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Project Summary

A Spring boot stack web application project focused adding, removing, updating, and searching employee information to a list.

Tech Stack

Language

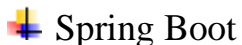


Java is an English-based code that allow programmer to write instruction instead of numerical code. Java program is back-end language used in the project to write codes in relation to connecting database, making a controller to handle request, to use in Spring Boot security etc.



Hyper Text Markup Language is a Front-end used in the project to display the implementation of content such as texts, images, containers, etc., HTML also used in the implementation of layout of Registration page, Log-in Page, Add List Page, and Display List Page, that illustrated in figure 1-4 in User Interface page below.

Java-Based Framework



Spring boot is a java framework that allows programmer to develop web application more easily and quickly. It allows autoconfiguration and create standalone apps.

Java-Library



Thymeleaf is a framework that's suit for HTML 5 template. It allows to properly display text or data in the project. Thymeleaf is useful for the Employee List

Project to display text and functional links such as Save to the list, Back to the List Logout, Add employee, Remove Employee, and Update Employee list buttons.

```
<html xmlns:th="http://www.thymeleaf.org"
      xmlns:sec="http://www.thymeleaf.org/thymeleaf-extras-springsecurity3">
```

Figure.1 Thymeleaf Link

Before the implementation of the thymeleaf, the link in figure.1 must be included in the html and thymeleaf dependency must also be pasted in pom.xml.

JQuery

JQuery is an open-source minified JavaScript library created for simplified JavaScript operations. The project used JQuery to sort information, add search feature, show entries, and next page in the Display Page without any configuration.

```
<link href="/Content/DataTables/css/jquery.dataTables.css" rel="stylesheet" />
<script src="/Scripts/DataTables/jquery.dataTables.js"></script>
```

Figure.2 JQuery Data Tables

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<script type="text/javascript" src="https://cdn.datatables.net/v/bs4/jq-3.6.0/dt-1.12.1/datatables.min.js"></script>
<script>
    $(document).ready(function(){
        $("#employee-table").dataTable();
    })
</script>
```

Figure.3 JQuery Data Table Funtion

Before the implementation of JQuery Data Tables, the link, and a script of JQuery Data Table must be inserted in the head of the html, illustrated in figure 2 and 3.

In Figure 3, there is the Data Table CSS file and a Js File, the JQuery .ready is a function call, and the .dataTable is function call that will instantiate for the table named “employee-table”.

CSS Framework

Bootstrap

Bootstrap is a useful front-end framework used to layout borders, buttons, color, input column size etc. The Project used bootstrap framework in design and layouting the navigation bar, register page, login page, display page, and adding employee page.

```
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/css/bootstrap.min.css"
      integrity="sha384-Gn5384xqQ1aoKhXA+058RXPxPg6fy4IWvTNh0E263XmFcJLSAwiGgFAW/dAiS6JXm"
      crossorigin="anonymous">
```

Figure.4 Bootstrap Link

Before the implementation of Bootstrap in the HTML, bootstrap link must be inserted in the head in figure 4.

Tools

Eclipse

Eclipse is an integrated development environment (IDE) for developing applications using the Java programming language and other programming languages

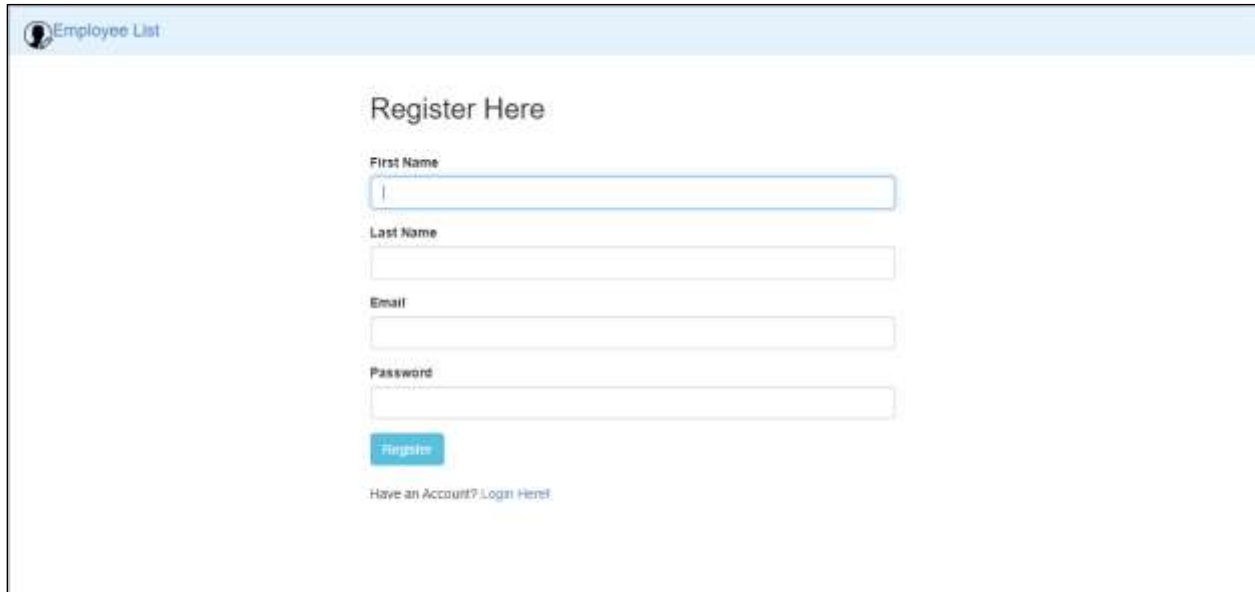
MySQL Work bench

MySQL Work bench is an interface for performing the many tasks involved when working with databases. The Project Store the data that the user enters in registration page and to the adding employee list.

Dependencies:

- ❖ Spring Data JPA
- ❖ Spring Web
- ❖ Thymeleaf
- ❖ MySQL Driver
- ❖ Spring Boot DevTools
- ❖ Spring Security
- ❖ Lombok

User Interface



The registration page features a light blue header with a user icon and the text "Employee List". The main content area is white and contains a "Register Here" heading. Below the heading are four input fields: "First Name", "Last Name", "Email", and "Password". Each field has a light blue border and a small blue "X" icon on the right. A blue "Register" button is positioned below the "Password" field. At the bottom, there is a link that says "Have an Account? Login Here!".

Employee List

Register Here

First Name

Last Name

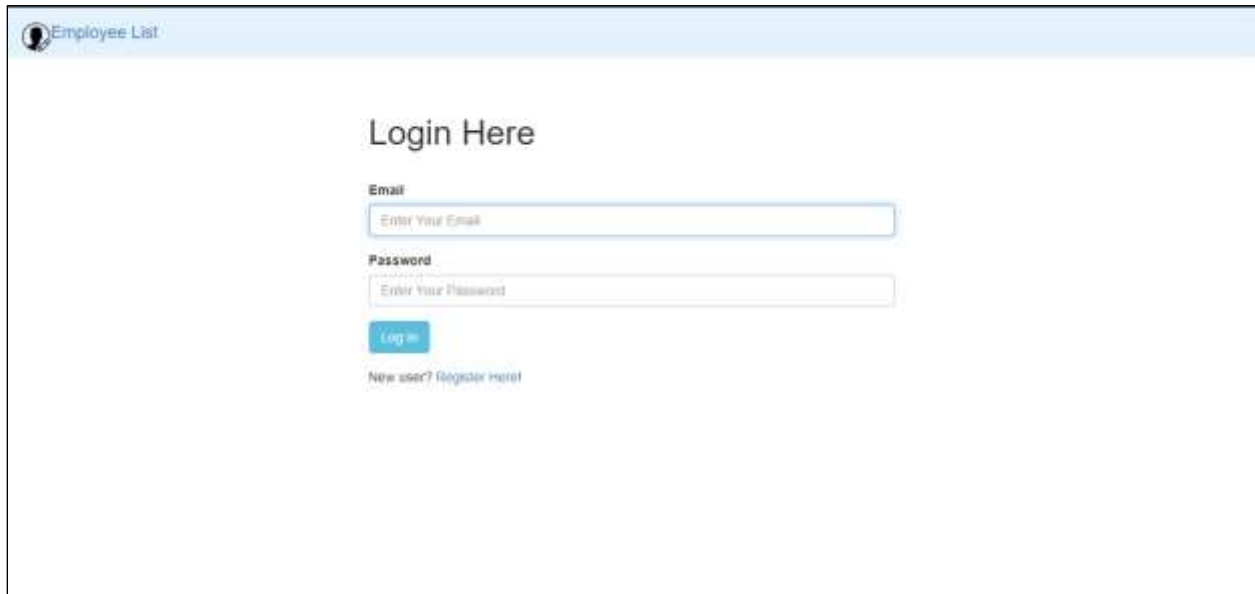
Email

Password

Register

[Have an Account? Login Here!](#)

Figure 5. Registration Page



The login page features a light blue header with a user icon and the text "Employee List". The main content area is white and contains a "Login Here" heading. Below the heading are two input fields: "Email" and "Password". Each field has a light blue border and a small blue "X" icon on the right. A blue "Log in" button is positioned below the "Password" field. At the bottom, there is a link that says "New user? Register Here!".

Employee List

Login Here

Email

Password

Log in

[New user? Register Here!](#)

Figure 6. Login Page

Employee List

Logout

Add Employee

Save to the List

[Back to List](#)

Figure 7. Adding Employee Page

Employee List

Logout

Hello Lala@gmail.com

Add New Employee

Show 10 entries

Search:

Full Name	Email	Field	Actions
Boy Abunda	Boy@gmail.com	Entertainment	<div>EditRemove</div>
Erin Titan	Erin@gmail.com	Security	<div>EditRemove</div>
Pope Momo	Pope@gmail.com	Priest	<div>EditRemove</div>
Ter Jay	Diether@gmail.com	Pilot	<div>EditRemove</div>
Thea Angele	Thea@gmail.com	Nurse	<div>EditRemove</div>

Showing 1 to 5 of 5 entries

Previous

1

Next

Figure 8. Employee Display List Page