### Steps to Manually Add the Servlet API to Your Eclipse Project

1. **Download the Jakarta Servlet API JAR:**
   * Download the jakarta.servlet-api-5.0.0.jar file from the [Maven Repository](https://repo1.maven.org/maven2/jakarta/servlet/jakarta.servlet-api/5.0.0/" \t "_new).
2. **Add the JAR to Your Eclipse Project:**
   * Right-click on your project in Eclipse and select Build Path > Configure Build Path.
   * Go to the Libraries tab and click on Add External JARs.
   * Browse to the location where you downloaded the jakarta.servlet-api-5.0.0.jar file and add it.
3. **Ensure Project is Configured as a Dynamic Web Project:**
   * Make sure your project is set up as a Dynamic Web Project. If not, you might need to create a new Dynamic Web Project and move your existing files into it.
4. **Configure web.xml:**
   * Ensure your web.xml is correctly configured to reference the Jakarta

**<https://repo1.maven.org/maven2/jakarta/servlet/jakarta.servlet-api/5.0.0/jakarta.servlet-api-5.0.0.jar>**

**JSP (Java Server Pages)**

|  |
| --- |
| 1. To include java code in jsp pages we have jsp tags |

**JSP tags are divided into 3 categories**

1. Scripting Elements
   1. Declarations
   2. Expression
   3. Scriptlet
2. Directives
   1. Page directives
   2. Include directives
   3. Taglib directives
3. Actions

Myservlet.java

import jakarta.servlet.http.\*;

import jakarta.servlet.\*;

import java.io.\*;

public class MyServlet extends HttpServlet

{

    int i=1000;

    int add(int a,int b)

    {

        return a+b;

    }

    public void doGet(HttpServletRequest req,HttpServletResponse res)throws ServletException,IOException

    {

        res.setContentType("text/html");

        PrintWriter out=res.getWriter();

        out.println("<!DOCTYPE html>");

        out.println("<html lang=\"en\">");

        out.println("<head>");

        out.println("<meta charset=\"UTF-8\">");

        out.println("<meta name=\"viewport\" content=\"width=device-width, initial-scale=1.0\">");

        out.println("<title>Document</title>");

        out.println("</head>");

        out.println("<body>");

        int x=10;

        int y=20;

        int z=x+y;

        out.println("z="+z);

        out.println("<h1>Welcome</h1>");

        out.println("Phone Pay Dwara ");

        out.println(i);

        out.println("rs Vachai Thank You Boss.....");

        out.println("</body>");

        out.println("</html>");

    }

}

Corresponding jsp page is

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

    <!-- declaration -->

     <!-- if you are writing something in declaration that should be placed in servlet outside the methods -->

    <%!

        int i=1000;

        //writing a function in servlet

        int add(int a,int b)

        {

            return a+b;

        }

    %>

    <!-- scriptlet -->

     <!-- the code which you have written in scriptlet is placed in the service method or doXXX() method -->

    <%

        int x=10;

        int y=20;

        int z=x+y;

        //out is implicit object

        out.println("z="+z);

    %>

    <h1>Welcome</h1>

    <!-- expression -->

    Phone Pay Dwara <%=i%> rs Vachai Thank You Boss.....

</body>

</html>

|  |
| --- |
| **Writing for loop in jsp page using scriptlet**<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*  pageEncoding=*"UTF-8"*%>  <!DOCTYPE html>  <html>  <head>  <meta charset=*"UTF-8"*>  <title>Insert title here</title>  </head>  <body>  <!-- script let -->  <%  **for**(**int** i=1;i<=10;i++)  {  //out is implicit object  out.println("i="+i+"<br>");  }  %>  </body>  </html> |

**Same as above but I have used expression and scriptlet**

|  |
| --- |
| <%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*  pageEncoding=*"UTF-8"*%>  <!DOCTYPE html>  <html>  <head>  <meta charset=*"UTF-8"*>  <title>Insert title here</title>  </head>  <body>  <!-- script let -->  <%  **for**(**int** i=1;i<=10;i++)  {  %>  i=<%=i%><br>  <%  }  %>  </body>  </html> |

**Usage of include directive**

**One.jsp**

<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*

pageEncoding=*"UTF-8"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Insert title here</title>

</head>

<body style="background-color: *red*;color:*white*;">

**Two.jsp**

</body>

</html>

**Index.jsp**

<%@ include file=*"one.jsp"* %>

<!-- script let -->

<%

**for**(**int** i=1;i<=10;i++)

{

%>

i=<%=i%><br>

<%

}

%>

<%@ include file=*"two.jsp"* %>

**Writing jdbc code to insert a row into a table in .JSP page**

<!-- script let(service) -->

<%@page import=*"java.sql.PreparedStatement"*%>

<%@page import=*"java.sql.DriverManager"*%>

<%@page import=*"java.sql.Connection"*%>

<%

**try**{

Class.forName("com.mysql.cj.jdbc.Driver");

out.println("Loaded...");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/gecdb2", "root", "madhu");

PreparedStatement pstmt=con.prepareStatement("insert into register(email,password,phone,address) values(?,?,?,?)");

pstmt.setString(1,"abbo@gmail.com");

pstmt.setString(2,"123456");

pstmt.setString(3,"8888888888");

pstmt.setString(4,"Gudlavalleru");

**int** r=pstmt.executeUpdate();

**if**(r==1)

out.println("Success....");

**else**

out.println("Failed To Register..");

}**catch**(Exception ex)

{

out.println(ex);

ex.printStackTrace();

}

%>

Index.jsp(for registration form design)

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Insert title here</title>

<link rel=*"stylesheet"* href=*"css/style.css"*>

</head>

<body>

<div class=*"row"*>

<div class=*"col1"*>

<img class=*"img"* src=*"images/img1.png"* alt=*""*>

</div>

<div class=*"col2"*>

<h3>Register Page</h3>

<form action=*"doregister.jsp"* method=*"post"*>

<div class=*"mb"*>

<input class=*"form-control"* type=*"email"* name=*"email"* placeholder=*"Email:"*>

</div>

<div class=*"mb"*>

<input class=*"form-control"* type=*"password"* name=*"password"* placeholder=*"Password:"*>

</div>

<div class=*"mb"*>

<input class=*"form-control"* type=*"tel"* name=*"phone"* placeholder=*"Phone:"*>

</div>

<div class=*"mb"*>

<textarea name=*"address"* id=*""*></textarea>

</div>

<div class=*"mb"*>

<button type=*"submit"*>Register</button>

</div>

</form>

</div>

</div>

</body>

</html>

**Doregister.jsp**

<!-- script let(service) -->

<%@page import=*"java.sql.PreparedStatement"*%>

<%@page import=*"java.sql.DriverManager"*%>

<%@page import=*"java.sql.Connection"*%>

<%

String email=request.getParameter("email");

String password=request.getParameter("password");

String phone=request.getParameter("phone");

String address=request.getParameter("address");

**try**{

Class.forName("com.mysql.cj.jdbc.Driver");

out.println("Loaded...");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/gecdb2", "root", "madhu");

PreparedStatement pstmt=con.prepareStatement("insert into register(email,password,phone,address) values(?,?,?,?)");

pstmt.setString(1,email);

pstmt.setString(2,password);

pstmt.setString(3,phone);

pstmt.setString(4,address);

**int** r=pstmt.executeUpdate();

**if**(r==1)

response.sendRedirect("login.jsp");

**else**

out.println("index.jsp?msg=RegistrationFailed");

}**catch**(Exception ex)

{

out.println(ex);

ex.printStackTrace();

}

%>

Another example

Login.jsp

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Insert title here</title>

<link rel=*"stylesheet"* href=*"css/style.css"*>

</head>

<body>

<div class=*"row"*>

<div class=*"col1"*>

<img class=*"img"* src=*"images/img1.png"* alt=*""*>

</div>

<div class=*"col2"*>

<h3>Login Page</h3>

<form action=*"logincheck.jsp"* method=*"post"*>

<div class=*"mb"*>

<input class=*"form-control"* type=*"email"* name=*"email"* placeholder=*"Email:"*>

</div>

<div class=*"mb"*>

<input class=*"form-control"* type=*"password"* name=*"password"* placeholder=*"Password:"*>

</div>

<div class=*"mb"*>

<button type=*"submit"*>Login</button>

<button type=*"reset"*>Reset</button>

</div>

</form>

</div>

</div>

</body>

</html>

Logincheck.jsp

<%@page import=*"java.sql.ResultSet"*%>

<%@page import=*"java.sql.PreparedStatement"*%>

<%@page import=*"java.sql.DriverManager"*%>

<%@page import=*"java.sql.Connection"*%>

<%

//request -> HttpServletRequest object

//response -> HttpServletResponse object

//out -> JspWriter object

String email=request.getParameter("email");

String password=request.getParameter("password");

**try**{

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/gecdb2","root","madhu");

PreparedStatement pstmt=con.prepareStatement("select \* from register where email=? and password=?");

pstmt.setString(1, email);

pstmt.setString(2,password);

ResultSet rs= pstmt.executeQuery();

**if**(rs.next())

{

response.sendRedirect("UserHome.jsp");

}**else**

{

response.sendRedirect("login.jsp?msg=InvalidAuthentication");

}

}**catch**(Exception e)

{

e.printStackTrace();

}

%>

**Project ToDoList With 2 main modules**

1. Admin
2. User

**Style2.css**

**\*{**

**margin:0;**

**}**

**body{**

**/\* overflow: hidden; to hide scroll bars and can be done as overflow-x or overflow-y\*/**

**margin:0;**

**font-family: cursive;**

**}**

**.main{**

**height:100vh;**

**background-color: rgb(192, 192, 192);**

**}**

**.header{**

**background-color: #131842;**

**height:15vh;**

**}**

**.navbar-nav{**

**padding-top:3vh;**

**/\*text-align: center;\*/**

**}**

**.navbar-nav li{**

**list-style: none;**

**display: inline;**

**padding: 5px;**

**border-radius: 10px;**

**/\*margin-left:60px;\*/**

**/\*margin-right: 60px;\*/**

**color:white;**

**}**

**.navbar-nav li:hover{**

**color:greenyellow;**

**}**

**.navbar-nav li:active{**

**background-color: cadetblue;**

**}**

**a{**

**text-decoration: none;**

**color:white;**

**}**

**.navbar-brand{**

**width: 4em;**

**}**

**.row{**

**margin:30px;**

**}**

**.row .col1{**

**width: 30%;**

**height: 60vh;**

**float: left;**

**padding-left:10px;**

**/\*background-color: blue;\*/**

**}**

**.row .col2{**

**width: 65%;**

**height: 60vh;**

**float: left;**

**/\*background-color: blue;\*/**

**}**

**.col2 p{**

**margin-top:8px;**

**text-indent: 20px;**

**text-align:justify;**

**}**

**.img{**

**margin:5px;**

**width:200px;**

**height:50vh;**

**}**

**input,textarea{**

**width:100%;**

**}**

**button{**

**background-color:rgb(12, 193, 118);**

**height:30px;**

**color:white;**

**border-radius:10px;**

**}**

**button[type=reset]{**

**background-color:rgb(226, 219, 6);**

**height:30px;**

**color:rgb(12, 0, 0);**

**border-radius:10px;**

**}**

**.mb{**

**margin-bottom:5px;**

**}**

**h3{**

**padding:5px;**

**}**

**#customers{**

**font-family: Arial, Helvetica, sans-serif;**

**border-collapse: collapse;**

**width: 100%;**

**}**

**#customers th,#customers td{**

**border: 1px solid #ddd;**

**padding: 8px;**

**}**

**#customers tr:nth-child(even)**

**{**

**background-color: lightgrey;**

**}**

**#customers tr:hover{**

**background-color:grey;**

**}**

**#customers th{**

**background-color: #04AA6D;**

**text-align:left;**

**padding:15px;**

**color:white;**

**}**

**Homemenu.jsp**

**<%**

**String msg=request.getParameter("msg");**

**if(msg==null)**

**msg="";**

**%>**

**<div class="header">**

**<ul class="navbar-nav">**

**<li>**

**<img class="navbar-brand" alt="" src="images/logo.png">**

**</li>**

**<li>**

**<a href="index.jsp">Home</a>**

**</li>**

**<li>**

**<a href="register.jsp">Register</a>**

**</li>**

**<li>**

**<a href="login.jsp">Login</a>**

**</li>**

**<li>**

**<a href="contact.jsp">Contact</a>**

**</li>**

**<li style="padding-left: 600px">**

**<span style="color:orange;"><%=msg%></span>&nbsp;&nbsp;**

**</li>**

**</ul>**

**</div>**

**Index.jsp**

**<%@ page language="java" contentType="text/html; charset=UTF-8"**

**pageEncoding="UTF-8"%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset="UTF-8">**

**<title>ToDoList-IndexPage</title>**

**<link rel="icon" href="images/logo.png">**

**<link rel="stylesheet" href="css/style2.css">**

**</head>**

**<body>**

**<div class="main">**

**<%@ include file="homemenu.jsp"%>**

**<div class="row">**

**<div class="col1">**

**<img class="img" src="images/about.jpg" alt="">**

**</div>**

**<div class="col2">**

**<h3>**

**About**

**</h3>**

**<p>ToDo List App is a kind of app that generally used to maintain our day-to-day tasks or list everything that we have to do, with the most important tasks at the top of the list, and the least important tasks at the bottom. It is helpful in planning our daily schedules. We can add more tasks at any time and delete a task that is completed. </p>**

**<p>ToDo List App is a kind of app that generally used to maintain our day-to-day tasks or list everything that we have to do, with the most important tasks at the top of the list, and the least important tasks at the bottom. It is helpful in planning our daily schedules. We can add more tasks at any time and delete a task that is completed. </p>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

**Register.jsp**

**<%@ page language="java" contentType="text/html; charset=UTF-8"**

**pageEncoding="UTF-8"%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset="UTF-8">**

**<title>ToDoList-IndexPage</title>**

**<link rel="icon" href="images/logo.png">**

**<link rel="stylesheet" href="css/style2.css">**

**</head>**

**<body>**

**<div class="main">**

**<%@ include file="homemenu.jsp"%>**

**<div class="row">**

**<div class="col1">**

**<img class="img" src="images/user.png" alt="">**

**</div>**

**<div class="col2">**

**<h3>Register Page</h3>**

**<form action="doregister.jsp" method="post">**

**<div class="mb">**

**<input required="required" class="form-control" type="email" name="email" placeholder="Email:">**

**</div>**

**<div class="mb">**

**<input required="required" class="form-control" type="password" name="password" placeholder="Password:">**

**</div>**

**<div class="mb">**

**<input required="required" class="form-control" type="tel" name="phone" placeholder="Phone:">**

**</div>**

**<div class="mb">**

**<textarea required="required" name="address" id=""></textarea>**

**</div>**

**<div class="mb">**

**<button type="submit">Register</button>**

**<button type="reset">Reset</button>**

**</div>**

**</form>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

**Login.jsp**

**<%@ page language="java" contentType="text/html; charset=UTF-8"**

**pageEncoding="UTF-8"%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset="UTF-8">**

**<title>ToDoList-IndexPage</title>**

**<link rel="icon" href="images/logo.png">**

**<link rel="stylesheet" href="css/style2.css">**

**</head>**

**<body>**

**<div class="main">**

**<%@ include file="homemenu.jsp"%>**

**<div class="row">**

**<div class="col1">**

**<img class="img" src="images/user.png" alt="">**

**</div>**

**<div class="col2" style="padding-top: 30px;">**

**<h3>Login Page</h3>**

**<form action="logincheck.jsp" method="post">**

**<div class="mb">**

**<input required="required" class="form-control" type="email" name="email" placeholder="Email:">**

**</div>**

**<div class="mb">**

**<input required="required" class="form-control" type="password" name="password" placeholder="Password:">**

**</div>**

**<div class="mb">**

**<button type="submit">Login</button>**

**<button type="reset">Reset</button>**

**</div>**

**</form>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

**Contact.jsp**

**<%@ page language="java" contentType="text/html; charset=UTF-8"**

**pageEncoding="UTF-8"%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset="UTF-8">**

**<title>ToDoList-IndexPage</title>**

**<link rel="icon" href="images/logo.png">**

**<link rel="stylesheet" href="css/style2.css">**

**</head>**

**<body>**

**<div class="main">**

**<%@ include file="homemenu.jsp"%>**

**<div class="row">**

**<div class="col1" style="width: 50%;" >**

**<img class="img" style="width:90%;margin-right:20px;border-radius:10px;"  src="images/contact.jpg" alt="">**

**</div>**

**<div class="col2" style="padding-top: 30px;width: 40%;">**

**<h3><span style="padding:5px;color:red;background-color:#131842;">Contact</span></h3>**

**<address>**

**Email: todolist@gmail.com<br>**

**#33-45/45/4s<br>**

**Vijayawada<br>**

**Krishna(Dist)<br>**

**AP.<br>**

**Phone: <span style="padding:5px;color:red;background-color:yellow;">99</span> <span style="padding:5px;color:green;background-color:yellow;">122</span> <span style="padding:5px;color:blue;background-color:yellow;">80</span> <span style="padding:5px;color:rgb(12, 193, 118);background-color:yellow;"> 626</span><br>**

**</address>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

**Task.java**

**package dto;**

**public class Task**

**{**

**private int  task\_id;**

**private String email,task,startdate,starttime,enddate,endtime,status;**

**public Task()**

**{   super();**

**}**

**public Task(int task\_id, String email, String task, String startdate, String starttime, String enddate,String endtime, String status)**

**{**

**super();**

**this.task\_id = task\_id;**

**this.email = email;**

**this.task = task;**

**this.startdate = startdate;**

**this.starttime = starttime;**

**this.enddate = enddate;**

**this.endtime = endtime;**

**this.status = status;**

**}**

**public int getTask\_id() {**

**return task\_id;**

**}**

**public void setTask\_id(int task\_id) {**

**this.task\_id = task\_id;**

**}**

**public String getEmail() {**

**return email;**

**}**

**public void setEmail(String email) {**

**this.email = email;**

**}**

**public String getTask() {**

**return task;**

**}**

**public void setTask(String task) {**

**this.task = task;**

**}**

**public String getStartdate() {**

**return startdate;**

**}**

**public void setStartdate(String startdate) {**

**this.startdate = startdate;**

**}**

**public String getStarttime() {**

**return starttime;**

**}**

**public void setStarttime(String starttime) {**

**this.starttime = starttime;**

**}**

**public String getEnddate() {**

**return enddate;**

**}**

**public void setEnddate(String enddate) {**

**this.enddate = enddate;**

**}**

**public String getEndtime() {**

**return endtime;**

**}**

**public void setEndtime(String endtime) {**

**this.endtime = endtime;**

**}**

**public String getStatus() {**

**return status;**

**}**

**public void setStatus(String status) {**

**this.status = status;**

**}**

**}**

**User.java**

**package dto;**

**public class User**

**{**

**private String email,password,phone,address,desig;**

**public User(String email, String password, String phone, String address, String desig) {**

**super();**

**this.email = email;**

**this.password = password;**

**this.phone = phone;**

**this.address = address;**

**this.desig = desig;**

**}**

**public User() {**

**super();**

**// TODO Auto-generated constructor stub**

**}**

**public String getEmail() {**

**return email;**

**}**

**public void setEmail(String email) {**

**this.email = email;**

**}**

**public String getPassword() {**

**return password;**

**}**

**public void setPassword(String password) {**

**this.password = password;**

**}**

**public String getPhone() {**

**return phone;**

**}**

**public void setPhone(String phone) {**

**this.phone = phone;**

**}**

**public String getAddress() {**

**return address;**

**}**

**public void setAddress(String address) {**

**this.address = address;**

**}**

**public String getDesig() {**

**return desig;**

**}**

**public void setDesig(String desig) {**

**this.desig = desig;**

**}**

**}**

**DAO.java**

**package dao;**

**import java.sql.Connection;**

**import java.sql.DriverManager;**

**import java.sql.PreparedStatement;**

**import java.sql.ResultSet;**

**import java.sql.Statement;**

**import java.util.ArrayList;**

**import dto.Task;**

**import dto.User;**

**public class DAO**

**{**

**private Connection con;**

**public DAO()**

**{**

**try {**

**Class.forName("com.mysql.cj.jdbc.Driver");**

**System.out.println("Loaded...");**

**con=DriverManager.getConnection("jdbc:mysql://localhost:3306/gecdb2","root","madhu");**

**System.out.println("Connected");**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**}**

**public boolean addToDo(String email,String task,String startdate,String starttime,String enddate,String endtime)**

**{**

**boolean flag=false;**

**try {**

**PreparedStatement pstmt=con.prepareStatement("insert into tasks(email,task,startdate,starttime,enddate,endtime) values(?,?,?,?,?,?)");**

**pstmt.setString(1,email);**

**pstmt.setString(2,task);**

**pstmt.setString(3,startdate);**

**pstmt.setString(4,starttime);**

**pstmt.setString(5,enddate);**

**pstmt.setString(6,endtime);**

**int r=pstmt.executeUpdate();**

**if(r==1)**

**flag=true;**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**return flag;**

**}**

**public boolean updateToDo(int taskid,String task,String startdate,String starttime,String enddate,String endtime,String status)**

**{**

**boolean flag=false;**

**try {**

**String cmd="update tasks set task=?,startdate=?,starttime=?,enddate=?,endtime=?,status=? where task\_id=?";**

**PreparedStatement pstmt=con.prepareStatement(cmd);**

**pstmt.setString(1,task);**

**pstmt.setString(2,startdate);**

**pstmt.setString(3,starttime);**

**pstmt.setString(4,enddate);**

**pstmt.setString(5,endtime);**

**pstmt.setString(6,status);**

**pstmt.setInt(7,taskid);**

**int r=pstmt.executeUpdate();**

**if(r==1)**

**flag=true;**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**return flag;**

**}**

**public boolean deleteToDo(int taskid)**

**{**

**boolean flag=false;**

**try {**

**String cmd="delete from tasks where task\_id=?";**

**PreparedStatement pstmt=con.prepareStatement(cmd);**

**pstmt.setInt(1,taskid);**

**int r=pstmt.executeUpdate();**

**if(r==1)**

**flag=true;**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**return flag;**

**}**

**public ArrayList<Task> getAllTasks(String email)**

**{**

**ArrayList<Task> tasksList=new ArrayList<Task>();**

**//tasksList=1 object**

**//tasksList=2 object**

**try {**

**PreparedStatement pstmt=con.prepareStatement("select \* from tasks where email=? order by task\_id desc");**

**pstmt.setString(1, email);**

**ResultSet rs=pstmt.executeQuery();**

**while(rs.next())**

**{**

**tasksList.add(new Task(rs.getInt(1),rs.getString(2),rs.getString(3),rs.getString(4),rs.getString(5),rs.getString(6),rs.getString(7),rs.getString(8)));**

**}**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**return tasksList;**

**}**

**public ArrayList<User> getAllUsers()**

**{**

**ArrayList<User> users=new ArrayList<User>();**

**try {**

**PreparedStatement pstmt=con.prepareStatement("select \* from register");**

**ResultSet rs=pstmt.executeQuery();**

**while(rs.next())**

**{**

**users.add(new User(rs.getString(1),rs.getString(2),rs.getString(3),rs.getString(4),rs.getString(5)));**

**}**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**return users;**

**}**

**//i want to store the register form details in database**

**public boolean doRegister(String email,String password,String phone,String address)**

**{**

**boolean flag=false;**

**try {**

**PreparedStatement pstmt=con.prepareStatement("insert into register(email,password,phone,address) values(?,?,?,?)");**

**pstmt.setString(1,email);**

**pstmt.setString(2,password);**

**pstmt.setString(3,phone);**

**pstmt.setString(4,address);**

**int r=pstmt.executeUpdate();**

**if(r==1)**

**flag=true;**

**}catch(Exception ex)**

**{**

**ex.printStackTrace();**

**}**

**return flag;**

**}**

**public String loginCheck(String email,String password)**

**{**

**String desig=null;**

**try {**

**PreparedStatement pstmt=con.prepareStatement("select \* from register where email=? and password=?");**

**pstmt.setString(1,email);**

**pstmt.setString(2,password);**

**ResultSet rs=pstmt.executeQuery();**

**//**

**//=> madhu@gmail.com | 123456   | 09912280626 | Vijayawada | user**

**if(rs.next())**

**{**

**desig=rs.getString("desig");**

**}**

**}catch (Exception e) {**

**e.printStackTrace();**

**}**

**return desig;**

**}**

**}**

**Doregister.jsp**

**<%@page import="dao.DAO"%>**

**<%**

**String email=request.getParameter("email");**

**String password=request.getParameter("password");**

**String phone=request.getParameter("phone");**

**String address=request.getParameter("address");**

**DAO dao=new DAO();**

**if(dao.doRegister(email, password, phone, address))**

**{**

**response.sendRedirect("login.jsp?msg=RegistrationSuccessfull");**

**}else{**

**response.sendRedirect("register.jsp?msg=RegistrationFailed");**

**}**

**%>**

**Logincheck.jsp**

**<%@page import="dao.DAO"%>**

**<%**

**String email=request.getParameter("email");**

**String password=request.getParameter("password");**

**DAO dao=new DAO();**

**String desig=dao.loginCheck(email, password);**

**if(desig!=null)**

**{**

**session.setAttribute("email",email);**

**if(desig.equalsIgnoreCase("user"))**

**response.sendRedirect("UserHome.jsp");**

**else if(desig.equalsIgnoreCase("admin"))**

**response.sendRedirect("AdminHome.jsp");**

**}else{**

**response.sendRedirect("login.jsp?msg=AuthenticationFailed");**

**}**

**%>**

**Usermenu.jsp**

**<%**

**String email=(String)session.getAttribute("email");**

**if(email==null)**

**{**

**response.sendRedirect("index.jsp?msg=You Can't Cheat me aaaaa.....");**

**}**

**%>**

**<div class="header">**

**<ul class="navbar-nav">**

**<li>**

**<img class="navbar-brand" alt="" src="images/logo.png">**

**</li>**

**<li>**

**<a href="UserHome.jsp">AddToDo</a>**

**</li>**

**<li>**

**<a href="ViewToDos.jsp">ViewToDos</a>**

**</li>**

**<li>**

**<a href="logout.jsp">Logout</a>**

**</li>**

**<li style="padding-left: 600px">**

**<span style="color:orange;">Active User</span>&nbsp;:&nbsp; <%=email%>**

**</li>**

**</ul>**

**</div>**

**UserHome.jsp**

**<%@ page language="java" contentType="text/html; charset=UTF-8"**

**pageEncoding="UTF-8"%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset="UTF-8">**

**<title>ToDoList-IndexPage</title>**

**<link rel="icon" href="images/logo.png">**

**<link rel="stylesheet" href="css/style2.css">**

**</head>**

**<body>**

**<div class="main">**

**<%@ include file="usermenu.jsp"%>**

**<%**

**String msg=request.getParameter("msg");**

**if(msg==null)**

**msg="";**

**%>**

**<div class="row">**

**<div class="col1">**

**<img class="img" src="images/user.png" alt="">**

**</div>**

**<div class="col2">**

**<h5><%=msg%></h5>**

**<h3>Add ToDo List</h3>**

**<form action="addToDo.jsp" method="post">**

**<div class="mb">**

**<textarea name="task" id="" placeholder="Task To Complete: "></textarea>**

**</div>**

**<div class="mb">**

**<label for="startdate">StartDate:</label>**

**<input type="date" name="startdate">**

**</div>**

**<div class="mb">**

**<label for="starttime">StartTime:</label>**

**<input type="time" name="starttime">**

**</div>**

**<div class="mb">**

**<label for="enddate">EndDate:</label>**

**<input type="date" name="enddate">**

**</div>**

**<div class="mb">**

**<label for="endtime">EndTime:</label>**

**<input type="time" name="endtime">**

**</div>**

**<div class="mb">**

**<button type="submit">Add</button>**

**<button type="reset">Cls</button>**

**</div>**

**</form>**

**</div>**

**</div>**

**</body>**

**</html>**

**ViewToDos.jsp**

<%@page import="dto.Task"%>

<%@page import="java.util.ArrayList"%>

<%@page import="dao.DAO"%>

<%@ page language="java" contentType="text/html; charset=UTF-8"

    pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>ToDoList-IndexPage</title>

<link rel="icon" href="images/logo.png">

<link rel="stylesheet" href="css/style2.css">

</head>

<body>

<div class="main">

    <%@ include file="usermenu.jsp"%>

    <%

    String msg=request.getParameter("msg");

        if(msg==null)

            msg="";

        DAO dao=new DAO();

        ArrayList<Task> tasksList=dao.getAllTasks(email);

    %>

    <div class="row">

        <%=msg%>

<table id="customers">

  <tr>

    <th>Task\_id</th>

    <th>Task</th>

    <th>StartDate</th>

    <th>StartTime</th>

    <th>EndDate</th>

    <th>EndTime</th>

    <th>Status</th>

    <th>Actions</th>

  </tr>

  <%

        for(Task task:tasksList)

        {

  %>

        <form action="Modify.jsp" method="post">

        <tr>

            <td>

                <input type="hidden" name="taskid" value="<%=task.getTask\_id()%>">

                <%=task.getTask\_id()%>

            </td>

            <td>

                <textarea name="task"><%=task.getTask()%></textarea>

            </td>

            <td>

                <input name="startdate" value="<%=task.getStartdate()%>">

            </td>

            <td>

                <input name="starttime" value="<%=task.getStarttime()%>">

            </td>

            <td>

                <input name="enddate" value="<%=task.getEnddate()%>">

            </td>

            <td>

                <input name="endtime" value="<%=task.getEndtime()%>">

            </td>

            <td>

                <input name="status" value="<%=task.getStatus()%>">

            </td>

            <td>

                <button type="submit" name="submit" value="update">Update</button>

                <button type="submit" name="submit" value="delete">Delete</button>

            </td>

        </tr>

        </form>

  <%

        }

  %>

</table>

    </div>

</body>

</html>

Modify.jsp

<%@page import="dao.DAO"%>

<%

    String taskid=request.getParameter("taskid");

    String task=request.getParameter("task");

    String startdate=request.getParameter("startdate");

    String starttime=request.getParameter("starttime");

    String enddate=request.getParameter("enddate");

    String endtime=request.getParameter("endtime");

    String status=request.getParameter("status");

    String submit=request.getParameter("submit");

    DAO dao=new DAO();

    if(submit.equalsIgnoreCase("update"))

    {

        if(dao.updateToDo(Integer.parseInt(taskid), task, startdate, starttime, enddate, endtime, status))

        {

            //request.getRequestDispatcher("ViewToDos.jsp").forward(request,response);

            response.sendRedirect("ViewToDos.jsp?msg=UpdatedSuccessfully");

        }else{

            response.sendRedirect("ViewToDos.jsp?msg=UpdationFailed");

        }

    }else if(submit.equalsIgnoreCase("delete"))

    {

        if(dao.deleteToDo(Integer.parseInt(taskid))){

            response.sendRedirect("ViewToDos.jsp?msg=DeletedSuccessfully");

        }else{

            response.sendRedirect("ViewToDos.jsp?msg=DeletionFailed");

        }

    }else{

        out.println("Wrong Button You Have Clicked");

    }

%>

Adminmenu.jsp

<%

    String email=(String)session.getAttribute("email");

    if(email==null)

    {

        response.sendRedirect("index.jsp?msg=You Can't Cheat me aaaaa.....");

    }

%>

<div class="header">

    <ul class="navbar-nav">

        <li>

            <img class="navbar-brand" alt="" src="images/logo.png">

        </li>

        <li>

            <a href="logout.jsp">Logout</a>

        </li>

        <li style="padding-left: 600px">

                <span style="color:orange;">Active User</span>&nbsp;:&nbsp; <%=email%>

        </li>

    </ul>

</div>

AdminHome.jsp

<%@page import="dto.User"%>

<%@page import="java.util.ArrayList"%>

<%@page import="dao.DAO"%>

<%@ page language="java" contentType="text/html; charset=UTF-8"

    pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>ToDoList-IndexPage</title>

<link rel="icon" href="images/logo.png">

<link rel="stylesheet" href="css/style2.css">

</head>

<body>

<div class="main">

    <%@ include file="adminmenu.jsp"%>

    <%

    String msg=request.getParameter("msg");

    if(msg==null)

        msg="";

    DAO dao=new DAO();

    ArrayList<User> users=dao.getAllUsers();

    %>

    <div class="row">

<table id="customers">

  <tr>

    <th>Email</th>

    <th>Password</th>

    <th>Phone</th>

    <th>Address</th>

    <th>Desig</th>

  </tr>

  <%

        for(User user:users)

        {

  %>

        <form action="ModifyUser.jsp" method="post">

        <tr>

            <td>

                <input type="hidden" name="email" value="<%=user.getEmail()%>">

                <%=user.getEmail()%>

            </td>

            <td>

                <textarea name="password"><%=user.getPassword()%></textarea>

            </td>

            <td>

                <input name="phone" value="<%=user.getPhone()%>">

            </td>

            <td>

                <textarea name="address"><%=user.getAddress()%></textarea>

            </td>

            <td>

                <input name="desig" value="<%=user.getDesig()%>">

            </td>

            <td>

                <button type="submit" name="submit" value="update">Update</button>

                <button type="submit" name="submit" value="delete">Delete</button>

            </td>

        </tr>

        </form>

  <%

        }

  %>

</table>

</div>

</body>

</html>

**Logout.jsp**

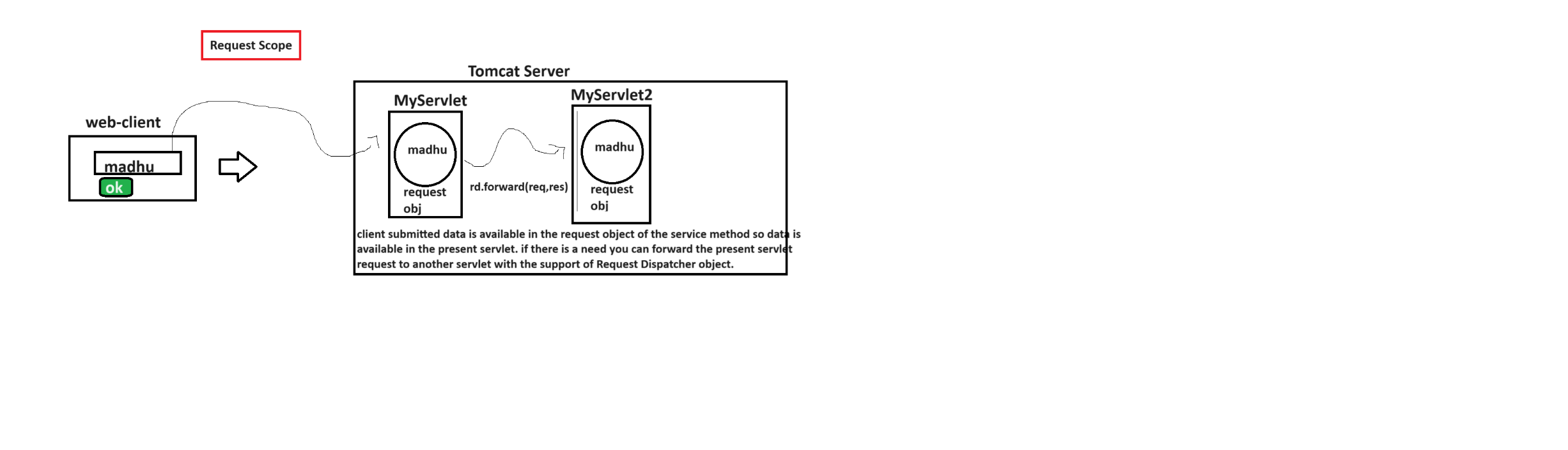
<%

session.invalidate();

response.sendRedirect("index.jsp?msg=YouHaveBeenLoggedOutSuccessfully");

%>

**Request scope**



**Index.jsp**

**<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"***

**pageEncoding=*"UTF-8"*%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset=*"UTF-8"*>**

**<title>Insert title here</title>**

**</head>**

**<body>**

**<h1>Example on Request Scope</h1>**

**<form action=*"MyServlet"*>**

**<input type=*"text"* name=*"uname"*>**

**<button type=*"submit"*>Submit</button>**

**</form>**

**</body>**

**</html>**

**MyServlet.java**

**package p1;**

**import jakarta.servlet.RequestDispatcher;**

**import jakarta.servlet.ServletConfig;**

**import jakarta.servlet.ServletException;**

**import jakarta.servlet.annotation.WebInitParam;**

**import jakarta.servlet.annotation.WebServlet;**

**import jakarta.servlet.http.HttpServlet;**

**import jakarta.servlet.http.HttpServletRequest;**

**import jakarta.servlet.http.HttpServletResponse;**

**import java.io.IOException;**

**import java.io.PrintWriter;**

**public class MyServlet extends HttpServlet**

**{**

**public void init(ServletConfig config)throws ServletException**

**{**

**System.*out*.println(config.getServletName());**

**System.*out*.println(config.getInitParameter("user"));**

**System.*out*.println(config.getInitParameter("password"));**

**}**

**public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException**

**{**

**//request: it contains client requested information**

**response.setContentType("text/html");**

**PrintWriter out=response.getWriter();**

**System.*out*.println("MyServlet: "+request.getParameter("uname"));**

**out.println("<h1>Hello</h1>");**

**RequestDispatcher rd=request.getRequestDispatcher("MyServlet2");**

**rd.forward(request, response);**

**}**

**}**

**MyServlet2.java**

**package p1;**

**import jakarta.servlet.ServletException;**

**import jakarta.servlet.annotation.WebServlet;**

**import jakarta.servlet.http.HttpServlet;**

**import jakarta.servlet.http.HttpServletRequest;**

**import jakarta.servlet.http.HttpServletResponse;**

**import java.io.IOException;**

**import java.io.PrintWriter;**

**public class MyServlet2 extends HttpServlet**

**{**

**public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException**

**{**

**response.setContentType("text/html");**

**PrintWriter out=response.getWriter();**

**out.println("<h1>MyServlet2</h1>");**

**out.println("MyServlet2: "+request.getParameter("uname"));**

**out.close();**

**}**

**}**

**Web.xml**

**<?xml version=*"1.0"* encoding=*"UTF-8"*?>**

**<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"https://jakarta.ee/xml/ns/jakartaee"* xsi:schemaLocation=*"https://jakarta.ee/xml/ns/jakartaee https://jakarta.ee/xml/ns/jakartaee/web-app\_6\_0.xsd"* version=*"6.0"*>**

**<servlet>**

**<servlet-name>MyServlet</servlet-name>**

**<servlet-class>p1.MyServlet</servlet-class>**

**<init-param>**

**<description>it is the user name of mysql</description>**

**<param-name>user</param-name>**

**<param-value>root</param-value>**

**</init-param>**

**<init-param>**

**<description>it is the password of the mysql</description>**

**<param-name>password</param-name>**

**<param-value>madhu</param-value>**

**</init-param>**

**</servlet>**

**<servlet-mapping>**

**<servlet-name>MyServlet</servlet-name>**

**<url-pattern>/MyServlet</url-pattern>**

**</servlet-mapping>**

**<display-name>WebApp3</display-name>**

**<welcome-file-list>**

**<welcome-file>index.html</welcome-file>**

**<welcome-file>index.htm</welcome-file>**

**<welcome-file>index.jsp</welcome-file>**

**<welcome-file>default.html</welcome-file>**

**<welcome-file>default.htm</welcome-file>**

**<welcome-file>default.jsp</welcome-file>**

**</welcome-file-list>**

**<servlet>**

**<description></description>**

**<display-name>MyServlet2</display-name>**

**<servlet-name>MyServlet2</servlet-name>**

**<servlet-class>p1.MyServlet2</servlet-class>**

**</servlet>**

**<servlet-mapping>**

**<servlet-name>MyServlet2</servlet-name>**

**<url-pattern>/MyServlet2</url-pattern>**

**</servlet-mapping>**

**</web-app>**

**MyServlet.java(using include method of request dispatcher)  
package p1;**

**import jakarta.servlet.RequestDispatcher;**

**import jakarta.servlet.ServletConfig;**

**import jakarta.servlet.ServletException;**

**import jakarta.servlet.annotation.WebInitParam;**

**import jakarta.servlet.annotation.WebServlet;**

**import jakarta.servlet.http.HttpServlet;**

**import jakarta.servlet.http.HttpServletRequest;**

**import jakarta.servlet.http.HttpServletResponse;**

**import java.io.IOException;**

**import java.io.PrintWriter;**

**public class MyServlet extends HttpServlet**

**{**

**public void init(ServletConfig config)throws ServletException**

**{**

**System.*out*.println(config.getServletName());**

**System.*out*.println(config.getInitParameter("user"));**

**System.*out*.println(config.getInitParameter("password"));**

**}**

**public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException**

**{**

**//request: it contains client requested information**

**response.setContentType("text/html");**

**PrintWriter out=response.getWriter();**

**out.println("MyServlet: "+request.getParameter("uname"));**

**out.println("<h1>Hello</h1>");**

**RequestDispatcher rd=request.getRequestDispatcher("MyServlet2");**

**//rd.forward(request, response);**

**rd.include(request, response);**

**}**

**}**

**Usage of <jsp:useBean> and <jsp:setProperty> actions**

**Bean**

**What is a bean?**

|  |
| --- |
| 1. It is a class which contains properties 2. A field is called as property if it contains setter and getter and methods and should be declared as private |

**Index.jsp**

**<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"***

**pageEncoding=*"UTF-8"*%>**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<meta charset=*"UTF-8"*>**

**<title>Insert title here</title>**

**</head>**

**<body>**

**<h3>Register Page</h3>**

**<form action=*"doregister.jsp"* method=*"post"*>**

**<div class=*"mb"*>**

**<input required=*"required"* class=*"form-control"* type=*"email"* name=*"email"* placeholder=*"Email:"*>**

**</div>**

**<div class=*"mb"*>**

**<input required=*"required"* class=*"form-control"* type=*"password"* name=*"password"* placeholder=*"Password:"*>**

**</div>**

**<div class=*"mb"*>**

**<input required=*"required"* class=*"form-control"* type=*"tel"* name=*"phone"* placeholder=*"Phone:"*>**

**</div>**

**<div class=*"mb"*>**

**<textarea required=*"required"* name=*"address"* id=*""*></textarea>**

**</div>**

**<div class=*"mb"*>**

**<button type=*"submit"*>Register</button>**

**<button type=*"reset"*>Reset</button>**

**</div>**

**</form>**

**</body>**

**</html>**

**Doregister.jsp**

**<%@page import=*"dto.Register"*%>**

**<jsp:useBean id=*"r1"* class=*"dto.Register"*>**

**<jsp:setProperty property=*"\*"* name=*"r1"* />**

**</jsp:useBean>**

**<%**

**/\***

**Register r1=new Register;**

**r1.setEmail("vinnu@gmail.com");**

**r1.setPassword("123456");**

**r1.setPhone("6767676767");**

**e1.setAddress("Chennai");**

**\*/**

**/\*String email=request.getParameter("email");**

**String password=request.getParameter("password");**

**String phone=request.getParameter("phone");**

**String address=request.getParameter("address");\*/**

**%>**

**Email:<%=r1.getEmail()%><br>**

**Password:<%=r1.getPassword()%><br>**

**Phone:<%=r1.getPhone()%><br>**

**Address:<%=r1.getAddress()%><br>**