

# Database

```
<web-app>
  <welcome-file-list>
    <welcome-file>Login.jsp</welcome-file>
  </welcome-file-list>

  <servlet>
    <servlet-name>SignUpServlet</servlet-name>
    <servlet-class>SignUpServlet</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>SignUpServlet</servlet-name>
    <url-pattern>/SignUpServlet</url-pattern>
  </servlet-mapping>

  <servlet>
    <servlet-name>LoginServlet</servlet-name>
    <servlet-class>LoginServlet</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>LoginServlet</servlet-name>
    <url-pattern>/LoginServlet</url-pattern>
  </servlet-mapping>
```

```
</web-app>
```

## Login.jsp

```
<!DOCTYPE html>
<html>
<head>
<title>login</title>
</head>
<body>
  <form action="LoginServlet" method="post">
    <center>
      <table>

        <tr><td colspan=2><h1>Login</h1></td></tr>

        <tr><td><h2>User Name :: </h2></td>
        <td><input type="text" name="userName"></td>
        </tr>
        <tr>
        <td><h2>Password :: </h2></td>
        <td><input type="password" name="passW"></td>
        </tr>
      </table></center>
      <center><input type="submit" value="Login"></center>
      <br/>

      <center>
        If you are not authorized user, please <a href="signup.jsp"><h2>Sign up</h2></a></td>
      </center>

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

## signup.jsp

```
<!DOCTYPE html>
<html>
<head>
<title>Sign Up</title>
</head>
```

```

<body>
    <form action="SignUpServlet" method="post">
    <br/>

    <table align="center">
        <tr><td>User Name :: </td><td><input type="text" name="username"></td></tr>

        <tr><td>Password :: </td><td><input type="text" name="password"></td></tr>

        <tr><td>Retype Password :: </td><td><input type="text" name="repass"></td></tr>

        <tr><td>eMail :: </td><td><input type="text" name="email"></td></tr>

        <tr><td>Address :: </td><td><input type="text" name="address"></td></tr>

    </table>
    <br/>
    <center><input type="submit" value="Sign Up"></center>
    </form>
</body>
</html>

```

```

import java.io.*;
import java.sql.*;
import java.util.Vector;
import javax.servlet.*;
import javax.servlet.http.*;
import javax.swing.*;
public class LoginServlet extends HttpServlet
{
    Connection con;
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
    {
        String name=request.getParameter("userName");
        String pass=request.getParameter("passW");

        try{
            Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
            con=DriverManager.getConnection("jdbc:odbc:userDB","","");
            System.out.println("success connection for check");
        }
        catch(ClassNotFoundException e2) { e2.printStackTrace(); }
        catch(SQLException e1) { e1.printStackTrace(); }
        System.out.println("success connection for check");

        boolean flag=false;

        String sql = "select username from mytable where username= ? and password=?";

        try {
            PreparedStatement stmt = con.prepareStatement(sql);
            stmt.setString(1,name);
            stmt.setString(2,pass);
            ResultSet rs = stmt.executeQuery();
            while(rs.next())
            {
                flag=true;
            }
            rs.close();
            if(flag==true)
            {
                RequestDispatcher rd=this.getServletContext().getRequestDispatcher("/loginSuccessful.jsp");
                rd.forward(request, response);
            }
            else

```

```

        response.sendRedirect("login.jsp");
        con.close();
    } catch (SQLException e) {

        e.printStackTrace();
    }
}

public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
{
    doGet(request, response);
}

import java.io.*;
import java.sql.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;
public class SignUpServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
    {
        boolean isMissingValue = false;

        String userName = request.getParameter("username");
        if (userName.equals("") || userName.equals("Missing_user_name"))
        {
            userName = new String("Missing_user_name");
            isMissingValue = true;
        }
        String passWord = request.getParameter("password");
        if (passWord.equals("") || passWord.equals("Missing_password"))
        {
            passWord = new String("Missing_password");
            isMissingValue = true;
        }
        String repassW = request.getParameter("repass");
        if (passWord.equals("") || passWord.equals("Missing_retype_password"))
        {
            passWord = new String("Missing_retype_password");
            isMissingValue = true;
        }
        String eMail = request.getParameter("email");
        if (passWord.equals("") || passWord.equals("Missing_email"))
        {
            passWord = new String("Missing_email");
            isMissingValue = true;
        }
        String add = request.getParameter("address");
        if (passWord.equals("") || passWord.equals("Missing_address"))
        {
            passWord = new String("Missing_address");
            isMissingValue = true;
        }

        if (isMissingValue) {
            response.sendRedirect("signup.jsp");
        }

        else if (repassW.equals(passWord))
        {

            Connection con ;
            Statement stm;
            String sql = new String();
            try {

```

```

        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        String url = "jdbc:odbc:userDB";
        con = DriverManager.getConnection(url, " ", " ");
        stm= con.createStatement();

        sql="INSERT INTO mytable VALUES
            ('"+userName+"','"+passWord+"','"+eMail+"','"+add+"')";

        System.out.println(sql);

        stm.executeUpdate(sql);

        System.out.println("Insertion is completed.");

    } catch (ClassNotFoundException ec)
    { System.out.println(ec.getMessage());
    }
    catch (SQLException es)
    { System.out.println(es.getMessage());
    }

    response.sendRedirect("login.jsp");

    }
    else
    {
        response.sendRedirect("login.jsp");
    }

    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
}
public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
{
    doGet(request, response);
}
}

```

## Login

User Name ::

Password ::

If you are not authorized user, please

[Sign up](#)

User Name ::

Password ::

Retype Password ::

eMail ::

# EXERCISES

Ex1.

<p>Enter your FirstName, LastName and Email</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> </p> <p> <input type="button" value="Submit"/> </p>	<p>Fill all Fields</p> <p>Enter your FirstName, LastName and Email</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> </p> <p> <input type="button" value="Submit"/> </p>						
<h2>Guest List</h2> <table> <tr> <th>First Name</th> <th>Last Name</th> <th>Email</th> </tr> <tr> <td>Mg</td> <td>Mg</td> <td>mm@gmail.com</td> </tr> </table>		First Name	Last Name	Email	Mg	Mg	mm@gmail.com
First Name	Last Name	Email					
Mg	Mg	mm@gmail.com					

```

<web-app>
    <welcome-file-list>
        <welcome-file>welcome.jsp</welcome-file>
    </welcome-file-list>
</web-app>
welcome.jsp
<!DOCTYPE >
<html>
<head>
<title>Insert title here</title>
</head>
<body>
<form action="/DBEx/Show3.jsp" method = "get">
<p>Enter your FirstName, LastName and Email</p>
<table>
<tr><td>FirstName</td>
<td><input type = "text" name = "fname" /></td></tr>
<tr><td>LastName</td>
<td><input type = "text" name = "lname" /></td></tr>
<tr><td>Email</td>
<td><input type = "text" name = "email" /></td></tr>
<tr><td><input type = "submit" value = "Submit" /></td></tr></table></form></body></html>
Show3.jsp
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<body>
<%String f=request.getParameter("fname");
String l=request.getParameter("lname");
String e=request.getParameter("email");
if(l!=""&&f!=""&&e!="")
{
%>
<h1>Guest List</h1>
<table><tr><th>First Name</th><th>Last Name</th><th>Email</th></tr>
<tr><td>
<%=f%>
</td>
<td><%=l%></td>
<td><%=e%></td></tr>
</table>
<% }
else
{
%>
<font color='red'>Fill all Fields</font>
<%@ include file="welcome.jsp" %>
<% } %></body></html>

```

<p>First Name <input type="text" value="Nyi"/></p> <p>Last Name <input type="text" value="Nyi"/></p> <p>Email <input type="text" value="nn@gmail.com"/></p> <p><input type="button" value="Show"/></p> <p>Table Name Guest ODBC Name Uni</p>	<p><b>Insert Successful!!!</b></p> <p><b>Your Information!</b></p> <p>First Name: <b>Nyi</b> Last Name: <b>Nyi</b> Email: <b>nn@gmail.com</b></p> <p>Go back to <a href="#">UserInfo</a> page.</p>
--	--

```

<web-app>
  <welcome-file-list>
    <welcome-file>userinfo.jsp</welcome-file>
  </welcome-file-list>
</web-app>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert User Info</title>
</head>
<body>
<%
    String fn = "";
        fn = request.getParameter("txtFName");
    String ln = "";
    ln = request.getParameter("txtLName");
    String em = "";
    em = request.getParameter("txtEmail");%>
<form action="UserShow.jsp" method="get">
<table>
<tr>
<td>First Name</td>
<td><input type="text" name="txtFName" value="<%= fn %>"></td>
</tr>
<tr>
<td>Last Name</td>
<td><input type="text" name="txtLName" value="<%= ln %>"></td>
</tr>
<tr>
<td>Email</td>
<td><input type="text" name="txtEmail" value="<%= em %>"></td>
</tr>
<tr>
<td colspan="2"><center><input type="submit" value="Show"></center></td>
</tr>
</table>
</form>
</body>
</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<%@page import="java.sql.*"%>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>

```

```

<body>
<%   String fn = request.getParameter("txtFName");
      String ln = request.getParameter("txtLName");
      String em = request.getParameter("txtEmail");
      if (fn == null || ln == null || em == null
|| fn.length() == 0 || ln.length() == 0 || em.length() == 0) {
          response.sendRedirect("UserInfo.jsp");
      } else {
if(insert(fn,ln,em)){%>
<b>Insert Successful!!!</b>
<h1>Your Information!</h1>
          First Name:<b><%= fn%></b><br>
          Last Name:<b><%= ln%></b><br>
          Email: <b><%= em%></b><br><br>
          Go back to <a href="UserInfo.jsp">UserInfo</a> page.
<% }else{%>
<b>Something wrong in database!!!</b>
<% }
      }
%>
</body>
<%!
boolean insert(String fn, String ln, String em) {
    try {
        try {
            Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        } catch (Exception e) {
        }
        try {
            Connection con = DriverManager.getConnection("jdbc:odbc:Uni", "", "");
            String s = "insert into Guest values(?,?,?)";
            PreparedStatement smt = con.prepareStatement(s);
            smt.setString(1, fn);
            smt.setString(2, ln);
            smt.setString(3, em);
            smt.executeUpdate();
            return true;
        } catch (Exception e) {
        }
        return false;
    }
}
%>
</html>

```

Ex3

<p><b>Guest Book Insert, Update, Delete, Select</b></p> <p><a href="#">Insert</a>   <a href="#">Update</a>   <a href="#">Delete</a>   <a href="#">SelectAll</a>   <a href="#">Select</a></p>	<p><b>Guest Book Insert, Update, Delete, Select</b></p> <p><a href="#">Insert</a>   <a href="#">Update</a>   <a href="#">Delete</a>   <a href="#">SelectAll</a>   <a href="#">Select</a></p> <p>First Name <input type="text"/></p> <p>Last Name <input type="text"/></p> <p>Email <input type="text"/></p> <p><input type="button" value="insert"/></p>									
<p><b>Guest Book Insert, Update, Delete, Select</b></p> <p><a href="#">Insert</a>   <a href="#">Update</a>   <a href="#">Delete</a>   <a href="#">SelectAll</a>   <a href="#">Select</a></p> <p>Old Email <input type="text"/></p> <p>New Email <input type="text"/></p> <p><input type="button" value="update"/></p>	<p><b>Guest Book Insert, Update, Delete, Select</b></p> <p><a href="#">Insert</a>   <a href="#">Update</a>   <a href="#">Delete</a>   <a href="#">SelectAll</a>   <a href="#">Select</a></p> <p>Email <input type="text"/></p> <p><input type="button" value="Delete"/></p>									
<p><b>Guest Book Insert, Update, Delete, Select</b></p> <p><a href="#">Insert</a>   <a href="#">Update</a>   <a href="#">Delete</a>   <a href="#">SelectAll</a>   <a href="#">Select</a></p> <p>Enter Email <input type="text"/> <input type="button" value="search"/></p>	<p><b>Guest Book Insert, Update, Delete, Select</b></p> <p><a href="#">Insert</a>   <a href="#">Update</a>   <a href="#">Delete</a>   <a href="#">SelectAll</a>   <a href="#">Select</a></p> <p>Guest Data</p> <table border="1"> <thead> <tr> <th>First Name</th> <th>Last Name</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>Zaw</td> <td>Zaw</td> <td>zaw1234@gmail.com</td> </tr> <tr> <td>ma</td> <td>ma</td> <td>dd@gmail.com</td> </tr> </tbody> </table>	First Name	Last Name	Email	Zaw	Zaw	zaw1234@gmail.com	ma	ma	dd@gmail.com
First Name	Last Name	Email								
Zaw	Zaw	zaw1234@gmail.com								
ma	ma	dd@gmail.com								

index.jsp

```

<html>
<body>
    <center><%@include file="menu.jsp" %></center>
</body>
</html>

```

menu.jsp

```
<html>
<body><h2> Guest Book Insert, Update, Delete, Select</h2>
<a href="insert.jsp">Insert</a> | <a href="update.jsp">Update</a> | <a href="delete.jsp">Delete | <a
href="selectAll.jsp">SelectAll</a> |
  <a href="select.jsp">Select</a>
</body>
</html>
```

insert.jsp

```
<html>
<body><center>
<%@include file="menu.jsp" %>
<form action="saveGuest.jsp">

    First Name<input type="text" name="txtFName" size="50"><br>
    Last Name    <input type="text" name="txtLName" size="50"><br>
    Email <input type="text" name="txtEmail" size="50"> <br>
                                <input type="submit" value="insert">

</form>
</center>
</body>
```

</html>

saveGuest.jsp

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

```
<body><center>
<%@include file="menu.jsp" %><br>
```

```
<%
```

```
try{
```

```
    String url=application.getInitParameter("url");
    String fname=request.getParameter("txtFName");
    String lname=request.getParameter("txtLName");
    String email=request.getParameter("txtEmail");

    Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
    Connection con=DriverManager.getConnection("jdbc:odbc:guestdb");
```

```
    String sql="INSERT INTO Guest Values(?,?,?)";
    PreparedStatement pstmt=con.prepareStatement(sql);
    pstmt.setString(1,fname);
    pstmt.setString(2,lname);
    pstmt.setString(3,email);
```

```
    int r=pstmt.executeUpdate();
    if(r>0)
        out.println("Insert successful");
    else out.println("Insertion fail");
```

```
        pstmt.close();
        con.close();
    } catch(ClassNotFoundException e)
    {
        .printStackTrace();
    } catch(SQLException e)
    { .printStackTrace();
```

```
    }

    %>
```

```
</center>
```

```
</body>
```

```
</html>
```



### update.jsp

```
<html>
<body><center>
    <%@include file="menu.jsp" %>

    <form action="updateGuest.jsp">

        Old Email      <input type="text" name="o" size="50"><br>
        New Email      <input type="text" name="n" size="50"><br>
        <input type="submit" value="update">
    </form>
    </center>
</body>
</html>
```

### updateGuest.jsp

```
<%@ page import="java.sql.*" %>
<html>
<body><center>
<%@include file="menu.jsp" %><br>
<%
    try{
        String url=application.getInitParameter("url");
        String oldmail=request.getParameter("o");
        String newmail=request.getParameter("n");
        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        Connection con=DriverManager.getConnection("jdbc:odbc:guestdb");
        String sql="update Guest set email=? where email=?";
        PreparedStatement pstmt=con.prepareStatement(sql);
        pstmt.setString(2,oldmail);
        pstmt.setString(1,newmail);
        int r=pstmt.executeUpdate();

        if(r>0)
            out.println("update successful");
        else out.println("update fail");

        pstmt.close();
        con.close();
    } catch(ClassNotFoundException e)
    {
        e.printStackTrace();
    } catch(SQLException e)
    {
        e.printStackTrace();
    }
}%>
</center>
</body>
</html>
```

### delete.jsp

```
<html>
<body><center>
<%@include file="menu.jsp" %>

<form action="deleteGuest.jsp">

    Email<input type="text" name="e" size="50"><br>
    <input type="submit" value="Delete">

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

### deleteGuest.jsp

```
<%@ page import="java.sql.*" %>
<html>
<body><center>
<%@include file="menu.jsp" %><br>

<%
    try {
        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");

        String email=request.getParameter("e");
        Connection con=DriverManager.getConnection("jdbc:odbc:guestdb");
        String s = "delete from Guest where email=?";
        PreparedStatement psmt = con.prepareStatement(s);
        psmt.setString(1, email);
        int r=psmt.executeUpdate();
        if(r>0)
            out.println("delete successful");
        else out.println("Delete fail");
        smt.close();
        con.close();

    } catch (Exception e) { e.printStackTrace(); }

%>
<center></body></html>
```

### select.jsp

```
<html>
<body><center>
    <%@include file="menu.jsp" %><br><br>
    <form method=get action=Search.jsp>
    Enter Email<input type="text" name="e">
    <input type="submit" value="search">
    </form>
</center></body></html>
```

### Search.jsp

```
<%@ page import="java.sql.*" %>
<html>
<body><center>
    <%@include file="menu.jsp" %><br>
<%
    try {
        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        Connection con = DriverManager.getConnection("jdbc:odbc:guestdb", "", "");
        String s = "select * from Guest where email=?";
        PreparedStatement smt = con.prepareStatement(s);
        smt.setString(1, email);
        ResultSet rs=smt.executeQuery();

    %>
<table border="1" width="50%"><caption> Student Data </caption>
    <tr><th>First Name</th><th>LastName</th><th>Email</th></tr>
    <%
        while(rs.next()) {
    %>
    <tr>
        <td><%=rs.getString(1)%></td>
        <td><%=rs.getString(2)%></td>
        <td><%=rs.getString(3)%></td>
    </tr>
    <%
        }
        rs.close();
        smt.close();
```

```

        con.close();
    } catch (ClassNotFoundException e)
    {
        e.printStackTrace();
    } catch (SQLException e)
    {
        e.toString();
    }
}%<center>
</body>
</html>
web.xml
<web-app>
    <welcome-file-list>
        <welcome-file>index.jsp</welcome-file>
    </welcome-file-list>
</web-app>

```