##### OPEN SOURCE SOFTWARE LAB

##### LAB RECORD

###### Submitted by

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201B299

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**LAB EXERCISE 1**

Write a HTML program for the demonstration of Lists.

a. Unordered List

b. Ordered List

c. Definition List

d. Nested List

<!DOCTYPE html>

<html>

<body bgcolor = "Lightblue">

<h1>Unordered List HTML </h2>

<ul>

<li>Greece</li>

<li>Tokyo</li>

<li>New York</li>

</ul>

<h1>Ordered List HTML</h1>

<ol>

<li>CSE</li>

<li>ECE</li>

<li>IT</li>

<li>CHE</li>

<li>ME</li>

</ol>

<h1>Definition List HTML</h1>

<dl>

<dt>CSE</dt>

<dd>- Computer Science and Engineering</dd>

<dt>IT</dt>

<dd>- Information Technology</dd>

</dl>

<h1>Nested List HTML</h1>

<ul>

<li>USA

<ul>

<li>New York</li>

<li>Portland</li>

</ul>

</li>

<li>INDIA</li>

</ul

</body>

</html>

**LAB EXERCISE 2**

Write a HTML program for demonstrating Hyperlinks.

a. Navigation from one page to another.

b. Navigation within the page.

<!DOCTYPE html>

<html>

<head>

<title>Setting Hyperlink colors</title>

</head>

<body bgcolor="orange" link="red" vlink="blue" alink="red">

<center><h1>Setting Hyperlink colors</h1>

<a href="https://www.google.com/">Click here</a> Google

<center><h1>Linking to a section in a page</h1>

<a name="top">This is the top of the page</a>

Click here to goto the <a href="#bottom"> bottom </a> of the page

<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br>

<br><br><br><br><br> <br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br>

<br><br><br><br><br> <br><br><br><br><br>

<a name="bottom">This is the bottom of the page</a> Click here to goto <a href="#top">top </a>of the page

</center>

</body>

</html>

**LAB EXERCISE 3**

Write a HTML program for time-table using tables.

<!DOCTYPE html>

<html>

<head>

<title>TIMETABLE</title>

</head>

<body bgcolor= 'lightblue' >

<h1 align = "center" > TIME TABLE USING TABLE TAG </h1>

<table align="center" border="2" cellspacing="0" cellpadding="15">

<tr align="center" valign=="middle">

<th>DAY/PERIOD</th>

<th>I</th>

<th>II</th>

<th>III</th>

<th>IV</th>

<th rowspan="7"><b>L<br>U<br>N<br>C<br>H</th>

<th>V</th>

<th>VI</th>

<th>VII</th>

</tr>

<tr align="center">

<th>MON</th>

<td>PTRP</td>

<td>TOC</td>

<td>SEM</td>

<td>OOTD</td>

<td>SCI</td>

<td>C#</td>

<td>COMP</td>

</tr>

<tr align="center">

<th>TUE</th>

<td>AP</td>

<td>AP Lab</td>

<td colspan="2">AP Lab</td>

<td>WT</td>

<td>IS</td>

<td>OOAD</td>

</tr>

<tr align="center">

<th>WED</th>

<td>WT</td>

<td>IS</td>

<td>C#</td>

<td>SCI</td>

<td colspan="3">PTRP</td>

</tr>

<tr align="center">

<th>THU</th>

<td>IS</td>

<td>LIB</td>

<td>OOAD</td>

<td>WT</td>

<td colspan="3">WT Lab</td>

</tr>

<tr align="center">

<th>FRI</th>

<td>AP</td>

<td>AP</td>

<td>C#</td>

<td>OOAD</td>

<td colspan="3">C# Lab</td>

</tr>

<tr align="center">

<th>SAT</th>

<td>OOAD</td>

<td>SCI</td>

<td>WT</td>

<td>SEM</td>

<td>AP</td>

<td>AP</td>

<td>C#</td>

</tr>

</table>

</body>

</html>

**LAB EXERCISE 4**

Write a HTML program to develop a static Home Page using frames.

<!DOCTYPE html>

<html>

<head>

<title>Example of HTML Frames using row attribute</title>

</head>

<frameset rows = "20%, 20%, 20%">

<frame name = "top" src = "./Images/dog1.jfif" />

<frame name = "main" src = "./Images/dog2.jfif" />

<frame name = "bottom" src = "./Images/dog3.jfif" />

<noframes>

<body>The browser you are working does

not support frames.</body>

</noframes>

</frameset>

</html>

**LAB EXERCISE 5**

Write a HTML program to develop a static Registration Form.

<!DOCTYPE HTML>

<Html>

<head>

<title> Registration Page </title>

</head>

<body bgcolor="#e9edc9">

<h1 align = 'center'> RESGISTRATION FORM </h1>

<form>

<label> First Nme </label>

<input type="text" name="firstname" size="15"/> <br> <br>

<label> Middle Name: </label>

<input type="text" name="middlename" size="15"/> <br> <br>

<label> Last Name: </label>

<input type="text" name="lastname" size="15"/> <br> <br>

<label>Course : </label>

<select>

<option value="Course">Course</option>

<option value="BCA">BCA</option>

<option value="BBA">BBA</option>

<option value="B.Tech">B.Tech</option>

<option value="MBA">MBA</option>

<option value="MCA">MCA</option>

<option value="M.Tech">M.Tech</option>

</select>

<br>

<br>

<label>Gender : </label><br>

<input type="radio" name="male"/> Male <br>

<input type="radio" name="female"/> Female <br>

<input type="radio" name="other"/> Other

<br>

<br>

<label>Phone : </label>

<input type="text" name="country code" value="+91" size="2"/>

<input type="text" name="phone" size="10"/> <br> <br>

Address

<br>

<textarea cols="80" rows="5" value="address"> </textarea>

<br> <br>

Email:

<input type="email" id="email" name="email"/> <br>

<br> <br>

Password:

<input type="Password" id="pass" name="pass"> <br>

<br> <br>

Re-type password:

<input type="Password" id="repass" name="repass"> <br> <br>

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

</form>

</body>

</Html>

**LAB EXERCISE 6**

Write a HTML program to develop a static Login Page.

<!DOCTYPE html>

<html>

<head>

<title>login</title>

</head>

<body>

<br><br><br><br>

<h1 align=center><u>LOGIN</u></h1>

<br><br><br>

<h4>

<center>

username&nbsp&nbsp<input type=text><br>

password&nbsp&nbsp<input type=password>

<br><br><br>

</h4>

<input type=submit value=submit>

&nbsp&nbsp

<input type=reset value=cancel>

</center>

</body>

</html>

**LAB EXERCISE 7**

Write a HTML program to develop a static Web Page for Catalog.

<!DOCTYPE html>

<html>

<head>

<style>

.card {

box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);

max-width: 300px;

margin: auto;

text-align: center;

font-family: arial;

}

.price {

color: grey;

font-size: 22px;

}

.card button {

border: none;

outline: 0;

padding: 12px;

color: white;

background-color: #000;

text-align: center;

cursor: pointer;

width: 100%;

font-size: 18px;

}

.card button:hover {

opacity: 0.7;

}

</style>

</head>

<body>

<h2 style="text-align:center">Product Card</h2>

<div class="card">

<img src="./image/jeans.jpg" alt="Denim Jeans" style="width:100%">

<h1>Denim Jeans</h1>

<p class="price">$19.99</p>

<p>Some text about the jeans. Super slim and comfy lorem ipsum lorem jeansum. Lorem jeamsun denim lorem jeansum.</p>

<p><button>Add to Cart</button></p>

</div>

</body>

</html>

**LAB EXERCISE 8**

Write a HTML program to develop a static Web Page for Shopping Cart.

<!doctype html>

<html lang="en-US">

<head>

<title>shopping cart</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

</head>

<body>

<form name="ShoppingList">

<fieldset>

<legend>Shopping cart</legend>

<label>Item: <input type="text" name="name"></label>

<label>Quantity: <input type="text" name="data"></label>

<input type="button" value="Save" onclick="SaveItem()">

<input type="button" value="Update" onclick="ModifyItem()">

<input type="button" value="Delete" onclick="RemoveItem()">

</fieldset>

<div id="items\_table">

<h2>Shopping List</h2>

<table id="list"></table>

<label><input type="button" value="Clear" onclick="ClearAll()">

\* Delete all items</label>

</div>

</form>

</body>

</html>

**LAB ECERCISE 9**

Write HTML for demonstration of cascading stylesheets.

a. Embedded stylesheets.

b. External stylesheets.

c. Inline styles.

<!DOCTYPE html>

<html>

<head>

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

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h1 style="color:blue;">A Blue Heading</h1>

<p style="color:red;">A red paragraph.</p>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

body {background-color: powderblue;}

h1 {color: blue;}

p {color: red;}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

**LAB EXERCISE 10**

Write a javascript program to validate USER LOGIN page.

<!DOCTYPE html>

<html>

<head>

<script>

function validateform(){

var name=document.myform.name.value;

var password=document.myform.password.value;

if (name==null || name==""){

alert("Name can't be blank");

return false;

}else if(password.length<6){

alert("Password must be at least 6 characters long.");

return false;

}

}

</script>

</head>

<body>

<form name="myform" method="post" action="abc.jsp" onsubmit="return validateform()" >

Name: <input type="text" name="name"><br/>

Password: <input type="password" name="password"><br/>

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

</form>

</body>

</html>

**LAB EXERCISE 11**

Write a javascript program for validating REGISTRATION FORM

<!DOCTYPE html>

<html>

<head>

<script>

function validateForm() {

let x = document.forms["myForm"]["fname"].value;

if (x == "") {

alert("Name must be filled out");

return false;

}

}

</script>

</head>

<body>

<h2>JavaScript Validation</h2>

<form name="myForm" action="/action\_page.php" onsubmit="return validateForm()" method="post">

Name: <input type="text" name="fname">

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

</form>

</body>

</html>

**LAB EXERCISE 12**

Write a program for implementing XML document for CUSTOMER DETAILS.

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

<root>

<Customers>

<CustomerID>ALFKI</CustomerID>

<CompanyName>Alfreds Futterkiste</CompanyName>

<ContactName>Maria Anders</ContactName>

<ContactTitle>Sales Representative</ContactTitle>

<AddressLine1>Obere Str. 57</AddressLine1>

<AddressLine2></AddressLine2>

<City>Berlin</City>

<Region></Region>

<PostalCode>12209</PostalCode>

<Country>Germany</Country>

<Phone>030-0074321</Phone>

<Fax>030-0076545</Fax>

</Customers>

<Customers>

<CustomerID>WOLZA</CustomerID>

<CompanyName>Wolski Zajazd</CompanyName>

<ContactName>Zbyszek Piestrzeniewicz</ContactName>

<ContactTitle>Owner</ContactTitle>

<AddressLine1>ul. Filtrowa 68</AddressLine1>

<AddressLine2></AddressLine2>

<City>Warszawa</City>

<Region></Region>

<PostalCode>01-012</PostalCode>

<Country>Poland</Country>

<Phone>(26) 642-7012</Phone>

<Fax>(26) 642-7012</Fax>

</Customers>

</root>

**LAB EXERCISE 13**

Write an internal Document Type Definition to validate XML for CUSTOMER DETAILS?

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

<!DOCTYPE customer [

<!ELEMENT customer (firstname, lastname, companyname, email, message)>

<!ELEMENT firstname (#PCDATA)>

<!ELEMENT lastname (#PCDATA)>

<!ELEMENT companyname (#PCDATA)>

<!ELEMENT email (#PCDATA)>

<!ELEMENT message (#PCDATA)>

]>

<customer>

<firstname>John</firstname>

<lastname>Doe</lastname>

<companyname>Section</companyname>

<email>johndoe@section.io</email>

<message>Welcome message</message>

</customer>

**LAB EXERCISE 14**

Write an external Document Type Definition to validate XML for CUSTOMER DETAILS?

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

<!DOCTYPE customer SYSTEM "validation.dtd">

<customer>

<firstname>John</firstname>

<lastname>Doe</lastname>

<companyname>Section</companyname>

<email>johndoe@section.io</email>

<message>Welcome message</message>

</customer>

<!ELEMENT customer (firstname, lastname, companyname, email, message)>

<!ELEMENT firstname (#PCDATA)>

<!ELEMENT lastname (#PCDATA)>

<!ELEMENT companyname (#PCDATA)>

<!ELEMENT email (#PCDATA)>

<!ELEMENT message (#PCDATA)>

**LAB EXERCISE 15**

Write an XML for person information and access the data using XSL.

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

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

<student>

<s>

<name> Divyank Singh Sikarwar </name>

<branch> CSE</branch>

<age>18</age>

<city> Agra </city>

</s>

<s>

<name> Aniket Chauhan </name>

<branch> CSE</branch>

<age> 20</age>

<city> Shahjahanpur </city>

</s>

<s>

<name> Simran Agarwal</name>

<branch> CSE</branch>

<age> 23</age>

<city> Buland Shar</city>

</s>

<s>

<name> Abhay Chauhan</name>

<branch> CSE</branch>

<age> 17</age>

<city> Shahjahanpur</city>

</s>

<s>

<name> Himanshu Bhatia</name>

<branch> IT</branch>

<age> 25</age>

<city> Indore</city>

</s>

</student>

**LAB EXERCISE 16**

Write an XML for student information and access second students data using DOM.

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

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

<student>

<s>

<name> Divyank Singh Sikarwar </name>

<branch> CSE</branch>

<age>18</age>

<city> Agra </city>

</s>

<s>

<name> Aniket Chauhan </name>

<branch> CSE</branch>

<age> 20</age>

<city> Shahjahanpur </city>

</s>

<s>

<name> Simran Agarwal</name>

<branch> CSE</branch>

<age> 23</age>

<city> Buland Shar</city>

</s>

<s>

<name> Abhay Chauhan</name>

<branch> CSE</branch>

<age> 17</age>

<city> Shahjahanpur</city>

</s>

<s>

<name> Himanshu Bhatia</name>

<branch> IT</branch>

<age> 25</age>

<city> Indore</city>

</s>

</student>

**LAB EXERCISE 17**

Write a program to display contents of XML file in a table using Extensible Style Sheets.

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

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

<body style="font-family:Arial;font-size:12pt;background-color:#EEEEEE">

<xsl:for-each select="breakfast\_menu/food">

<div style="background-color:teal;color:white;padding:4px">

<span style="font-weight:bold"><xsl:value-of select="name"/> - </span>

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

</div>

<div style="margin-left:20px;margin-bottom:1em;font-size:10pt">

<p>

<xsl:value-of select="description"/>

<span style="font-style:italic"> (<xsl:value-of select="calories"/> calories per serving)</span>

</p>

</div>

</xsl:for-each>

</body>

</html>

**LAB EXERCISE 18**

Write a simple servlet that displays a message

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import java.io.\*;

@WebServlet("/MyServlet")

public class MyServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

public MyServlet() {

super();

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

response.setContentType("text/html");

PrintWriter out=response.getWriter();

out.print("<html><head>My First Servlet</head><body>");

out.print("<center><h2>");

out.print("Welcome to HTTP Servlets</h2></center>");

out.print("<p>doGet() Method is executing....</p>");

out.print("</body></html>");

}

}

**LAB EXERCISE 19**

Write a servlet that reads parameters from employee login page.

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/loginServlet")

public class LoginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

public LoginServlet() {

super();

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

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

System.out.println("emailId.." + emailId);

System.out.println("password.." + password);

if (emailId != null && emailId.equalsIgnoreCase("admin@gmail.com") && password != null && password.equalsIgnoreCase("admin")) {

HttpSession httpSession = request.getSession();

httpSession.setAttribute("emailId", emailId);

request.getRequestDispatcher("welcome.jsp").forward(request, response);

}

}

}

**LAB EXERCISE 20**

Write a servlet for creating a cookie and retrieving it.

import jakarta.servlet.\*;

import jakarta.servlet.http.\*;

import java.io.IOException;

import java.io.PrintWriter;

public class Servlet1 extends HttpServlet {

protected void

processRequest(HttpServletRequest request,

HttpServletResponse response)

throws ServletException, IOException

{

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

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

out.println("<html>");

out.println("<head>");

out.println("<title>Servlet Servlet1</title>");

out.println("</head>");

out.println("<body>");

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

out.println("<h1> Hello, welcome to " + name

+ " </h1>");

out.println(

Cookie c = new Cookie("user\_name", name);

response.addCookie(c);

out.println("</body>");

out.println("</html>");

}

}

}

**LAB EXERCISE 21**

Write a servlet for session tracking.

import java.io.\*;

import java.util.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class GfgSession extends HttpServlet {

public void doGet(HttpServletRequest request,

HttpServletResponse response)

throws ServletException, IOException

{

HttpSession session = request.getSession(true);

Date createTime

= new Date(session.getCreationTime());

Date lastAccessTime

= new Date(session.getLastAccessedTime());

String title = "Welcome Back to geeksforgeeks";

Integer visitCount = new Integer(0);

String visitCountKey = new String("visitCount");

String userIDKey = new String("userID");

String userID = new String("GFG");

if (session.isNew()) {

title = "Welcome to GeeksForGeeks";

session.setAttribute(userIDKey, userID);

}

else {

visitCount = (Integer)session.getAttribute(

visitCountKey);

visitCount = visitCount + 1;

userID

= (String)session.getAttribute(userIDKey);

}

session.setAttribute(visitCountKey, visitCount);

response.setContentType("text/html");

PrintWriter out = response.getWriter();

String docType

= "<!doctype html public \"-//w3c//dtd html 4.0 "

+ "transitional//en\">\n";

out.println(

docType + "<html>\n"

+ "<head><title>" + title + "</title></head>\n"

+

"<body bgcolor = \"#f0f0f0\">\n"

+ "<h1 align = \"center\">" + title + "</h1>\n"

+ "<h2 align = \"center\">Gfg Session Information</h2>\n"

+ "<table border = \"1\" align = \"center\">\n"

+

"<tr bgcolor = \"#949494\">\n"

+ " <th>Session info</th><th>value</th>"

+ "</tr>\n"

+

"<tr>\n"

+ " <td>id</td>\n"

+ " <td>" + session.getId() + "</td>"

+ "</tr>\n"

+

"<tr>\n"

+ " <td>Creation Time</td>\n"

+ " <td>" + createTime + " </td>"

+ "</tr>\n"

+

"<tr>\n"

+ " <td>Time of Last Access</td>\n"

+ " <td>" + lastAccessTime + "</td>"

+ "</tr>\n"

+

"<tr>\n"

+ " <td>User ID</td>\n"

+ " <td>" + userID + "</td>"

+ "</tr>\n"

+

"<tr>\n"

+ " <td>Number of visits</td>\n"

+ " <td>" + visitCount + "</td>"

+ "</tr>\n"

+ "</table>\n"

+ "</body>"

+ "</html>");

}

}

**LAB EXERCISE 22**

Write a JSP that reads parameters from user login page.

<%@ 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>Guru Login Form</title>

</head>

<body>

<form action="guru\_login" method="post">

<table style="with: 50%">

<tr>

<td>UserName</td>

<td><input type="text" name="username" /></td>

</tr>

<tr>

<td>Password</td>

<td><input type="password" name="password" /></td>

</tr>

</table>

<input type="submit" value="Login" /></form>

</body>

</html>

**LAB EXERCISE 23**

Write a JSP that reads a value, creates a cookie and retrieves it.

<html>

<head>

<title>Reading Cookies</title>

</head>

<body>

<center>

<h1>Reading Cookies</h1>

</center>

<%

Cookie cookie = null;

Cookie[] cookies = null;

// Get an array of Cookies associated with the this domain

cookies = request.getCookies();

if( cookies != null ) {

out.println("<h2> Found Cookies Name and Value</h2>");

for (int i = 0; i < cookies.length; i++) {

cookie = cookies[i];

out.print("Name : " + cookie.getName( ) + ", ");

out.print("Value: " + cookie.getValue( )+" <br/>");

}

} else {

out.println("<h2>No cookies founds</h2>");

}

%>

</body>

</html>

**LAB EXERCISE 24**

Write a JSP for session tracking.

<%@ page import = "java.io.\*,java.util.\*" %>

<%

// Get session creation time.

Date createTime = new Date(session.getCreationTime());

// Get last access time of this Webpage.

Date lastAccessTime = new Date(session.getLastAccessedTime());

String title = "Welcome Back to my website";

Integer visitCount = new Integer(0);

String visitCountKey = new String("visitCount");

String userIDKey = new String("userID");

String userID = new String("ABCD");

// Check if this is new comer on your Webpage.

if (session.isNew() ){

title = "Welcome to my website";

session.setAttribute(userIDKey, userID);

session.setAttribute(visitCountKey, visitCount);

}

visitCount = (Integer)session.getAttribute(visitCountKey);

visitCount = visitCount + 1;

userID = (String)session.getAttribute(userIDKey);

session.setAttribute(visitCountKey, visitCount);

%>

<html>

<head>

<title>Session Tracking</title>

</head>

<body>

<center>

<h1>Session Tracking</h1>

</center>

<table border = "1" align = "center">

<tr bgcolor = "#949494">

<th>Session info</th>

<th>Value</th>

</tr>

<tr>

<td>id</td>

<td><% out.print( session.getId()); %></td>

</tr>

<tr>

<td>Creation Time</td>

<td><% out.print(createTime); %></td>

</tr>

<tr>

<td>Time of Last Access</td>

<td><% out.print(lastAccessTime); %></td>

</tr>

<tr>

<td>User ID</td>

<td><% out.print(userID); %></td>

</tr>

<tr>

<td>Number of visits</td>

<td><% out.print(visitCount); %></td>

</tr>

</table>

</body>

</html>

**LAB EXERCISE 25**

Write a servlet that connects to the database and retrieves the data and displays it.

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

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("/fetch")

public class FetchServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

final String URL = "jdbc:postgresql://localhost/postgres";

final String USER = "root";

final String PASSWORD = "root";

final String DRIVER = "org.postgresql.Driver";

Connection conn = null;

public void init() throws ServletException {

try {

Class.forName(DRIVER);

conn = DriverManager.getConnection(URL, USER, PASSWORD);

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace();

}

}

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

try {

response.setContentType("text/html");

PrintWriter out = response.getWriter();

out.println("<html><body>");

out.println("<h3>Mobile Phone Details</h3>");

out.println("<table border=1><tr>" + "<td><b>S.No</b></td>" + "<td><b>Brand</b></td>"

+ "<td><b>Processor</b></td>" + "<td><b>Operating System</b></td>"

+ "<td><b>Screen Size(inches)</b></td>" + "<td><b>Battery Life(mAh)</b></td></tr>");

Statement stmt = conn.createStatement();

String sql = "select \* from public.mobilePhones;";

ResultSet rs = stmt.executeQuery(sql);

while (rs.next()) {

int sno = rs.getInt("sno");

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

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

float screenSize = rs.getFloat("screensize");

String osystem = rs.getString("operatingsystem");

int batteryLife = rs.getInt("batterylife");

out.println("<tr>" + "<td>" + sno + "</td>" + "<td>" + brand + "</td>" + "<td>" + processor + "</td>"

+ "<td>" + osystem + "</td>" + "<td>" + screenSize + "</td>" + "<td>" + batteryLife

+ "</td></tr>");

}

out.println("</table></body></html>");

rs.close();

stmt.close();

out.close();

} catch (SQLException e) {

e.printStackTrace();

}

}

public void destroy() {

try {

conn.close();

} catch (SQLException e) {

e.printStackTrace();

}

}

}