TP4: Thymeleaf

```
Créer le package :
package com.example.appweb.entity;
Créer la classe Client.java
package com.example.appweb.entity;
public class Client {
     private Long id;
     private String name;
     private Long age;
     private String location;
     public Long getId() {
           return id;
      }
     public void setId(Long id) {
           this.id = id;
      }
     public String getName() {
           return name;
      }
     public void setName(String name) {
           this.name = name;
      }
     public Long getAge() {
           return age;
      }
     public void setAge(Long age) {
           this.age = age;
      }
     public String getLocation() {
           return location;
      }
```

```
public void setLocation(String location) {
           this.location = location;
     }
}
Créer le package :
package com.example.appweb.service;
Créer la classe ServiceClient.java
package com.example.appweb.service;
import java.util.ArrayList;
import java.util.List;
import org.springframework.stereotype.Service;
import com.example.appweb.entity.Client;
@Service
public class ServiceClient {
     private static List<Client> List = new ArrayList<Client>();
     static {
           Client c = new Client();
           c.setId(1L);
           c.setName("Client 1");
           c.setAge(28L);
           c.setLocation("Tunisia");
           list.add(c);
           c = new Client();
           c.setId(2L);
           c.setName("Client2");
           c.setAge(30L);
           c.setLocation("Algeria");
           list.add(c);
           c = new Client();
           c.setId(3L);
           c.setName("Client 3");
           c.setAge(31L);
           c.setLocation("Maroc");
           list.add(c);
     }
```

```
public List<Client> getClientList() {
           return list;
      }
     public Client findClientById(long id) {
           Client client = new Client();
           for(Client cl: list)
                 if(cl.getId() == id)
                       client = cl;
                 }
           }
           return client ;
      }
     public void saveClient(Client Cl)
                 Client c = new Client();
                 c.setId(Long.valueOf(list.size() + 1));
                 c.setName(Cl.getName());
                 c.setAge(Cl.getAge());
                 c.setLocation(Cl.getLocation());
                 list.add(c);
      }
     public void deleteClientById(long id)
           System.out.println("id = " + id);
           for(Client cl: list)
           {
                 if(cl.getId() == id)
                 {
                       list.remove(cl);
                 }
           }
      }
}
Créer le package :
package com.example.appweb.controller;
Créer la classe ClientController.java
```

```
package com.example.appweb.controller;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import com.example.appweb.entity.Client;
import com.example.appweb.service.ServiceClient;
@Controller
public class ClientController {
     @Autowired
     ServiceClient SCL;
     @GetMapping("/")
    public String viewHomePage(Model model) {
        model.addAttribute("allemplist", SCL.getClientList());
        return "index";
    }
     @GetMapping("/addnew")
    public String addNewClient(Model model) {
        Client client = new Client();
        model.addAttribute("client", client);
        return "newclient";
    }
     @PostMapping("/save")
    public String saveEmployee(@ModelAttribute("employee") Client
client) {
        SCL.saveClient(client);
        return "redirect:/";
    }
     @GetMapping("/showFormForUpdate/{id}")
    public String updateForm(@PathVariable(value = "id") long id,
Model model) {
        Client client = SCL.findClientById(id);
        model.addAttribute("client", client);
        return "update";
    }
     @GetMapping("/deleteClient/{id}")
```

```
public String deleteThroughId(@PathVariable(value = "id") long
id) {
      SCL.deleteClientById(id);
      return "redirect:/";
   }
}
Ajouter dans le dossier : src/main/ressources/templates, les pages suivantes :
index.html;
<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org">
<head>
<meta charset="ISO-8859-1">
<title>Client</title>
<link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstr
ap.min.css"
   integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkF0JwJ8ERdknLPM0"
   crossorigin="anonymous">
</head>
<body>
<div class="container my-2" align="center">
<h3>Client List</h3>
<a th:href="@{/addnew}" class="btn btn-primary btn-sm mb-3" >Add
Client</a>
   class = "table table-striped table-responsive-md">
   <thead>
 >
   Name
   Age
   Location
   Action
 </thead>
  <a
th:href="@{/showFormForUpdate/{id}(id=${client.id})}"
             class="btn btn-primary">Update</a>
```

```
<a th:href="@{/deleteClient/{id}(id=${client.id})}"</pre>
                class="btn btn-danger">Delete</a>
    </div>
</body>
</html>
newclient.html;
<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org">
<meta charset="ISO-8859-1">
<title>Client Management System</title>
<link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstr
ap.min.css"
    integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkF0JwJ8ERdknLPM0"
    crossorigin="anonymous">
</head>
<body>
    <div class="container">
        <h1>Client Management System</h1>
        <h2>Save Client</h2>
        <form action="#" th:action="@{/save}" th:object="${client}"</pre>
            method="POST">
            <input type="text" th:field="*{name}"</pre>
placeholder="Client Name"
                class="form-control mb-4 col-4"> <input type="text"</pre>
                th:field="*{age}" placeholder="Employee age"
                class="form-control mb-4 col-4">
                <input type="text"</pre>
                th:field="*{location}" placeholder="Employee
location"
                class="form-control mb-4 col-4">
            <button type="submit" class="btn btn-info col-2">Save
                Employee</button>
        </form>
        <hr>>
```

```
<a th:href="@{/}"> Back to Client List</a>
    </div>
</body>
</html>
Update.html
<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org">
<meta charset="ISO-8859-1">
<title>Client Management System</title>
<link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstr
ap.min.css">
</head>
<body>
    <div class="container">
        <h1>Client Management System</h1>
        <hr>>
        <h2>Update Client</h2>
        <form action="#" th:action="@{/save}" th:object="${client}"</pre>
            method="POST">
            <!-- Add hidden form field to handle update -->
            <input type="hidden" th:field="*{id}" />
            <input type="text" th:field="*{Name}" class="form-</pre>
control mb-4 col-4">
                 <input type="text" th:field="*{age}" class="form-</pre>
control mb-4 col-4">
                 <input type="text" th:field="*{location}"</pre>
class="form-control mb-4 col-4">
                 <button type="submit" class="btn btn-info col-2">
Update Client</button>
        </form>
        <hr>>
        <a th:href = "@{/}"> Back to Client List</a>
    </div>
</body>
</html>
```