**Objective:-** Take User Name and Email-id from user in html page. Store Email id in xml file also. Display both values in servlet. (Servlet)

**Code :-**

**UserServlet.java**

package Practicle\_5;  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import javax.servlet.ServletException;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
  
@WebServlet("/UserServlet")  
public class UserServlet extends HttpServlet {  
  
 // Handle POST requests  
 protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  
 response.setContentType("text/html");  
 PrintWriter out = response.getWriter();  
  
 try {  
 // Retrieve form data  
 String username = request.getParameter("username");  
 String email = request.getParameter("email");  
  
 // Validate form data  
 if (username == null || username.trim().isEmpty() || email == null || email.trim().isEmpty()) {  
 out.println("<html><head><title>Error</title>");  
 out.println("<link href='https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;500;600&display=swap' rel='stylesheet'>");  
 out.println("<style>");  
 out.println("body { font-family: 'Poppins', sans-serif; background: #ffdddd; padding: 40px; text-align: center; }");  
 out.println("h2 { color: #e74c3c; }");  
 out.println("p { font-size: 18px; }");  
 out.println("a { text-decoration: none; color: #3498db; font-size: 16px; }");  
 out.println("</style></head>");  
 out.println("<body>");  
 out.println("<h2>Error: Both username and email are required!</h2>");  
 out.println("<a href='user.html'>Go Back</a>");  
 out.println("</body></html>");  
 return;  
 }  
  
 // Display user information with consistent theme  
 out.println("<html><head><title>User Info</title>");  
 out.println("<link href='https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;500;600&display=swap' rel='stylesheet'>");  
 out.println("<style>");  
 out.println("body { font-family: 'Poppins', sans-serif; background: linear-gradient(to right, #4facfe, #00f2fe); color: #333; min-height: 100vh; display: flex; justify-content: center; align-items: center; }");  
 out.println(".container { background: #fff; padding: 40px; border-radius: 12px; box-shadow: 0 8px 20px rgba(0, 0, 0, 0.1); width: 450px; text-align: center; }");  
 out.println("h2 { font-size: 28px; color: #2c3e50; }");  
 out.println("p { font-size: 18px; line-height: 1.6; color: #555; }");  
 out.println("a { display: inline-block; margin-top: 20px; text-decoration: none; color: #3498db; font-weight: 500; transition: 0.3s; }");  
 out.println("a:hover { color: #2980b9; }");  
 out.println("</style></head>");  
 out.println("<body>");  
 out.println("<div class='container'>");  
 out.println("<h2>User Information</h2>");  
 out.println("<p><strong>Username:</strong> " + username + "</p>");  
 out.println("<p><strong>Email ID:</strong> " + email + "</p>");  
 out.println("<p style='color: green;'>Data submitted successfully!</p>");  
 out.println("<a href='user.html'>Go Back</a>");  
 out.println("</div>");  
 out.println("</body></html>");  
  
 } catch (Exception e) {  
 // Handle exceptions gracefully  
 out.println("<html><head><title>Error</title>");  
 out.println("<link href='https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;500;600&display=swap' rel='stylesheet'>");  
 out.println("<style>");  
 out.println("body { font-family: 'Poppins', sans-serif; background: #ffdddd; padding: 40px; text-align: center; }");  
 out.println("h2 { color: #e74c3c; }");  
 out.println("p { font-size: 18px; }");  
 out.println("a { text-decoration: none; color: #3498db; font-size: 16px; }");  
 out.println("</style></head>");  
 out.println("<body>");  
 out.println("<h2>Error: " + e.getMessage() + "</h2>");  
 out.println("<a href='user.html'>Go Back</a>");  
 out.println("</body></html>");  
 e.printStackTrace();  
 } finally {  
 out.close();  
 }  
 }  
}

**XMLHandler.java**

package Practicle\_5;  
  
import java.io.File;  
import javax.xml.parsers.DocumentBuilder;  
import javax.xml.parsers.DocumentBuilderFactory;  
import javax.xml.parsers.ParserConfigurationException;  
import javax.xml.transform.Transformer;  
import javax.xml.transform.TransformerFactory;  
import javax.xml.transform.dom.DOMSource;  
import javax.xml.transform.stream.StreamResult;  
import org.w3c.dom.Document;  
import org.w3c.dom.Element;  
import org.w3c.dom.NodeList;  
  
public class XMLHandler {  
  
 private static final String *XML\_FILE\_PATH* = "D:/Aryan Data/Usefull Data/Semester - 6/Advanced\_Java/Lab Manual/Experiment - 5/Experiment\_5/src/main/webapp/WEB-INF/user.xml";  
  
 public void addEmailToXML(String email) {  
 try {  
 File file = new File(*XML\_FILE\_PATH*);  
  
 Document doc;  
 Element rootElement;  
  
 if (file.exists()) {  
 // Parse existing XML  
 DocumentBuilderFactory dbFactory = DocumentBuilderFactory.*newInstance*();  
 DocumentBuilder dBuilder = dbFactory.newDocumentBuilder();  
 doc = dBuilder.parse(file);  
 rootElement = doc.getDocumentElement();  
 } else {  
 // Create new XML  
 DocumentBuilderFactory dbFactory = DocumentBuilderFactory.*newInstance*();  
 DocumentBuilder dBuilder = dbFactory.newDocumentBuilder();  
 doc = dBuilder.newDocument();  
 rootElement = doc.createElement("Users");  
 doc.appendChild(rootElement);  
 }  
  
 // Create a new element for email  
 Element user = doc.createElement("User");  
 Element emailElement = doc.createElement("Email");  
 emailElement.appendChild(doc.createTextNode(email));  
  
 user.appendChild(emailElement);  
 rootElement.appendChild(user);  
  
 // Write the content into XML  
 TransformerFactory transformerFactory = TransformerFactory.*newInstance*();  
 Transformer transformer = transformerFactory.newTransformer();  
 DOMSource source = new DOMSource(doc);  
 StreamResult result = new StreamResult(file);  
 transformer.transform(source, result);  
  
 } catch (Exception e) {  
 e.printStackTrace();  
 }  
 }  
}

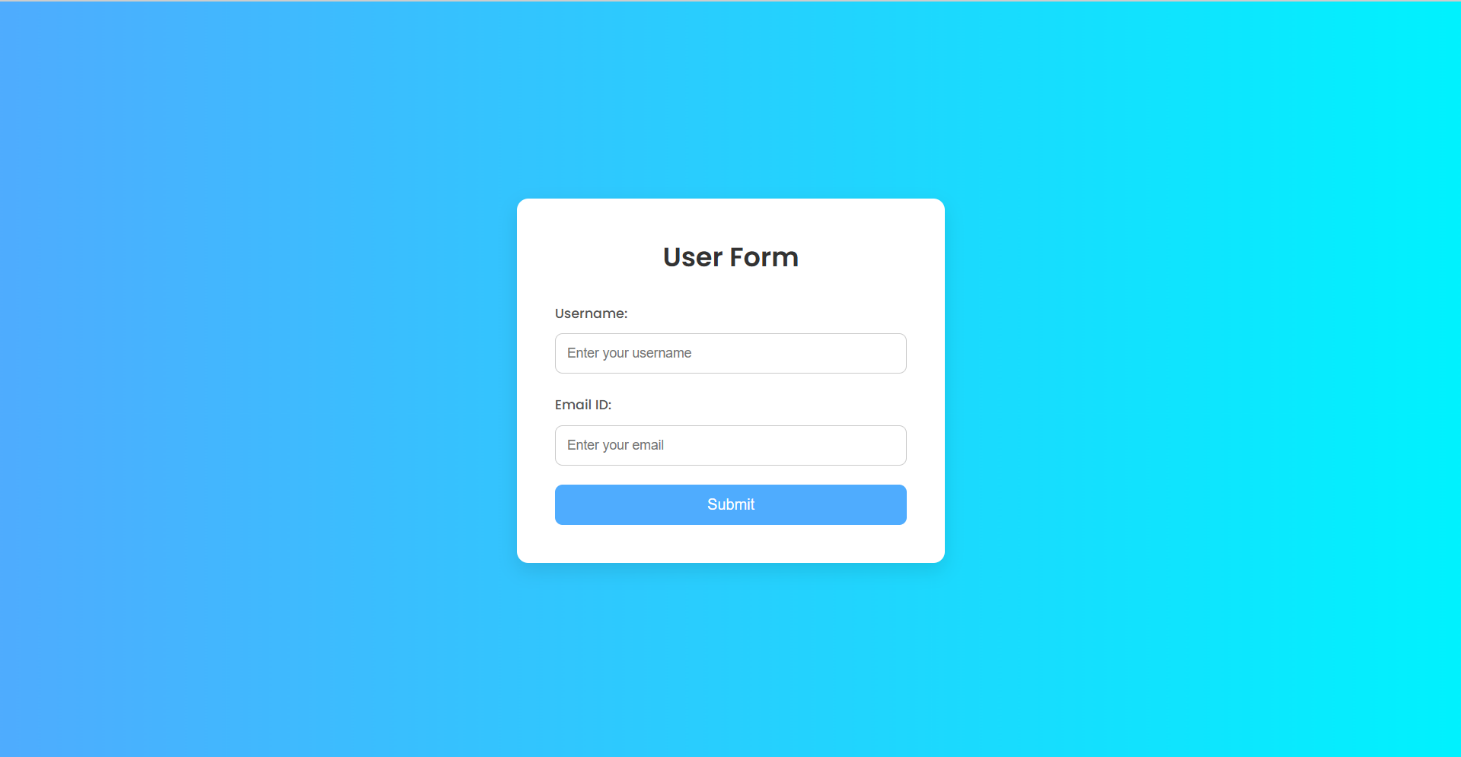
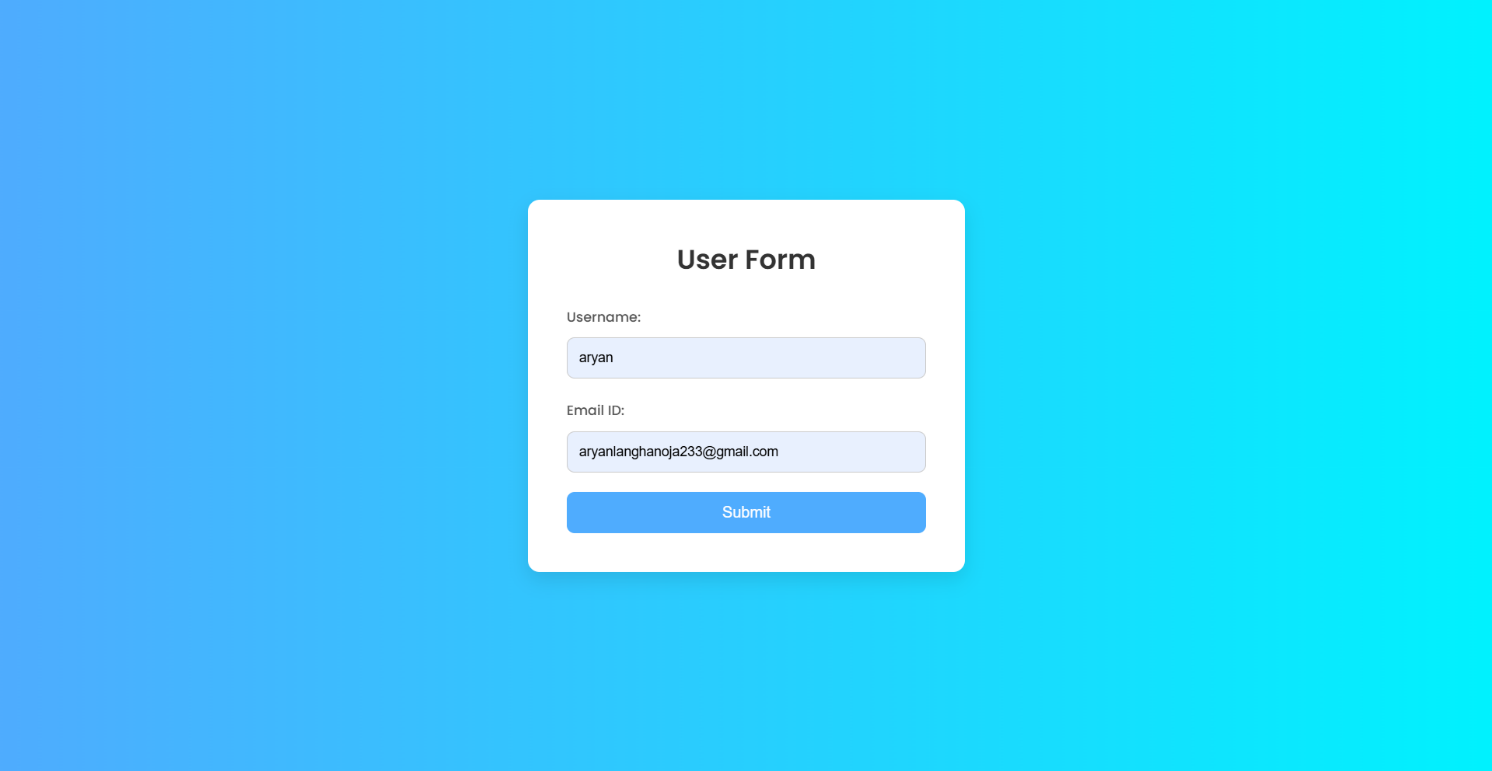
**User.html**

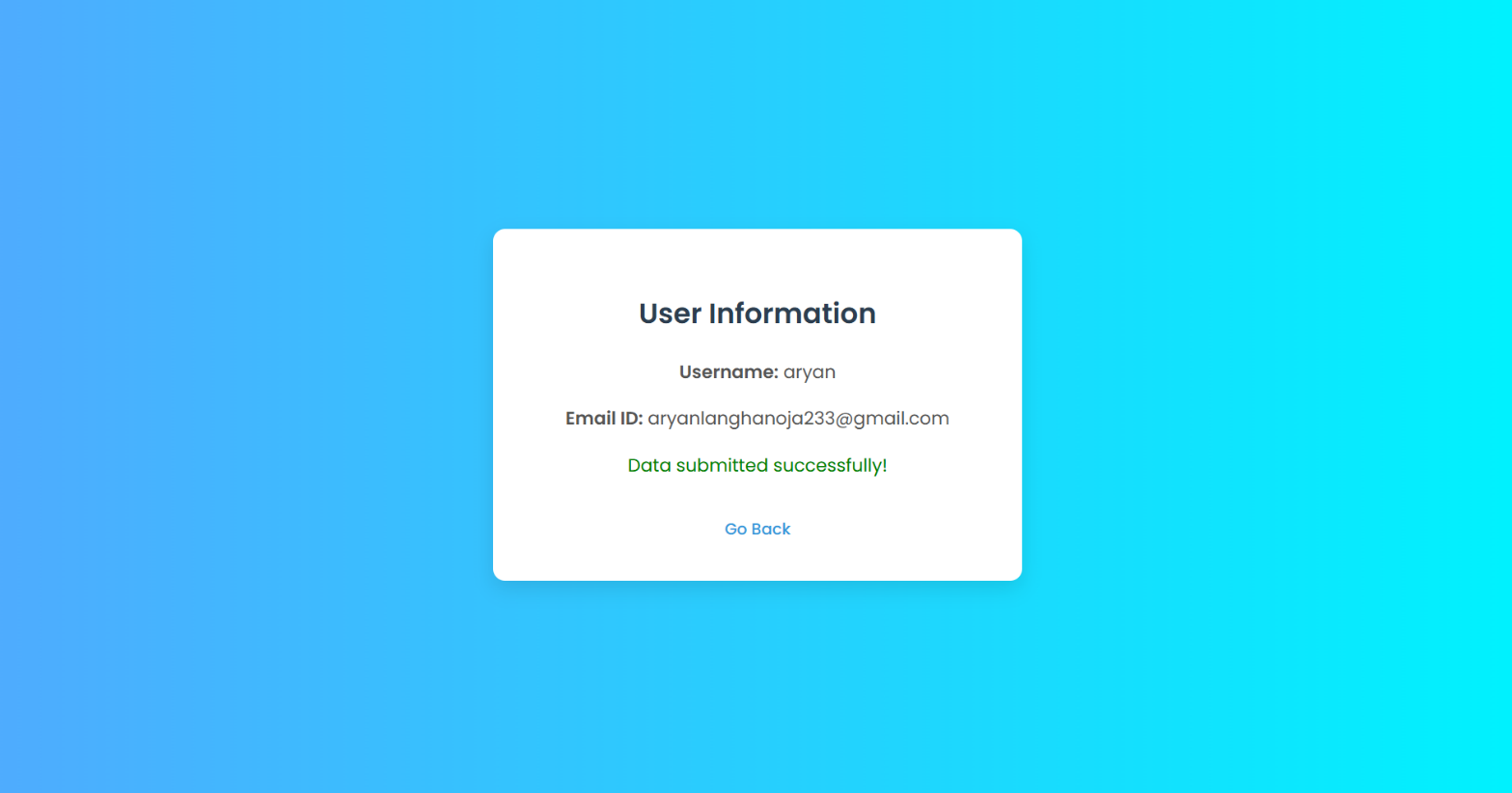
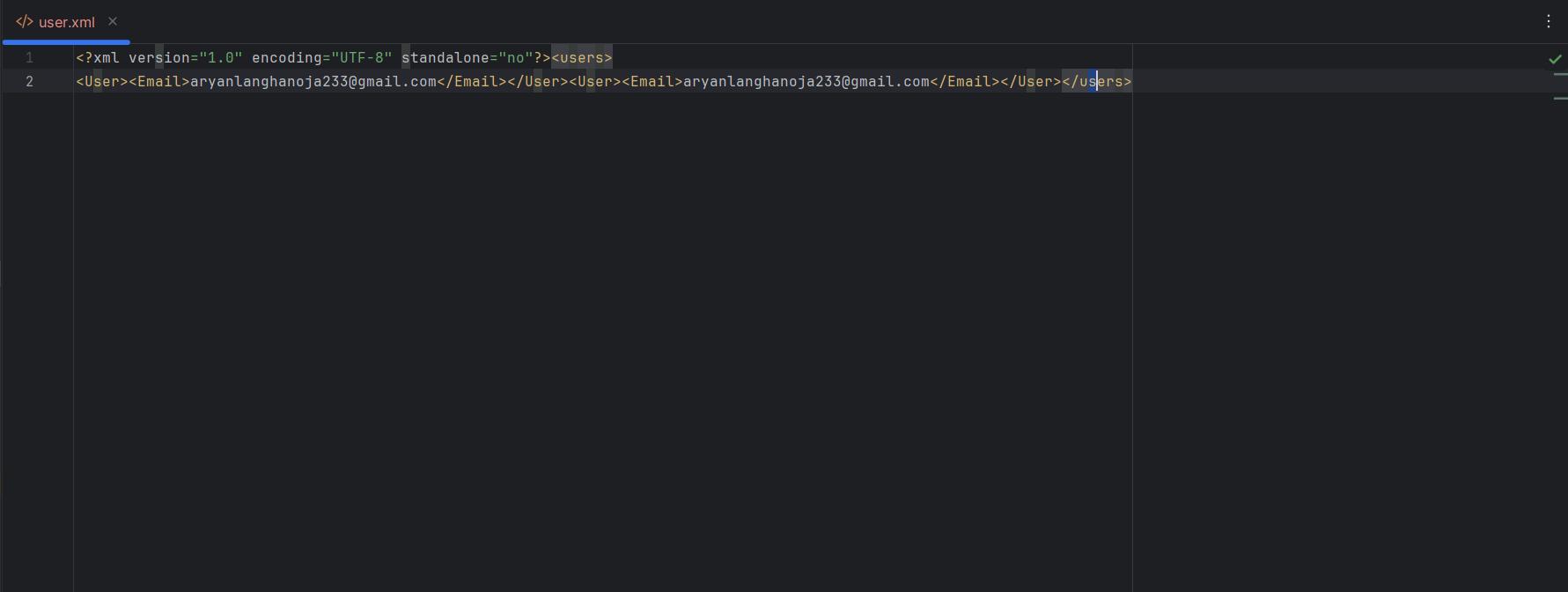
<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>User Form</title>  
 <style>  
 body {  
 font-family: Arial, sans-serif;  
 margin: 50px;  
 text-align: center;  
 }  
 form {  
 max-width: 400px;  
 margin: auto;  
 padding: 20px;  
 background: #f4f4f4;  
 border-radius: 10px;  
 box-shadow: 0 0 10px #ccc;  
 }  
 input, button {  
 display: block;  
 width: 100%;  
 padding: 10px;  
 margin-bottom: 10px;  
 }  
 button {  
 background: #4CAF50;  
 color: white;  
 border: none;  
 cursor: pointer;  
 }  
 button:hover {  
 background: #45a049;  
 }  
 </style>  
</head>  
<body>  
  
<h2>User Form</h2>  
<form action="UserServlet" method="POST">  
 <label for="username">Username:</label>  
 <input type="text" id="username" name="username" required>  
  
 <label for="email">Email ID:</label>  
 <input type="email" id="email" name="email" required>  
  
 <button type="submit">Submit</button>  
</form>  
  
</body>  
</html>

**User.xml**

<?xml version="1.0" encoding="UTF-8" standalone="no"?><users>  
<User><Email>aryanlanghanoja233@gmail.com</Email></User></users>

**Output:-**

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