositories.AuthorityRepository;

@Service
public class AuthorityService {

    @Autowired
    private AuthorityRepository authorityRepository;

    public Authority save(Authority authority){
        return authorityRepository.save(authority);
    }
}
```

Authorities.java -> Enum

```
package org.studyeasy.SpringBlog.utils.constant;

public enum Authorities {
    RESET_ANY_USER_PASSWORD(11, "RESET_ANY_USER_PASSWORD"),
    ACCESS_ADMIN_PANEL(21, "ACCESS_ADMIN_PANEL");

    private Long authorityId;
    private String authorityString;
    private Authorities(Long authorityId, String authorityString) {
        this.authorityId = authorityId;
        this.authorityString = authorityString;
    }
    public Long getAuthorityId() {
        return authorityId;
    }
    public String getAuthorityString() {
        return authorityString;
    }
}
```

Updated SeedData.java Code

```
package org.studyeasy.SpringBlog.config;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.boot.CommandLineRunner;
import org.springframework.stereotype.Component;
import org.studyeasy.SpringBlog.models.Account;
import org.studyeasy.SpringBlog.models.Authority;
import org.studyeasy.SpringBlog.models.Post;
import org.studyeasy.SpringBlog.services.AccountService;
import org.studyeasy.SpringBlog.services.AuthorityService;
import org.studyeasy.SpringBlog.services.PostService;
import org.studyeasy.SpringBlog.utils.constant.Authorities;
```

@Component

```
public class SeedData implements CommandLineRunner {
```

 @Autowired

```
    private PostService postService;
```

 @Autowired

```
    private AccountService accountService;
```

 @Autowired

```
    private AuthorityService authorityService;
```

 @Override

```
    public void run(String... args) throws Exception {
```

```
        for (Authorities auth : Authorities.values()) {
            Authority authority = new Authority();
            authority.setId(auth.getAuthorityId());
            authority.setName(auth.getAuthorityString());
            authorityService.save(authority);
        }
```

 // Account

```
        Account account01 = new Account();
```

```
        Account account02 = new Account();
```

```
        account01.setEmail("account01@studyeasy.org");
```

```
        account01.setPassword("password");
```

Added
Lines

```

account01.setFirstname("user01");
account01.setLastname("lastname01");

account02.setEmail("account02@studyeasy.org");
account02.setPassword("password");
account02.setFirstname("user02");
account02.setLastname("lastname02");

accountService.save(account01);
accountService.save(account02);

// Post
List<Post> posts = postService.getAll();
if (posts.size() == 0) {
    Post post01 = new Post();
    post01.setTitle("Post01");
    post01.setBody("Post 01 Body .....");

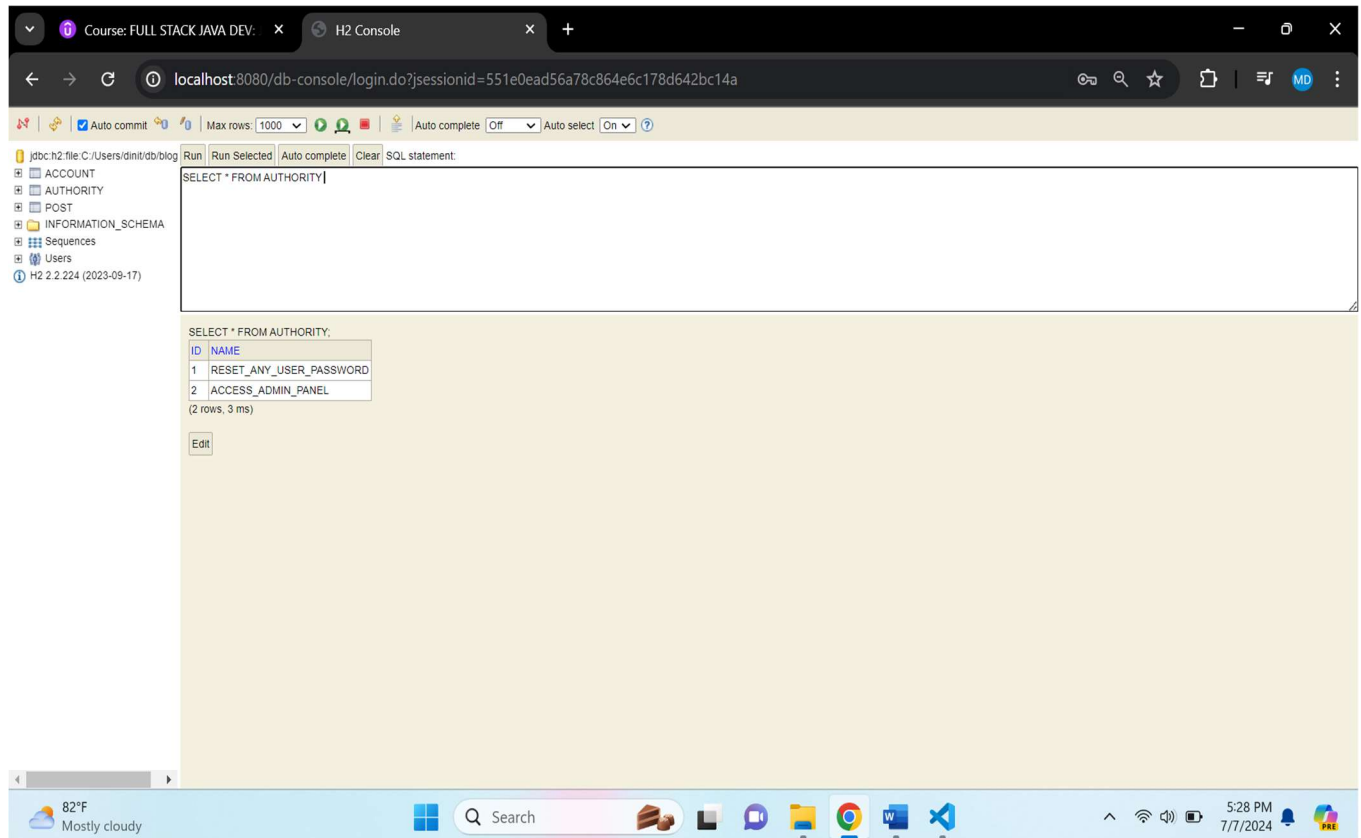
    // added
    post01.setAccount(account01);
    postService.save(post01);

    Post post02 = new Post();
    post02.setTitle("Post02");
    post02.setBody("Post 02 Body .....");

    // added
    post02.setAccount(account02);
    postService.save(post02);
}
}
}

```

Output:-



Rename Authorities.java to Privileges.java

Privileges.java

```
package org.studyeasy.SpringBlog.utils.constant;

public enum Privileges {
    RESET_ANY_USER_PASSWORD(11, "RESET_ANY_USER_PASSWORD"),
    ACCESS_ADMIN_PANEL(21, "ACCESS_ADMIN_PANEL");

    private Long id;
    private String privillage;

    private Privileges(Long id, String privillage) {
        this.id = id;
        this.privillage = privillage;
    }
}
```

```

    }

    public Long getId() {
        return id;
    }

    public String getPrivillage() {
        return privillage;
    }
}

```

Add this piece of code in Account.java

```

@ManyToMany
@JoinTable(
    name = "account_authority",
    joinColumns = {@JoinColumn(name="account_id", referencedColumnName = "id")},
    inverseJoinColumns = {@JoinColumn(name="authority_id", referencedColumnName = "id")})

private Set<Authority> authorities = new HashSet<>();

```

Updated Account.java

```

package org.studyeasy.SpringBlog.models;

import java.util.HashSet;
import java.util.List;
import java.util.Set;

import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.GenerationType;
import jakarta.persistence.Id;
import jakarta.persistence.JoinColumn;
import jakarta.persistence.JoinTable;
import jakarta.persistence.ManyToMany;
import jakarta.persistence.OneToOne;
import lombok.Getter;
import lombok.NoArgsConstructor;
import lombok.Setter;

```

```
@Entity
@Getter
@Setter
@NoArgsConstructor
public class Account {
    @Id
    @GeneratedValue(strategy = GenerationType.SEQUENCE)
    private Long id;

    private String email;

    private String password;

    private String firstname;

    private String lastname;

    private String role;

    @OneToMany(mappedBy = "account")
    private List<Post> posts;

    @ManyToMany
    @JoinTable(
        name = "account_authority",
        joinColumns = {@JoinColumn(name="account_id", referencedColumnName =
"id")},
        inverseJoinColumns = {@JoinColumn(name="authority_id",
referencedColumnName = "id")})
    private Set<Authority> authorities = new HashSet<>();
}
```