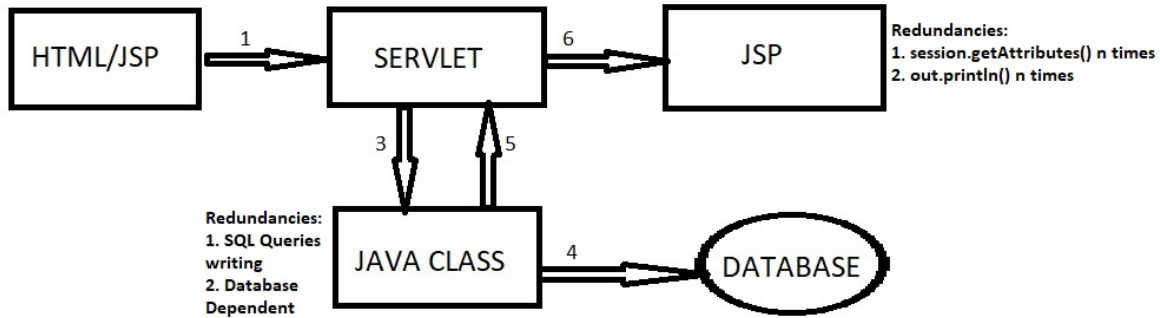# SESSION 20 PROGRAMS(SPRING BOOT)

REDUNDANCIES:
1. request.getParameter() n times
2. session.setAttribute() n times
3. Multiple actions cannot call 1 servlet
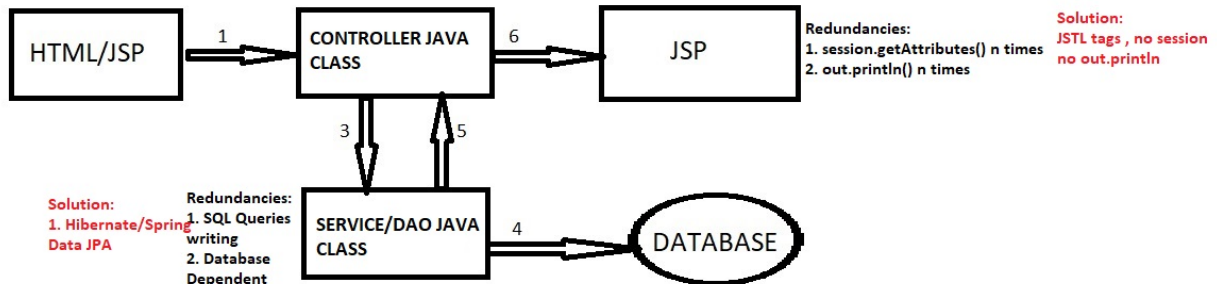
| HTML/JSP | → 1 | SERVLET | → 6 | JSP |

Redundancies:
1. session.getAttributes() n times
2. out.println() n times

3 ↓   ↑ 5

Redundancies:
1. SQL Queries writing
2. Database Dependent

| JAVA CLASS | → 4 | DATABASE |

MVC 1

REDUNDANCIES:
1. request.getParameter() n times
2. session.setAttribute() n times
3. Multiple actions cannot call 1 servlet

Solution:
1.@RequestParam
2. @SessionAttributes
3. 1 Controller called by multiple actions

| HTML/JSP | → 1 | CONTROLLER JAVA CLASS | → 6 | JSP |

Redundancies:
1. session.getAttributes() n times
2. out.println() n times

Solution:
JSTL tags , no session no out.println

3 ↓   ↑ 5

Solution:
1. Hibernate/Spring Data JPA

Redundancies:
1. SQL Queries writing
2. Database Dependent

| SERVICE/DAO JAVA CLASS | → 4 | DATABASE |

MVC 2

@RequestParam : Request Objects Parameter. Use at method parameter level

@SessionAttributes : Session Objects Attributes . Use above Class

@GetMapping : Form action url Mapping method=get . Use above corresponding method called

@PostMapping Form action url Mapping method=post . Use above corresponding method called

@ModelAttribute : Auto transfer forms data to a Java bean object.Use at method parameter level.

@Autowired: Create object of another class without new keyword. Use inside class. Also called as Dependency Injection .Handled by Spring Container .

Spring StereoTypes(Use above Class Name):

@Component : Represents Spring Class

@Controller : Represents Spring Controller Class

@Repository : Represents Data Class with database access methods.

Program1 customerlogin.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title> Customer Login Form</title>
</head>
<body>

<form action="customerview" method="post">
<table>
<tr><td>Customer Login Form </td></tr>
<tr><td>Customer Id : </td><td><input type="text" name="cid"></td></tr>
<tr><td>Customer Name : </td><td><input type="text" name="cname"></td></tr>
<tr><td>Customer Email : </td><td><input type="text" name="cemail"></td></tr>
<tr><td></td><td><input type="submit" value="Submit"></td></tr>
</table>
```

```html
    </form>
    </body>
</html>
```

```java
import java.util.Iterator;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.SessionAttributes;
import org.springframework.web.servlet.ModelAndView;

@Controller
@SessionAttributes({"cid","cname","cemail"})
 public class CustomerController
 {
        @Autowired
        CustomerInt impl;

        @GetMapping("customerlogin")
        public String custLogin()
        {
                return "customerlogin";
        }

        @PostMapping("customerview")
        public ModelAndView custDetails(@RequestParam("cid") String cid,
@RequestParam("cname") String cname, @RequestParam("cemail") String cemail ,
@ModelAttribute Customer cust)
        {
                ModelAndView mv = new ModelAndView();
                mv.addObject("cid", cid);
                mv.addObject("cname", cname);
                mv.addObject("cemail", cemail);
                mv.setViewName("CustomerView");

                int cid1 = cust.getCid();
```

```java
                    System.out.println("The id is :" + cid1);
                    String cname1 = cust.getCname();
                    System.out.println("The name is :" + cname1);
                    String cemail1 = cust.getCemail();
                    System.out.println("The email is :" + cemail1);

                    return mv;

            }

            @GetMapping("customersessionview")
            public String custSession()
            {

                    return "CustomerSessionview";
            }
     }
```

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Customer View</title>
</head>
<body>
<h1> View Customer Details </h1>

<h4>Customer Id : ${cid} </h4>

<h4>Customer Name : ${cname} </h4>

<h4>Customer Email : ${cemail} </h4>

<h4><a href="customersessionview"> Click here to get data into session page </a></h4>

</body>
</html>
```

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
```

```
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1> View Customer Session Details </h1>

<h4>Customer Session Id : ${cid} </h4>

<h4>Customer Session Name : ${cname} </h4>

<h4>Customer Session Email : ${cemail} </h4>
</body>
</html>
```

SESSION 20 ASSIGNMENT

- **Write a Program to create Employee Controller class , employee jsp , employeeview jsp & employeesessionview jsp .**

- **Write 3 methods in   Employee Controller class.**

- **1st method mapped to url="employee"**

- **2nd method mapped to url="employeeview"**

- **3rd method mapped to url="employeesessionview"**

- **Employee jsp should have fields like Name,Address,Mobile No & submit button.**

- **Display Request data in employeeview jsp . href to employeesessionview**

- **Display Session data in employeesessionview jsp .**

- **In EmployeeController Class use @RequestParam , @ModelAttribute & print the corresponding values in console .**