# WEEK-1,2

**Design static web pages for home page that includes hyperlinks for registration page, login page and forgot password pages. Use form elements to create required web pages for the applications considered.**

**Scenario 1: Design Home page that comprises of 3 Frames. Top frame consists of Logo and title of the web page. Left frame comprises of links to different web pages and Right frame used to display the content of web pages.**

**Scenario 2: Left frame has links to Login page, Registration page, Contact us etc…**

**Scenario 3: Login page has username and password fields along with submit button, forgot password and sign up hyperlinks.**

**Scenario 4: Registration page has username, password, confirm password, email-id, Mobile Number, date of birth, Address, Gender fields, submit button etc…**

**DESCRIPTION:**

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It is often assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript. HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset. The window is divided into frames in a similar way the tables are organized: into rows and columns.

**MAIN.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<frameset rows="13%,87%">

<frame name="top" src="top\_frame.html"/>

<frameset cols="20%,80%">

<frame name="left" src="left\_frame.html"/>

<frame name="right" src="right\_frame.html"/>

</frameset>

</frameset>

</html>

**Top\_frame.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head> <style> h3{ padding-left: 100px; padding-top: 12px;

}

</style>

<body>

<img src="clglogo.jpg"alt="icon" height="50px"width="60px"style="float:left;">

<h3>GAYATRI VIDYA PARISHAD</h3>

</body>

</html>

**left\_frame.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<body >

<a href="login.html" target="right">Login Page</a><br>

<a href="registration.html" target="right">Registration Page</a><br>

<a href="contactus.html" target="right">ContactUs</a><br>

</body>

</html>

**right\_frame.HTML** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<body >

</body>

</html>

**login.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<body>

<center>username:<input type="text" id="username"></center>

<center>Password:<input type="password"id="password"></center>

<center><a href="" target="right">Forgot Password</a> <button type="button"

onclick="myFunction()">Submit</button></center>

<p id="demo"></p>

</body>

</html>

**registration.HTML** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<style>

p{ padding-left: 350px;

}

</style>

<body>

<p>Name:<input type="text"></p>

<p>DateofBirth:<input type="date"></p>

<p><input type="radio" id="female" name="gender" value="female">

<label for="female">Female</label><br>

<input type="radio" id="male" name="gender" value="male">

<label for="male">Male</label><br></p>

<p>Address:</Address>:<input type="text"></p>

<p>Emailid:<input type="text"></p>

<p>MobileNO:<input type="number"></p>

<p>UserName:<input type="text"></p>

<p>Password:<input type="password"></p>

<p>ConfirmPassword:<input type="password"></p>

<center><input type="button" value="Submit"></center>

</body>

</html>

**OUTPUT:**

Graphical user interface, text, application, Word

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

# WEEK-3

**Apply styles using CSS to the web pages designed in Week 1 & 2.**

**Scenario 1: Apply styles to web pages using inline, embedded and external style sheets.**

**Scenario 2: Use various background, text, font and color styles**

**Scenario 3: Apply boxes and columns styles Scenario 4: Use positioning and floating styles**

**DESCRIPTION:**

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML.Inline CSS contains the CSS property in the body section attached to the element is known as inline CSS. This kind of style is specified within an HTML tag using the style attribute.In Internal or Embedded CSS ,the CSS rule set should be within the HTML file in the head section i.e. the CSS is embedded within the <style> tag inside head section of the HTML file.External CSS contains separate CSS files that contain only style properties with the help of tag attributes.CSS property written in a separate file with .css extension and should be linked to the HTML document using link tag.

**MAIN.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<frameset rows="13%,87%">

<frame name="top" src="top\_frame.html"/>

<frameset cols="20%,80%">

<frame name="left" src="left\_frame.html"/>

<frame name="right" src="right\_frame.html"/>

</frameset>

</frameset>

</html>

**Top\_frame.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head> <style> h3{ padding-left: 100px; padding-top: 12px;

}

</style>

<body>

<img src="clglogo.jpg"alt="icon" height="50px"width="60px"style="float:left;">

<h3>GAYATRI VIDYA PARISHAD</h3>

</body>

</html>

**left\_frame.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<body style="background-color: aqua;">

<a href="login.html" target="right">Login Page</a><br>

<a href="registration.html" target="right">Registration Page</a><br>

<a href="contactus.html" target="right">ContactUs</a><br>

</body>

</html>

**right\_frame.HTML** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<link rel="stylesheet" href="mystyle.css">

</head>

<body >

</body>

</html>

**login.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<link rel="stylesheet" href="mystyle.css">

</head>

<body>

<center>username:<input type="text" id="username"></center> <center>Password:<input type="password"id="password"></center>

<center><a href="" target="right">Forgot Password</a> <button type="button" onclick="myFunction()">Submit</button></center>

<p id="demo"></p>

</body>

</html>

**registration.HTML** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<link rel="stylesheet" href="mystyle.css">

</head>

<style>

p{ padding-left: 350px;

}

</style>

<body>

<p>Name:<input type="text"></p>

<p>DateofBirth:<input type="date"></p>

<p><input type="radio" id="female" name="gender" value="female">

<label for="female">Female</label><br>

<input type="radio" id="male" name="gender" value="male">

<label for="male">Male</label><br></p>

<p>Address:</Address>:<input type="text"></p>

<p>Emailid:<input type="text"></p>

<p>MobileNO:<input type="number"></p>

<p>UserName:<input type="text"></p>

<p>Password:<input type="password"></p>

<p>ConfirmPassword:<input type="password"></p>

<center><input type="button" value="Submit"></center>

</body>

</html>

**OUTPUT:**

Graphical user interface, text

Description automatically generated

Graphical user interface

Description automatically generated

# WEEK-4

**Perform the client-side data validations using javascript for Scenario 3 and 4 in Week 1 & 2 Scenario 1: In login form, define username and password constraints and ensure that the credentials follow them.**

**Scenario 2: In registration form, username must be of atleast 6 characters. Password must be of atleast 8 characters and follow password constraints. Password and confirm password fields must match with each other. E-mail id must be of the form “yourname@domain.com”. Mobile number must be of 10 digits only and starting digit must be any number from 6-9 etc…**

**DESCRIPTION:**

JavaScript (JS) is the most popular lightweight, interpreted compiled programming language. It can be used for both [Client-side](https://www.geeksforgeeks.org/server-side-client-side-programming/) as well as [Server-side](https://www.geeksforgeeks.org/server-side-client-side-programming/) developments. JavaScript also known as a scripting language for web pages.

JavaScript can be added to your HTML file in two ways:

* Internal JavaScript
* External JavaScript

**Internal JavaScript**: We can add JS code directly to our HTML file by writing the code inside the <script> & </script>. The <script> tag can either be placed inside the <head> or the <body> tag according to the requirement.

**External JavaScript**: We can create the file with a .js extension and paste the JS code inside of it. After creating the file, add this file in <script src=”file\_name.js”> tag, and this <sctipt> can import inside <head> or <body> tag of the HTML file.

**MAIN.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<frameset rows="13%,87%">

<frame name="top" src="top\_frame.html"/>

<frameset cols="20%,80%">

<frame name="left" src="left\_frame.html"/>

<frame name="right" src="right\_frame.html"/>

</frameset>

</frameset>

</html>

**Top\_frame.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head> <style> h3{ padding-left: 100px; padding-top: 12px;

}

</style>

<body>

<img src="clglogo.jpg"alt="icon" height="50px"width="60px"style="float:left;">

<h3>GAYATRI VIDYA PARISHAD</h3>

</body>

</html>

**left\_frame.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<body style="background-color: aqua;">

<a href="login.html" target="right">Login Page</a><br>

<a href="registration.html" target="right">Registration Page</a><br>

<a href="contactus.html" target="right">ContactUs</a><br>

</body>

</html>

**right\_frame.HTML** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<link rel="stylesheet" href="mystyle.css">

</head>

<body >

</body>

</html>

**login.HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<link rel="stylesheet" href="mystyle.css">

<body>

<center>username:<input type="text" id="username"></center>

<center>Password:<input type="password"id="password"></center>

<center><a href="" target="right">Forgot Password</a> <button type="button" onclick="myFunction()">Submit</button></center>

<p id="demo"></p>

</body> <script> function myFunction() {

// Get the value of the input field with id="numb" let x = document.getElementById("username").value; let y= document.getElementById("password").value;

// If x is Not a Number or less than one or greater than 10

let text;

if (x.valuelength>=8&&y.valuelength>=8) { alert("successful");

} else { alert("invalid");

}

}

</script>

</html>

**registration.HTML** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<link rel="stylesheet" href="mystyle.css">

<body>

<div>

<p>Name:<input type="text" id="name"></p>

<p>DateofBirth:<input type="date" id="dob"></p>

<p><input type="radio" id="female" name="gender" value="female">

<label for="female">Female</label><br>

<input type="radio" id="male" name="gender" value="male">

<label for="male">Male</label><br></p>

<p>Address:</Address>:<input type="text" id="address"></p>

<p>Emailid:<input type="text" id="mail"></p>

<p>MobileNO:<input type="text" id="mobile"></p>

<p>UserName:<input type="text" id="username"></p>

<p>Password:<input type="password"id="password1"></p>

<p>ConfirmPassword:<input type="password"id="confirmpassword"></p>

<center><button type="button" onclick="myFunction()">Submit</button></center>

</div>

</body> <script>

function myFunction() {

let name=document.getElementById("name").value; let dob=document.getElementById("dob").value; let address=document.getElementById("address").value; let mail=document.getElementById("mail").value; let mobile=document.getElementById("mobile").value; let cpassword= document.getElementById("confirmpassword").value; let password= document.getElementById("password1").value; let username=document.getElementById("username").value; let r=0; if

(name==""||dob==""||address==""||mail==""||mobile==""||cpassword==""||password==""||username==

"") { r=1;

alert("empty field");

}

if(username.length<8){

r=1;

alert("username less than 6");

}

if(password.length<8){

r=1; alert("password <8");

}

if(cpassword.length<8){ r=1; alert("confirm password <8");

}

if(password!=cpassword){

r=1;

alert("confirm password and password are diff");

}

if(mobile.length!=10){ r=1;

alert("mobile no should have 10 char");

}

if(parseInt(mobile.charAt(0)<=6)){

r=1;

alert("first number in mobile no is <6");

} if(r==0){ alert("successful");

} else{ alert("invalid");

}

}

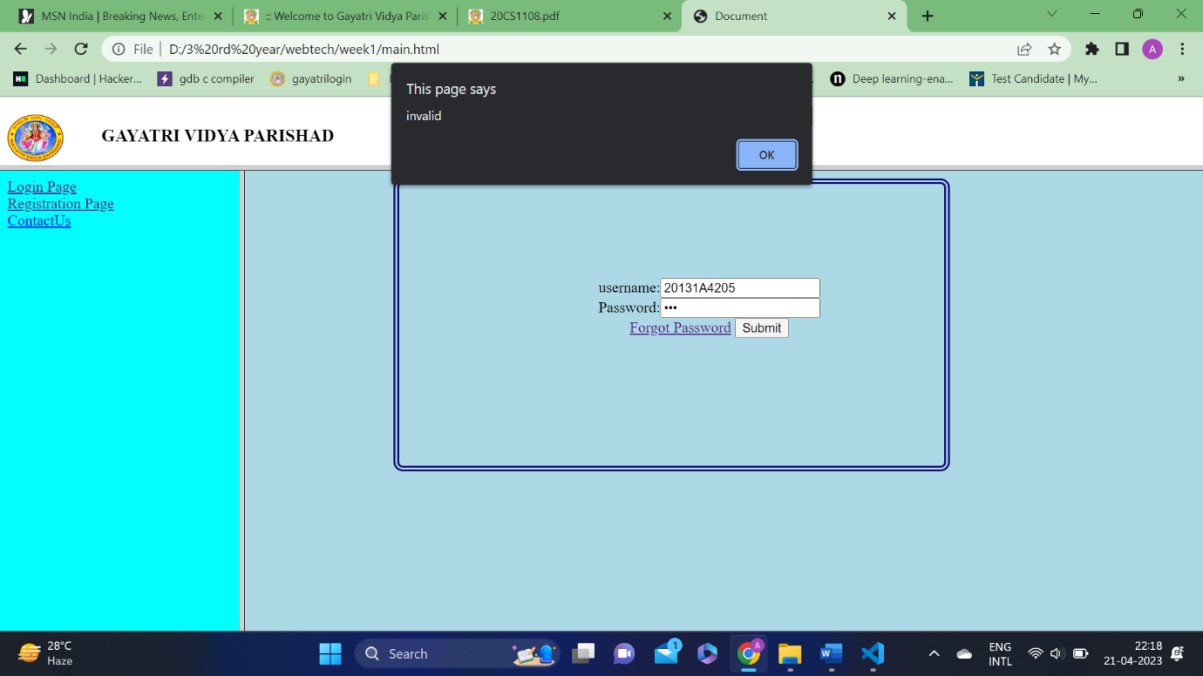
</script>

</html>

**OUTPUT**

A screenshot of a computer

Description automatically generated



# WEEK-5

**Create XML documents for chosen application and validate using DTD and schema. Also render the content of XML document using XSL**

**Scenario 1: XML document must have attributes and elements so that they can be validated against DTD/Schema.**

**Scenario 2: Check the data types of variables declared in XML document using Schema.**

**Scenario 3: Display the details of data contained in XML document in a table using XSL.**

**DESCRIPTION:**

XML stands for eXtensible Markup Language XML is a markup language much like HTML XML was designed to store and transport data. DTD stands for Document Type Definition. A DTD defines the structure and the legal elements and attributes of an XML document. An XML document validated against a DTD is both "Well Formed" and "Valid". XSL (eXtensible Stylesheet Language) is a styling language for XML.

**Books.xml**

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

<?xml-stylesheet type="text/xsl" href="transform.xsl"?>

<!DOCTYPE catalog [

<!ELEMENT catalog (book)\*>

<!ELEMENT book (title,author,publication,edition,ISBN,price)>

<!ELEMENT title (#PCDATA)>

<!ELEMENT author (#PCDATA)>

<!ELEMENT publication (#PCDATA)>

<!ELEMENT edition (#PCDATA)>

<!ELEMENT ISBN (#PCDATA)>

<!ELEMENT price (#PCDATA)>

] >

<catalog>

<book>

<title>XML Bildt</title>

<author>Winston</author>

<publication>Willey</publication>

<edition>5</edition>

<ISBN>0-7645-4750-7</ISBN>

<price>1200</price>

</book>

<book>

<title>AI</title>

<author>Russel</author>

<publication>Princeton</publication>

<edition>5</edition>

<ISBN>0-13-730-7</ISBN>

<price>1700</price>

</book>

</catalog>

**Datatype.xsd**

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

<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">

<xs:element name="catalog">

<xs:complexType>

<xs:sequence>

<xs:element name=" Title " type="xs:string"/>

<xs:element name=" Author " type="xs:string"/>

<xs:element name=" Publication " type="xs:string"/>

<xs:element name=" Edition " type="xs:string"/>

<xs:element name=" ISBN " type="xs:integer"/>

<xs:element name=" Price " type="xs:decimal"/>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:schema>

**Transform.xsl**

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

<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

<xsl:template match="/">

<html>

<body>

<h2>Book Collection</h2>

<table border="1">

<tr bgcolor="#9acd32">

<th style="text-align:left">Title</th>

<th style="text-align:left">Author</th>

<th style="text-align:left">Publication</th>

<th style="text-align:left">Edition</th>

<th style="text-align:left">ISBN</th>

<th style="text-align:left">Price</th>

</tr>

<xsl:for-each select="catalog/book">

<tr>

<td><xsl:value-of select="title"/></td>

<td><xsl:value-of select="author"/></td>

<td><xsl:value-of select="publication"/></td>

<td><xsl:value-of select="edition"/></td>

<td><xsl:value-of select="ISBN"/></td>

<td><xsl:value-of select="price"/></td>

</tr>

</xsl:for-each>

</table>

</body>

</html>

</xsl:template>

</xsl:stylesheet>



# Week 6

**Create necessary tables for the application chosen using JDBC, establish the database connectivity.**

**Scenario 1: Establish the connectivity using JDBC drivers.**

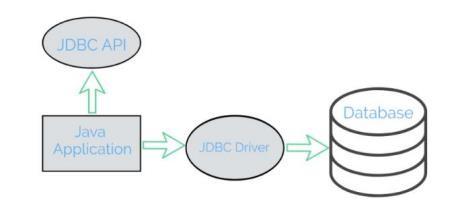
**Scenario 2: Use create and select statements. Scenario 3: Use insert, update and delete queries**

**DESCRIPTION:**

Java Database Connectivity (JDBC):

JDBC stands for Java Database Connectivity. JDBC is a Java API to connect and execute the query with the database. It is part of JavaSE (Java Standard Edition). JDBC API uses JDBC drivers to connect with the database. There are four types of JDBC drivers.

i) JDBC-ODBC Bridge Driver ii) Native Driver iii) Network Protocol Driver iv) Thin Driver



**App.java**

CREATE TABLE student( id INT PRIMARY KEY, name VARCHAR(50) NOT NULL,

age INT, gender VARCHAR(10), address VARCHAR(100), salary DOUBLE

);

import java.sql.\*; public class StudentDatabase {

static final String JDBC\_DRIVER = "com.mysql.jdbc.Driver"; static final String DB\_URL = "jdbc:mysql://localhost/mydatabase"; static final String USER = "root"; static final String PASS = "password"; public static void main(String[] args) {

Connection conn = null; Statement stmt = null; try {

// Register JDBC driver

Class.forName(JDBC\_DRIVER);

// Open a connection

conn = DriverManager.getConnection(DB\_URL, USER, PASS);

// Insert a record

String insertSql = "INSERT INTO Student (id, name, age, gender, email, phone) VALUES

(1, 'sita’, 15, 'female', 'sita@example.com', '555-12894')"; stmt.executeUpdate(insertSql);

String insertSql = "INSERT INTO Student (id, name, age, gender, email, phone) VALUES

(2, 'ram’, 12, 'male', 'ram@example.com', '555-12874')"; stmt.executeUpdate(insertSql);

String insertSql = "INSERT INTO Student (id, name, age, gender, email, phone) VALUES

(3, 'akanksha’, 15, 'female', 'akanksha@example.com', '555-125434')"; stmt.executeUpdate(insertSql);

String updateSql = "UPDATE Student SET age = 19 WHERE id = 1"; stmt.executeUpdate(updateSql);

String deleteSql = "DELETE FROM Student WHERE id = 1"; stmt.executeUpdate(deleteSql);

String selectSql = "SELECT \* FROM Student"; ResultSet rs = stmt.executeQuery(selectSql); while (rs.next()) { int id = rs.getInt("id");

String name = rs.getString("name"); int age = rs.getInt("age");

String gender = rs.getString("gender");

String email = rs.getString("email");

String phone = rs.getString("phone");

System.out.println("ID: " + id + ", Name: " + name + ", Age: " + age + ", Gender: " + gender + ", Email: " + email + ", Phone: " + phone);

}

// Clean-up environment rs.close(); stmt.close(); conn.close();

} catch(SQLException se) { // Handle errors for JDBC se.printStackTrace();

}

**OUTPUT**

ID:2 , Name:ram , Age:12 , Gender:female, Email:ram@example.com, Phone:555-12894

ID:3 , Name: akanksha, Age:15 , Gender:female, Email: akanksha@example.com, Phone:555-12874

# Week 7 & 8

**Create the necessary servlets for the application chosen.**

**Scenario 1: Check the authenticity of the login details with the information available in database. If he is a valid user it must redirect to site resources otherwise it should stay in same page with invalid username/password message.**

**Scenario 2: Insert the details of the registration page into the database. If registration is successful it ` must display “Registration is successful”.**

**Scenario 3: Update the password field in the database.**

**DESCRIPTION:**

**Set Up and Installation of Apache Tomcat, MySQL Workbench and Apache Maven :**

1. Install the Tomcat server from the apachetomcat.org website and go to Downloads Section and select

“Tomcat 9.0”.

1. Click on the .exe windows installer file and the file will be downloaded to the downloads folder.
2. Now run the .exe file and then set the class path in the environment variables and click ok.
3. Go to apachemaven.org and go to the Downloads section and select OS and then click on the respective .exe file and then download.
4. In the downloads folder, execute the .exe maven file and then set the class path in the same way as above.
5. Go to MySql community website and click on the downloads and select the OS and then download the required MySQL Workbench.
6. Set Up the Workbench as the above in the same way.
7. Now download the mysql connector 8.0.0.29.jar file and then paste it in to the following path C:>Program Files>Apache Software Foundation>Tomcat 9.0>lib. **Login.java**

import java.io.IOException; import java.io.PrintWriter; import javax.servlet.ServletException; import javax.servlet.http.HttpServlet; import javax.servlet.http.HttpServletRequest; import javax.servlet.http.HttpServletResponse; import java.sql.\*;

public class Login extends HttpServlet { public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException{ response.setContentType("text/html");

PrintWriter out = response.getWriter();

String name = request.getParameter("username");

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

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

Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/javalab","root","Password@123");

Statement stmt = con.createStatement();

String query = "Select \* from details where name = '"+ name+"' and password =

'"+ password +"'";

ResultSet rs = stmt.executeQuery(query); if(rs.next()){

out.print("Welcome to you "+name);

}else{ out.print("Sorry Incorrect Entry"); }} catch (Exception e) { out.write("Error in JDBC connectivity : "+e);}}}

Index.html

<!DOCTYPE html>

<html>

<head>

<title>Login Page</title>

</head>

<body>

<center>

<b><p style="font-size:x-large;">Student Login Page</p></b>

<form action="Login" method="post">

<label> Name : </label>

<input type="text" name="username" id="username"><br><br>

<label> Password : </label>

<input type="text" name="password" id="password"><br><br>

<input type="submit"></input>

</form>

</center>

</body>

</html>

**Web.xml**

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

<web-app >

<servlet>

<servlet-name>servlet1</servlet-name>

<servlet-class>Login</servlet-class>

</servlet>

<servlet-mapping>

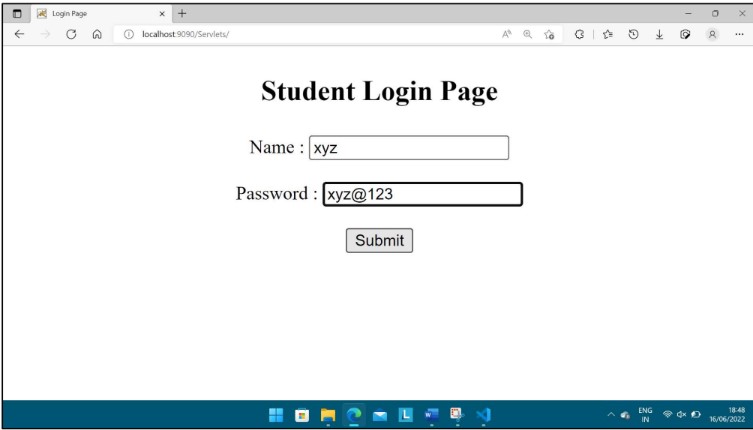
<servlet-name>servlet1</servlet-name>

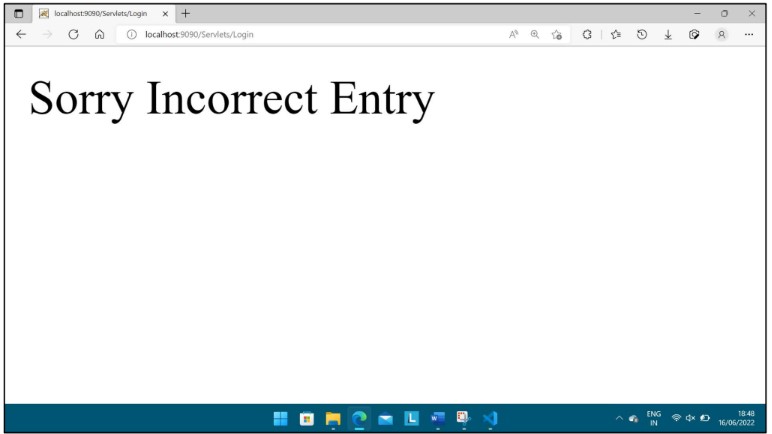
<url-pattern>/Login</url-pattern>

</servlet-mapping>

</web-app>

**OUTPUT :**





# WEEK - 9 AND WEEK – 10

**Create the necessary JSP’s for the application chosen.**

**Scenario 1 : Use Scriptlets, JSP Action tags and Expressions.**

**Scenario 2 : Perform the same scenarios as done in Week 7&8 using JSP Elements**.

**DECRIPTION:**

**Set Up and Installation of Apache Tomcat, MySQL Workbench and Apache Maven :**

1. Install the Tomcat server from the apachetomcat.org website and go to Downloads Section and select “Tomcat 9.0”.
2. Click on the .exe windows installer file and the file will be downloaded to the downloads folder. 3) Now run the .exe file and then set the class path in the environment variables and click ok. 4) Go to apachemaven.org and go to the Downloads section and select OS and then click on the respective .exe file and then download.

5) In the downloads folder, execute the .exe maven file and then set the class path in the same way as above. 6) Go to MySql community website and click on the downloads and select the OS and then download the required MySQL Workbench.

1. Set Up the Workbench as the above in the same way.
2. Now download the mysql connector 8.0.0.29.jar file and then paste it in to the following path C:>Program Files>Apache Software Foundation>Tomcat 9.0>lib.

**Set Up in Visual Studio Code :**

1. Now follow the Directory structure in the below image and create the .java, .html and .xml files and WEB INF, classes folders in the Folder Servlets.
2. Store the Servlets folder in the path

C:>Program Files>Apache Software Foundation>Tomcat 9.0>webapps.

1. In the MySql Workbench, click th password and open the database and create the schema and table names “details” and insert name and password values of different users in to the table and execute the statement. 4) In the next step, Open the Servlets folder in VS Code and then open the .java file.
2. In the Bottom Left of Vscode we have Java Projects>Referenced Libraries, click on the + icon and then add the servlet-api.jar and mysql-connector-8.0.0.29.jar file.
3. Go to C:>Program Files>Apache Software Foundation>Tomcat 9.0>bin>Tomcat9w and click on Tomcat9w and then select Start to run the Tomcat Server.
4. Now compile and run the .java file and put the .class file in the path

Servlets>WEB-INF>classes and then save the file.

1. Go to Google Chrome Browser and then paste “localhost:portnumber/foldername” command to run the required servlet page and check the output for the input given.

**Welcome.java** import java.io.IOException; import java.io.PrintWriter; import javax.servlet.ServletException; import javax.servlet.http.HttpServlet; import javax.servlet.http.HttpServletRequest; import javax.servlet.http.HttpServletResponse; import java.sql.\*;

public class Welcome extends HttpServlet {

public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException{ response.setContentType("text/html");

PrintWriter out = response.getWriter();

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

try {

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

Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/javalab","root","Password@123"); Statement stmt = con.createStatement();

String query = "Select \* from details where name = '"+ name+"' and password = '"+ password +"'"; ResultSet rs = stmt.executeQuery(query); if(rs.next()){ out.print("Welcome to you "+name);

}else{ out.print("Sorry Incorrect Entry");

}

} catch (Exception e) { out.write("Error in JDBC connectivity : "+e);

}} public static void main(String[] args) {

System.out.println("Continue to Browser");

}}

**Index.html**

<!DOCTYPE html>

<html lang="en">

<head>

<title>Document</title>

</head>

<body>

<center>

<b><p style="font-size:x-large">Student Login Page</p></b>

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

<label> Name : </label>

<input type="text" name="username" id="username"><br><br> <label> Password : </label>

<input type="text" name="password" id="password"><br><br> <input type="submit"></input>

</form>

</center>

</body>

</html>

**Web.xml**

<web-app>

<servlet>

<servlet-name>servlet1</servlet-name>

<servlet-class>Hello</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>servlet1</servlet-name>

<url-pattern>/Hello</url-pattern>

</servlet-mapping>

</web-app>

**Welcome.jsp**

<html>

<body>

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

<%

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

try {

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

Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/javalab","root","Password@123"); Statement stmt = con.createStatement();

String query = "Select \* from details where name = '"+ name+"' and password = '"+ password +"'"; ResultSet rs = stmt.executeQuery(query); if(rs.next()) { out.print("Login Successful !!! Welcome to you - "+name); } else { out.print("!!!Enter Valid User Details!!!");

}

} catch (Exception e) { out.write("Error in JDBC connectivity"+e);

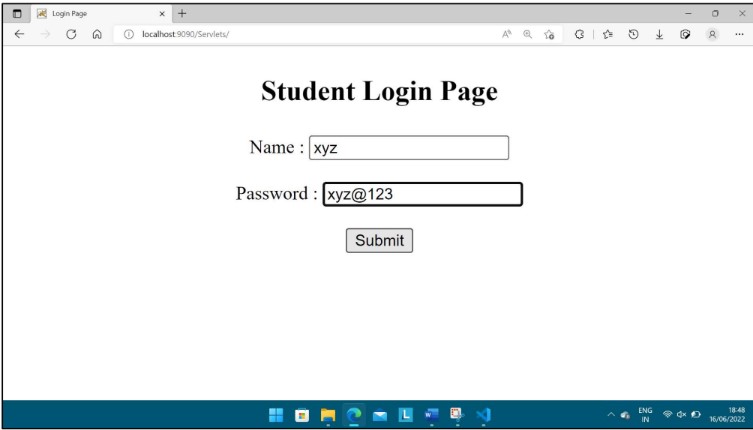
}

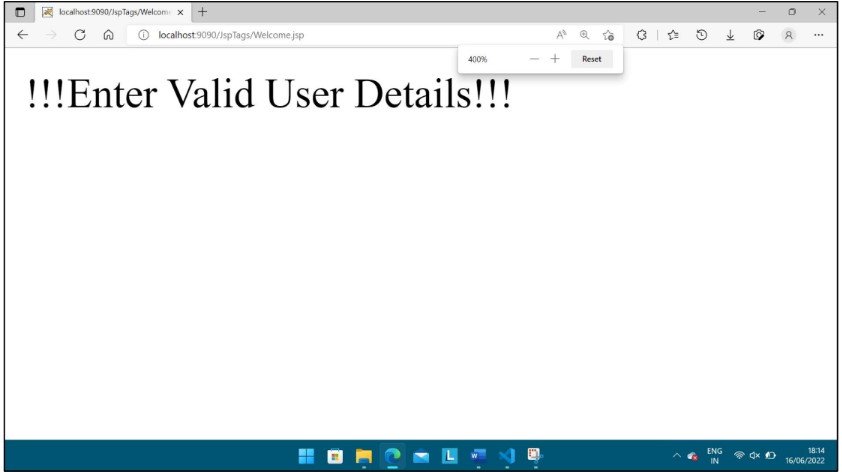
%>

</body>

</html>

**OUTPUT:**





**WEEK – 11,12**

**Embed the JQuery features for the application chosen.**

**Scenario 1: Perform the Scenarios of Week 4 using JQUERY ready function**

**Scenario 2: Use the get and post methods for server side communication**

**Week11.java**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<script src="jquery-3.6.4.min.js"></script>

<script>

$(document).ready(function() {

$('#myForm').submit(function(e) {

var username=$('#username').val();

var usernameregex=/[a-zA-Z]{6,}$/;

var password = $('#password').val();

var passwordRegex = /^(?=.\*[A-Za-z])(?=.\*\d)[A-Za-z\d]{8,}$/;

// Password must be at least 8 characters long and contain at least one letter and one number

var confpassword = $('#confpassword').val();

if (!usernameregex.test(username)) {

e.preventDefault();

$('#usernameError').text('Username must be at least 6 characters long');

}

if (!passwordRegex.test(password)) {

e.preventDefault();

$('#passwordError').text('Password must be at least 8 characters long and contain at least one letter

and one number');

}

if (confpassword!=password) {

e.preventDefault();

$('#err').text('passwords are not matching');

}

else {

e.preventDefault();

$('#err1').html('<b>Success</b>');

}

});

});

</script>

</head>

<body>

<!-- HTML Form -->

<form id="myForm">

<label for="username">Username:</label>

<input type="text" id="username" name="username"><br><br>

Email:<input type="email" name="mail" id="mail"></input><br><br>

<label for="password">Password:</label>

<input type="password" id="password" name="password"><br><br>35

<label for="confpassword">Confirm Password:</label>

<input type="password" id="confpassword" name="confpassword"><br><br>

Mobile Number:<input type="integer" id="mbno" name="mbno">

<br>

<span id="usernameError"></span>

<br>

<span id="passwordError"></span>

<br>

<span id="err"></span>

<br>

<input type="submit" value="Submit">

</form>

<span id="err1"></span>

<br>

</body>

</html>