

EMPLOYEE MANAGEMENT SY

MainController

```
package com.mycompany.mywebappl;

import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;

@Controller
public class MainController {

    @GetMapping
    public String showHomePage()
    {
        return "index";
    }

}
```

User

```
package com.mycompany.mywebappl.com.company;

import jakarta.persistence.*;

@Entity
@Table(name="user")
public class User {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(name="email", nullable=false, length=45)
    private String email;
    @Column(name="password", nullable=false, length=35)
    private String password;
    @Column(name="firstname", nullable=false, length=45)
    private String firstName;
    @Column(name="lastname", nullable=false, length=45)
    private String lastname;

    @Override
    public String toString() {
        return "User{" +
            "id=" + id +
            ", email='" + email + '\'' +
            ", password='" + password + '\'' +
            ", firstName='" + firstName + '\'' +
            ", lastname='" + lastname + '\'' +
            '}';
    }

    public void setEmail(String email) {
        this.email = email;
    }
}
```

```

public void setFirstName(String firstName) {
    this.firstName = firstName;
}

public void setLastname(String lastname) {
    this.lastname = lastname;
}

public void setPassword(String password) {
    this.password = password;
}

public void setId(int id) {
    this.id = id;
}

public String getLastName() {
    return lastname;
}

public String getFirstName() {
    return firstName;
}

public String getPassword() {
    return password;
}

public int getId() {
    return id;
}

public String getEmail() {
    return email;
}
}

```

index.html

```

<!DOCTYPE html>
<html lang="en" th:href="https://www.thymleaf.org">
<head>
    <meta charset="UTF-8">
    <title>Welcome to my Application</title>

    <link rel="stylesheet" type="text/css"
        th:href="@{/webjars/bootstrap/css/bootstrap.min.css}"/>
</head>
<body>
<div class="container-fluid text-center">
    <h1>Welcome to my Application</h1>
    <a class="h2" th:href="@{users}">Manage Users</a>
</div>
</body>
</html>

```

Controller

```
package com.mycompany.mywebappl.com.company;

import ch.qos.logback.core.model.Model;
import jakarta.persistence.Tuple;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;

import java.util.List;

import static jdk.vm.ci.hotspot.riscv64.RISCV64HotSpotRegisterConfig.ra;

@org.springframework.stereotype.Controller
public class Controller {
    Private UserService
        service();

    public String showUserList(Model model) {

        List<User> listuser = service.listAll();
        model.addAttribute("listUser", listuser);
        return "users";
    }

    @GetMapping("/users/new")
    public String showNewForm(Model model) {
        model.addAttribute("user", "Add New User");
        return "new_form";
    }

    @PostMapping("/users/save")
    public String saveUser(User user) {
        service.save(user);
        return "redirect:/users";
    }

    @PostMapping("/users/save")
    public <redirectAttribute> String saveUser(User user, redirectAttribute
ra) {
        service.save(user);
        ra.addFlashAttribute("message", "The user has been saved
successfully");
        return "redirect:/users";
    }

    @GetMapping("/users/edit/{id}")
    public String showEditForm(@PathVariable("id") Integer Id, Model model)
{
        try {
            User user = service.get(Id);
            model.addAttribute("User", user);
        } catch (UserNotFoundException e) {
            ra.hashCode("message", "The user has been saved successfully");
            return "redirect:/users";
        }
        return null;
    }
}
```

```

@GetMapping("/users/delete/{id}")
public String deleteUser()
{
    try
    {
        service.delete(Id);
        ra.addFlashAttribute("message","The user ID"+Id+"has been
deleted");
    }
    catch(ClassNotFoundException e)
    {
        ra.addFlashAttribute("message",e.getMessage());
    }
    return "redirect:/users";
}
}

```

User_form.html

```

<!DOCTYPE html>
<html lang="en" th:href="https://www.thymleaf.org">>\
<head>
    <meta charset="UTF-8">
    <title>[[${pageTitle}]]</title>
    <link rel="stylesheet" type="text/css"
        th:href="@{/webjars/bootstrap/css/bootstrap.min.css}"/>
</head>
<body>
<div class="container-fluid"></div>
<div class="text-center"></div>
<button type="submit" class="btn btn-primary m-2">Save</button>
<button type="button" class="btn btn-secondary m-2">Cancel</button>
<h2>Add New User</h2>
<form th:action="@{/users/save}" method="post" th:object="${users}"
    style="max-width:500px;margin:0 auto">
    <input type="hidden" th:field="*{id}">
    <div class="border border-secondary rounded p-3">
        <div class="form-froup row">
            <label class="col-sm-4 col-form-label">Email:</label>
            <div class="col-sm-8">
                <input type="email" th:field="*{'email'}" class="form-
control" required min length="8" max length="45"/>
                <input type="password" th:field="*{'password'}"
class="form-control" required min length="2" max length="45"/>
                <input type="firsname" th:field="*{'firstname'}"
class="form-control" required min length="2" max length="45"/>
                <input type="lastname" th:field="*{'lastname'}"
class="form-control" required min length="5" max length="15"/>
                <input type="enabled" th:field="*{'enabled'}">
            </div>
        </div>
    </div>
</div>

<script type="text/javascriprt">
    function cancelForm()
    {
        window.location="/users";
    }

```

```
        </script>
    </form>
</div>
</body>
</html>
```

CrudeRepository

```
package com.mycompany.mywebappl.com.company;

public interface crudeRepository<User> {
}
```

UserNotFoundException

```
package com.mycompany.mywebappl.com.company;

public class UserNotFoundException extends Throwable {
    public UserNotFoundException(String s) {
    }

    public void delete(Integer Id)
    {
        repo.deleteById(Id);
    }
}
```

UserRepository

```
package com.mycompany.mywebappl.com.company;

public interface UserRepository extends crudeRepository<User>{

    public long countById(Integer id);

    public void delete(Integer Id)
    {
        Long count=repo.countById(Id);
        if(count==null||count==0)
        {
            try {
                throw new UserNotFoundException("Could not find any users
with ID"+Id);
            } catch (UserNotFoundException e) {
                throw new RuntimeException(e);
            }
            repo.deleteById(Id);
        }
    }
}
```

UserService

```
package com.mycompany.mywebappl.com.company;

import org.hibernate.mapping.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import java.util.Optional;

@Service
public class UserService {

    private UserRepository repo;

    private List<user> listAll() {
        return (List<user>) repo.findAll();
    }

    public User get(int id)
    {
        Optional<User> result=repo.findById(id);
        if(result.isPresent())
        {
            return result.get();
        }
        throw new UserNotFoundException("Could not find any users with ID"+id);
    }
}
```

users.html

```
<!DOCTYPE html>
<html lang="en" th:herf="https://www.thymleaf.org">
<head>
    <meta charset="UTF-8">
    <title>Manage Users</title>
    <link rel="stylesheet" type="text/css"
        th:href="@{/webjars/bootstrap/css/bootstrap.min.css}"/>
</head>
<body>
    <div class="container-fluid text-center">
        <div><h2>Manage Users</h2></div>
    </div>
    <div th:href="${message}" class="alert alert-success text-
```

```

center"></div>
    [{${message}}]}
    <div>
        <table class="table table-border">
            <thead class="table-border">
                <div>
                    <a class="h3" th:href="@{'/users/new'}">Add New User</a>
                </div>
                <a class="h4 m-2" th:href="@{'/users/edit'
+${user.edit}}"></a>
                <a class="h4 m-2" th:href="@{'/users/delete'
+${user.delete}}"></a>

                <div class="m-3"></div>
            <tr>
                <th>Id</th>
                <th>Email</th>
                <th>First Name</th>
                <th>Last Name</th>
                <th>Enabled</th>
            </tr>
            </thead>
            <tbody>
                <th:block th:each="user:${list(users)}">
                    <tr>
                        <td>[${user.id}]</td>
                        <td>[${user.firstname}]</td>
                        <td>[${user.lastname}]</td>
                        <td>edit</td>
                        <td>delete</td>
                    </tr>
                </th:block>
            </tbody>
        </table>
    </div>
</body>
</html>

```

MyWebApp1Application

```

package com.mycompany.mywebapp1;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class MyWebApp1Application {

    public static void main(String[] args) {
        SpringApplication.run(MyWebApp1Application.class, args);
    }

}

```

application.properties

```
spring.datasource.url=jdbc:mysql://localhost:3306/usersdb  
spring.datasource.username=root  
spring.datasource.password=system  
spring.jpa.hibernate.ddl-auto=update  
spring.jpa.properties.hibernate.show_sql=true
```