Login and Signup Servlet Project Documentation

## 1. Create the Database Table in Oracle

CREATE TABLE users (  
 username VARCHAR(50) PRIMARY KEY,  
 password VARCHAR(255) NOT NULL  
);

## 2. Project Structure in NetBeans

LoginSignUpProject/  
├── Web Pages/  
│ ├── index.html  
│ ├── signup.html  
│ └── Home.html  
├── Source Packages/  
│ └── sumith/  
│ ├── LoginServlet.java  
│ └── SignupServlet.java  
├── Configuration Files/  
│ └── context.xml  
└── Libraries/  
 └── ojdbc6.jar

## 3. index.html

<!DOCTYPE html>  
<html>  
<head><title>Login</title></head>  
<body>  
<center>  
<h2>Login</h2>  
<form action="LoginServlet" method="post">  
<table>  
<tr><td>Username:</td><td><input type="text" name="username"/></td></tr>  
<tr><td>Password:</td><td><input type="password" name="password"/></td></tr>  
<tr><td></td><td><input type="submit" value="Login"/></td></tr>  
</table>  
</form>  
<p>Don't have an account? <a href="signup.html">Signup</a></p>  
</center>  
</body>  
</html>

## 4. signup.html

<!DOCTYPE html>  
<html>  
<head><title>Signup</title></head>  
<body>  
<center>  
<h2>Signup</h2>  
<form action="SignupServlet" method="post">  
<table>  
<tr><td>Username:</td><td><input type="text" name="username"/></td></tr>  
<tr><td>Password:</td><td><input type="password" name="password"/></td></tr>  
<tr><td></td><td><input type="submit" value="Signup"/></td></tr>  
</table>  
</form>  
</center>  
</body>  
</html>

## 5. Home.html

<!DOCTYPE html>  
<html>  
<head><title>Home</title></head>  
<body><center><h2>Login Successful! Welcome to Home Page</h2></center></body>  
</html>

## 6. LoginServlet.java

package sumith;  
  
import java.io.\*;  
import java.sql.\*;  
import javax.naming.\*;  
import javax.sql.DataSource;  
import javax.servlet.\*;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.\*;  
  
@WebServlet("/LoginServlet")  
public class LoginServlet extends HttpServlet {  
 protected void doPost(HttpServletRequest request, HttpServletResponse response)  
 throws ServletException, IOException {  
  
 response.setContentType("text/html");  
 PrintWriter out = response.getWriter();  
 String username = request.getParameter("username");  
 String password = request.getParameter("password");  
  
 try {  
 Context initContext = new InitialContext();  
 Context envContext = (Context) initContext.lookup("java:/comp/env");  
 DataSource ds = (DataSource) envContext.lookup("jdbc/OracleDB");  
 Connection conn = ds.getConnection();  
  
 String sql = "SELECT \* FROM users WHERE username = ? AND password = ?";  
 PreparedStatement pst = conn.prepareStatement(sql);  
 pst.setString(1, username);  
 pst.setString(2, password);  
 ResultSet rs = pst.executeQuery();  
  
 if (rs.next()) {  
 response.sendRedirect("Home.html");  
 } else {  
 out.println("<h3 style='color:red;'>Invalid Username or Password</h3>");  
 }  
 rs.close(); pst.close(); conn.close();  
 } catch (Exception e) {  
 out.println("<h3>Error: " + e.getMessage() + "</h3>");  
 }  
 }  
}

## 7. SignupServlet.java

package sumith;  
  
import java.io.\*;  
import java.sql.\*;  
import javax.naming.\*;  
import javax.sql.DataSource;  
import javax.servlet.\*;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.\*;  
  
@WebServlet("/SignupServlet")  
public class SignupServlet extends HttpServlet {  
 protected void doPost(HttpServletRequest request, HttpServletResponse response)  
 throws ServletException, IOException {  
  
 response.setContentType("text/html");  
 PrintWriter out = response.getWriter();  
 String username = request.getParameter("username");  
 String password = request.getParameter("password");  
  
 try {  
 Context initContext = new InitialContext();  
 Context envContext = (Context) initContext.lookup("java:/comp/env");  
 DataSource ds = (DataSource) envContext.lookup("jdbc/OracleDB");  
 Connection conn = ds.getConnection();  
  
 String sql = "INSERT INTO users (username, password) VALUES (?, ?)";  
 PreparedStatement pst = conn.prepareStatement(sql);  
 pst.setString(1, username);  
 pst.setString(2, password);  
  
 int rowsInserted = pst.executeUpdate();  
 if (rowsInserted > 0) {  
 out.println("<h3 style='color:green;'>Signup successful! Please <a href='index.html'>Login</a></h3>");  
 } else {  
 out.println("<h3 style='color:red;'>Signup failed. Try again.</h3>");  
 }  
 pst.close(); conn.close();  
 } catch (Exception e) {  
 out.println("<h3>Error: " + e.getMessage() + "</h3>");  
 }  
 }  
}

## 8. Deployment Steps in NetBeans

1. Create a new Java Web Application in NetBeans (without web.xml).  
2. Add your servlet files to the `sumith` package.  
3. Place HTML files inside the Web Pages directory.  
4. Add `ojdbc6.jar` to project Libraries.  
5. Run the project.  
6. Access the login page via: http://localhost:8080/LoginSignUpProject/index.html