



**SAVEETHA SCHOOL OF ENGINEERING  
SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES**



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

## **CSA43 -Internet Programming**

**LAB MANUAL**

**PREPARED BY**

**Professors of CSE**

## **LIST OF EXPERIMENTS**

1. Create a web page with the following using HTML
  - a. To embed a map in a web page
  - b. To fix the hot spots in that map
  - c. Show all the related information when the hot spots are clicked.
2. Create a web page with the following.
  - a. Cascading style sheets.
  - b. Embedded style sheets.
  - c. Inline style sheets. Use our college information for the web pages.
3. Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.
4. Write programs in Java using Servlets:
  - i. To invoke servlets from HTML forms
  - ii. Session tracking using hidden form fields and Session tracking for a hit count
5. Write programs in Java to create three-tier applications using servlets for conducting online examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.
6. Install TOMCAT web server. Convert the static web pages of programs into dynamic web pages using servlets (or JSP) and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.
7. Redo the previous task using JSP by converting the static web pages into dynamic web pages. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database.
8. Create and save an XML document at the server, which contains 10 users Information. Write a Program, which takes user Id as an input and returns the User details by taking the user information from the XML document
9. i. Validate the form using PHP regular expression.
  - ii. PHP stores a form data into database.
10. Write a web service for finding what people think by asking 500 people's opinion for any consumer product.

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S.NO.	DATE	EXPERIMENT TITLE	MARKS/10	SIGN.
1		IMAGE MAPPING IN HTML		
2		STYLE SHEETS		
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9a		FORM VALIDATION USING PHP REGULAR EXPRESSION		
9b		STORING A FORM DATA IN PHP		
10		WEB SERVICE FOR FINDING PEOPLE'S OPINION		

**AIM:**

To create a web page which includes a map and display the related information when a hot spot is clicked in the map.

**PROCEDURE:**

1. Create a html file with map tag.
2. Set the source attribute of the img tag to the location of the image and also set the use map attribute.
3. Specify an area with name, shape and href set to the appropriate values.
4. Repeat step 3 as many hot spots you want to put in the map.
5. Create html files for each and every hot spot the user will select.

**PROGRAM:*****ImageMap.html***

```
<HTML>
<HEAD>
<TITLE>Image Map</TITLE> </HEAD>
<BODY>
 <map name="metroid"
id="metroid">
<area href="TamilNadu.html" shape="circle" coords="208,606,50" title="TamilNadu"/>
<area href="Karnataka.html" shape="rect" coords = "130,531,164,535" title = "Karnataka" />
<area href="AndhraPradesh.html" shape="poly" coords =
"227,490,238,511,230,536,198,535,202,503" title = "Andhra Pradesh" />
<area href="Kerala.html" shape="rect" coords = "154,606,166,621" title = "Kerala" /> </map>
</BODY>
</HTML>
```

***TamilNadu.html***

```
<HTML><HEAD>
<TITLE>About Tamil Nadu</TITLE>
</HEAD>
<BODY>
<CENTER><H1>Tamil Nadu</H1></CENTER> <HR>
<UL>
<LI>Area : 1,30,058 Sq. Kms.</LI>
<LI>Capital : Chennai</LI>
<LI>Language : Tamil</LI>
<LI>Population : 6,21,10,839</LI> </UL><hr>
<a href='ImageMap.html'>India Map</a>
</BODY>
</HTML>
```

***Karnataka.html***

```
<HTML>
<HEAD>
<TITLE>About Karnataka</TITLE> </HEAD>
<BODY>
<CENTER><H1>Karnataka</H1></CENTER>
<HR>
```

```
<UL>
<LI>Area : 1,91,791 Sq. Kms</LI>
<LI>Capital : Bangalore</LI>
<LI>Language : Kannada</LI>
<LI>Population : 5,27,33,958</LI>
</UL>
<hr>
<a href='ImageMap.html'>India Map</a>
</BODY>
</HTML>
```

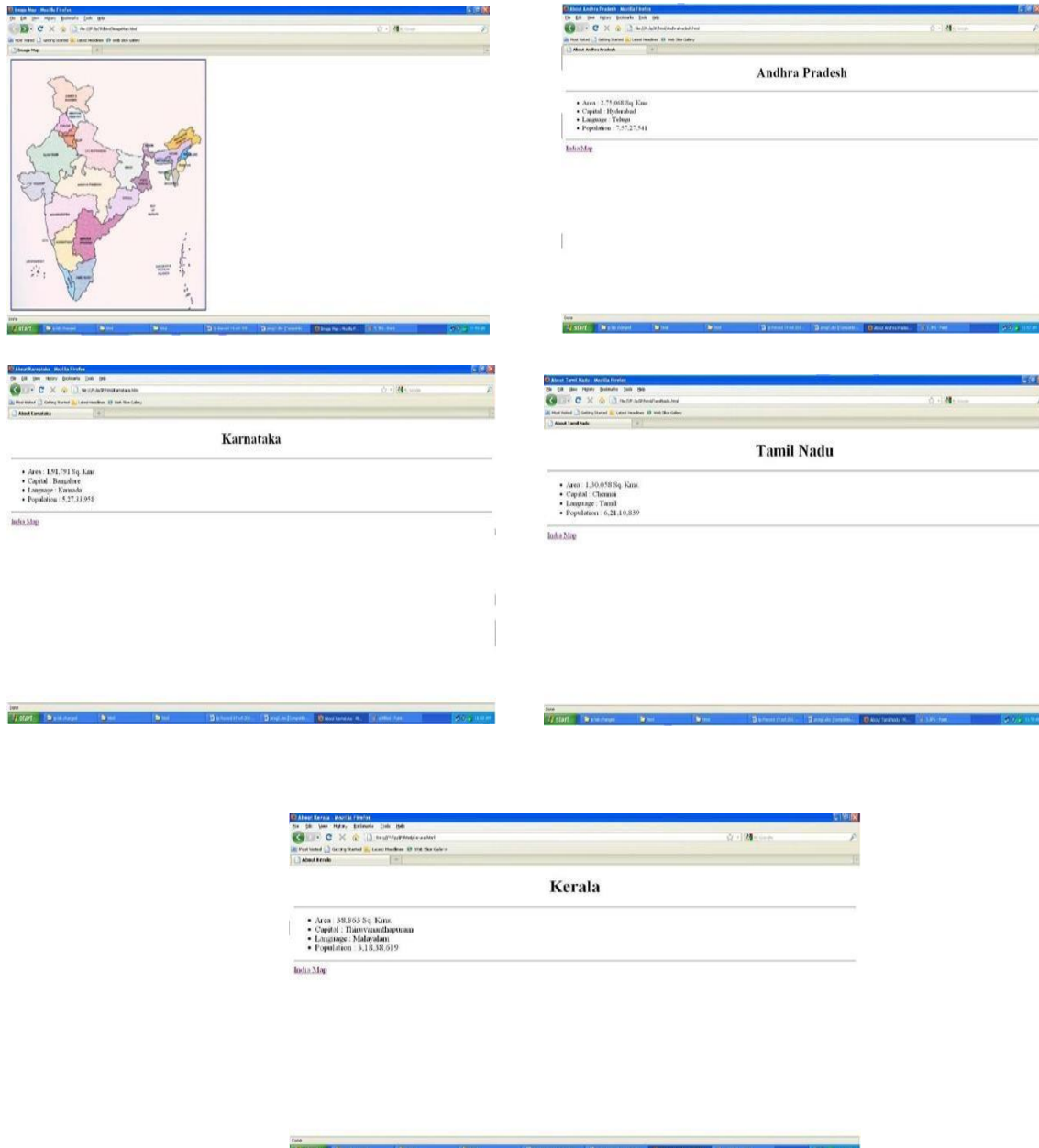
### ***AndhraPradesh.html***

```
<HTML>
<HEAD>
<TITLE>About Andhra Pradesh</TITLE> </HEAD>
<BODY>
<CENTER><H1>Andhra Pradesh</H1></CENTER> <HR>
<UL>
<LI>Area : 2,75,068 Sq. Kms</LI>
<LI>Capital : Hyderabad</LI>
<LI>Language : Telugu</LI>
<LI>Population : 7,57,27,541</LI>
</UL>
<hr>
<a href='ImageMap.html'>India Map</a>
</BODY>
</HTML>
```

### ***Kerala.html***

```
<HTML>
<HEAD>
<TITLE>About Kerala</TITLE>
</HEAD>
<BODY>
<CENTER>
<H1>Kerala</H1></CENTER>
<HR>
<UL>
<LI>Area : 38,863 Sq. Kms.</LI>
<LI>Capital : Thiruvananthapuram</LI>
<LI>Language : Malayalam</LI>
<LI>Population : 3,18,38,619</LI>
</UL>
<hr>
<a href='ImageMap.html'>India Map</a>
</BODY></HTML>
```

## OUTPUT:



## RESULT:

Thus the creation of a web page which includes a map and display the related in-formation when a hot spot is clicked in the map was executed successfully.

**AIM:**

To create a web page that displays college information using various style sheet

**PROCEDURE:**

1. Create a web page with frame sets consisting two frames
2. In the first frame include the links
3. In the second frame set display the web page of the link
4. Create a external style sheets
5. Create a embedded style sheets
6. Create a inline and internal style sheets and make it link to the external style sheets

**PROGRAM:****XYZ.CSS:**

```
h3
{
font-family:arial;
font-size:20;
color:cyan
}
table{
border-color:green
}
td
{
font-size:20pt;
color:magenta
}
```

**HTML CODE:**

```
<html>
<head>
<h1>
<center>ALL STYLE SHEETS</center>
</h1>
<title>USE of INTERNAL and EXTERNAL STYLESHEETS </title>
<link rel="stylesheet" href="xyz.css" type="text/css">
<style type="text/css">
.vid
{
    font-family:verdana;
    font-style:italic;
    color:red;
    text-align:center
}
.ani
{
    font-family:tahoma;
    font-style:italic;
```

```

        font-size:20;
        text-align:center;
    }
font
{
    font-family:georgia;
    color:blue;
    font-size:20
}
ul
{
    list-style-type:circle
}
p
{
    font-family: georgia, serif;
    font-size: x-small;
}
hr
{
    color: #ff9900; height: 1px
}
a:hover
{
color: #ff0000;
text-decoration: none
}
</style>
</head>
<body>
    <h1 style="color:blue;margin-left:30px;">Welcome</h1> //In-line style Sheet
    <ol style="list-style-type:lower-alpha">

        <b>St.Anne's College of Engineering and Technology </b>
        <br>
        <br>
        <br>
        <li>EEE</li>

        <li>ECE </li>
        <li> MECH</li>
        <li> CSE</li>
        </ol>

        <p style="font-size:20pt;color:purple">Details</p>
        <p class="ani">St.Anne's College <br>It is approved by AICTE(All India Council for
        Technical Education). It is affiliated to Anna University.<br></p>
        <h2 class="vid"> St.Anne's college of engineering </h2> <br>
        <font>It is an ISO certified Institution
        </font>
        <br>
        <br>
        <font>
        <h2>List of Courses offered</h2>

```



```

<ul>

<li>Computer Science and Engineering</li>
<li>Ece</li>
<li>mech</li>
<li>eee</li>
</ul>
</font>
<h3>Results of cse students</h3>
<table width="100%" cellspacing="2" cellpadding="2" border="5"> <tr>
  <th>S.NAME</th> <th>MARKS</th> <th>RESULT</th>
</tr>
<tr>
  <td align="center">Suppriya</td> <td align="center">100</td>
  <td align="center">pass</td>
</tr>
<tr>
  <td align="center">Devishree</td> <td align="center">99</td>
  <td align="center">pass</td>
</tr>
<tr>
  <td align="center">Vinayagam</td> <td align="center">98</td>
  <td align="center">pass</td> </tr>
</table>
</body>
</html>

```

## OUTPUT:

USE OF INTERNAL and EXTERNAL x +

F:/SACET%202022%20even%20sem/IP%20lab/HTMLCODE.html

Apps Gmail YouTube Maps

Reading list

ALL STYLE SHEETS

Welcome

/to-line style sheet

St.Anne's College of Engineering and Technology

a. EEE  
b. ECE  
c. MECH  
d. CSE

Details

St.Anne's College  
It is approved by AICTE(All India Council for Technical Education). It is affiliated to Anna University.  
**St.Anne's college of engineering**

It is an ISO certified Institution

List of Courses offered

- Computer Science and Engineering
- Ece
- mech
- eee

Results of cse students

S.NAME	MARKS	RESULT
Suppriya	100	pass
Devishree	99	pass
Vinayagam	98	pass

Type here to search

EN 31°C 10:26 AM 3/6/2022

## RESULT:

Thus the creation of a web page that displays college information using various style sheet was successfully executed and verified.

**AIM:**

To Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.

**PROCEDURE:**

1. Static web pages of an online Book store is developed with following pages.
  - Home page
  - Registration and user Login
  - User profile page
  - Books catalog
  - Payment by credit card
2. Each input box in webpage is validated using java script code using <script> tag in html file.
3. Designed output is displayed.

**PROGRAM AND OUTPUT :****Main.html:**

```
<html>
<head>
<title> ONLINE BOOK STORES</title>
</head>
<body bgcolor="pink">
<marquee><h1 align="center"><b><u><font color="white">
ONLINE BOOK STORAGE</u></font>
</b></h1></marquee>
<H2 ALIGN="CENTER">
<b><p><U><FONT COLOR="PURPLE">Welcome to online book storage.
Press login if you are having id otherwise press registration.</U></FONT></p></b></H2>
<H2> <FONT COLOR="WHITE"></FONT></H2>
<H3 ALIGN="CENTER">
<A HREF="reg.html"><BR><BR><FONT COLOR="black"><ITALIC>REGISTRATION
FORM</FONT></ITALIC><BR><BR>
<BR><BR><A HREF="profile.html"><FONT COLOR="black"><ITALIC>USER
PROFILE</FONT></ITALIC><BR>
<BR><BR><A HREF="login.html"><FONT COLOR="black"><ITALIC>USER
LOGIN</FONT></ITALIC><BR>
<BR><BR><A HREF="catalog.html"><FONT COLOR="black"><ITALIC>BOOKS
CATALOG</FONT></ITALIC><BR>
<BR><BR><A HREF="payment.html"><FONT
COLOR="black"><ITALIC>PAYMENT</FONT></ITALIC><BR>
<BR><BR><A HREF="Order.html"><FONT COLOR="black"><ITALIC>ORDER
CONFIRMATION</H3></FONT></ITALIC><BR>
</body>
</html>
```

**Login.html:**

```
<html>
<body bgcolor="blue"><br><br><br>
<script language="javascript">
function validate()
{
```

```

var flag=1;
if(document.myform.id.value=="||document.myform.pwd.value=="")
{
    alert("LoginId and Password must be filled")
    flag=0;
}
if(flag==1)
{
    alert("VALID INPUT");
window.open("catalog.html","right");
}
else
{
    alert("INVALID INPUT");
    //document.myform.focus();
}
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID:<input type="text" name="id"><br>
PASSWORD:<input type="password" name="pwd">
<br><br>
</pre>
<input type="button" value="ok" onClick="validate()">
<input type="reset" value="clear">
</div>
</form>
</body>
</html>

```

### **Reg.html:**

```

<html>
<body bgcolor="blue"><br><br>
<script language="javascript">
    var str=document.myform.phno.value;
    var x;
    if(flag==1)
    {
        alert("VALID INPUT");
    }
    else
    {
        alert("INVALID INPUT");
        document.myform.focus();
    }
}
</script>
<form name="myform">
<div align="center"><pre>
NAME :<input type="text" name="name"><br>
ADDRESS :<input type="text" name="addr"><br>
CONTACT NUMBER:<input type="text" name="phno"><br>
LOGINID :<input type="text" name="id"><br>
PASSWORD :<input type="password" name="pwd"></pre><br><br>
</div>

```



```

        flag=0;
    }
    var str=document.myform.amount.value;
    var x;
    for(var i=0;i<str.length;i++)
    {
        x=str.substr(i,1);
        if(!(x<=9))
        {
            flag=0;
            break;
        }
    }
    str=document.myform.num.value;
    for(var i=0;i<str.length;i++)
    {
        x=str.substr(i,1);
        if(!(x<=9))
        {
            flag=0;
            break;
        }
    }
    if(flag==1)
    {
        alert("VALID INPUT");
    }
    else
    {
        alert("INVALID INPUT");
        document.myform.focus();
    }
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id"><br>
PASSWORD :<input type="password" name="pwd"><br>
AMOUNT :<input type="text" name="amount"><br>
CREDITCARDNUMBER:<input type="PASSWORD" name="num+"><br></pre><br><br>
</div>
<br><br><div align="center">
<input type="submit" value="ok" onClick="validate()">
<input type="reset" value="clear">
</form>
</body>
</html>

```

### Profile.html:

```

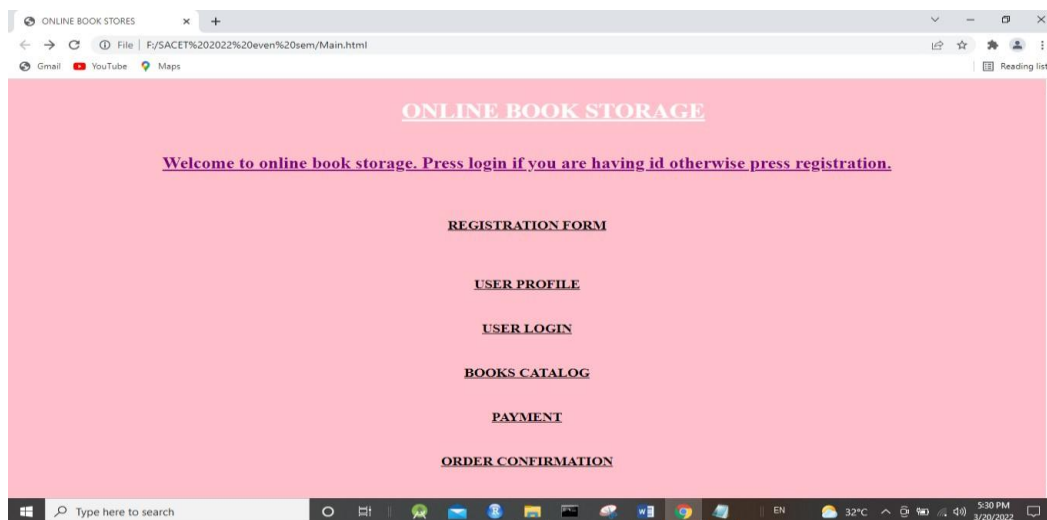
<html>
<body bgcolor="pink"><br><br><br>
<script type="text/javascript">
function validate()

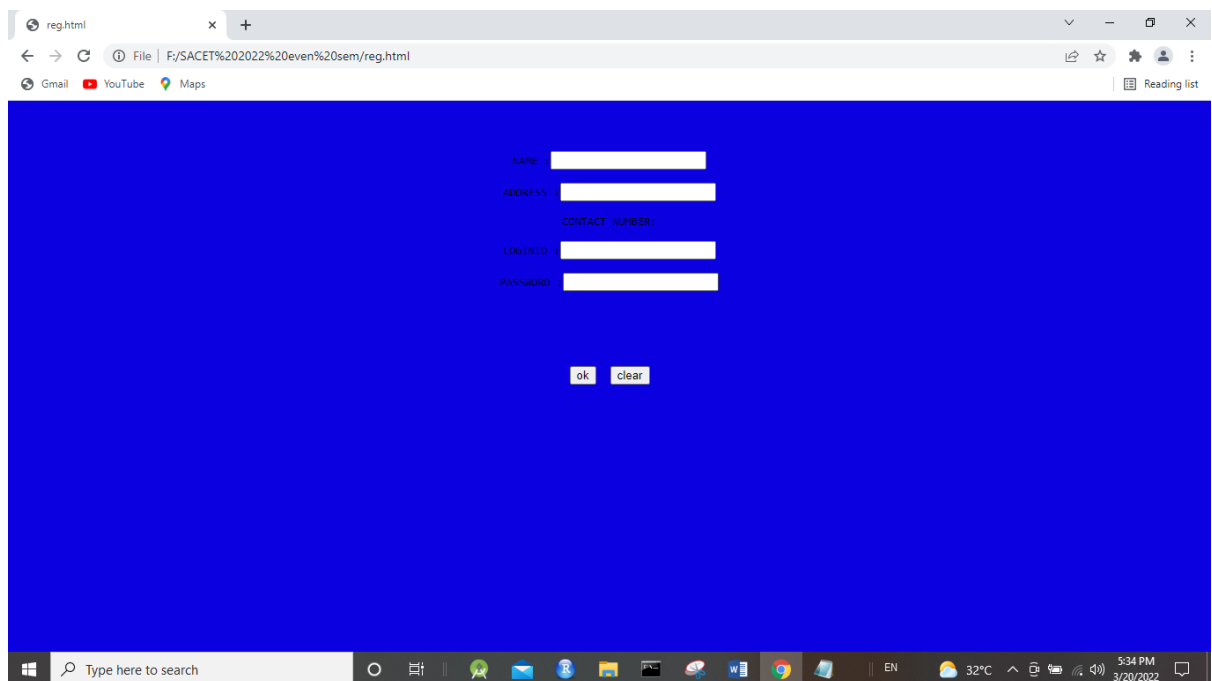
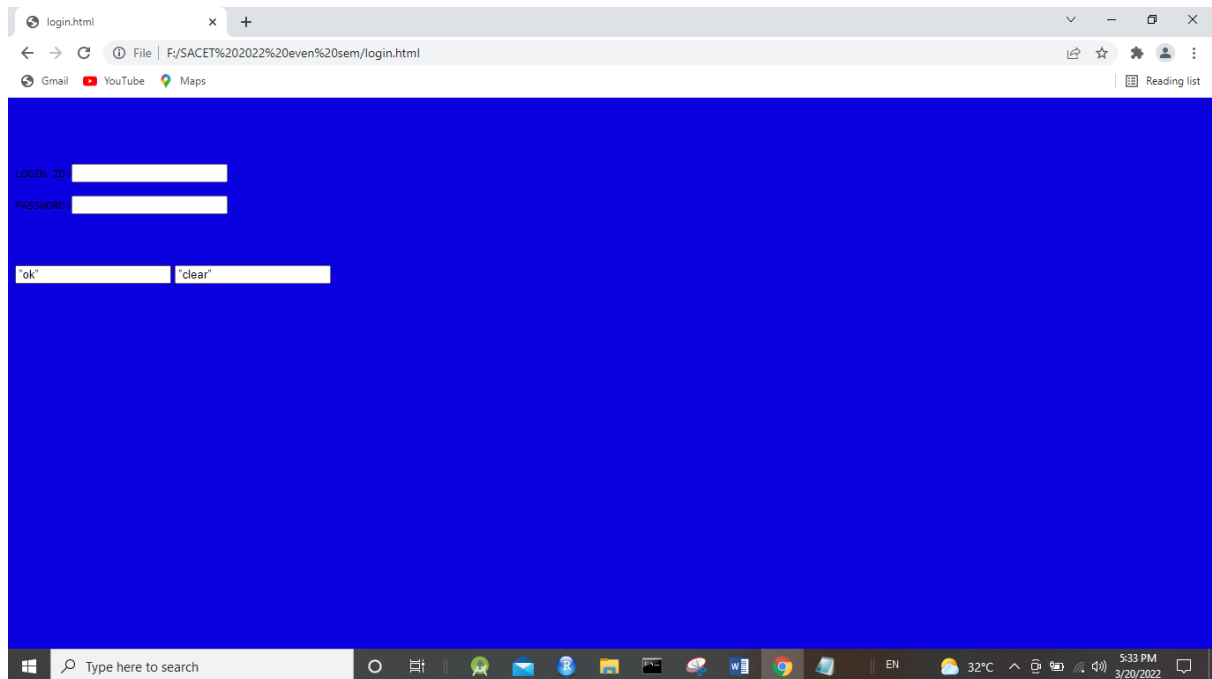
```

```

{
    var flag=1;
    if(document.myform.id.value=="||
    document.myform.pwd.value=="")
    {
        flag=0;
    }
    if(flag==1)
    {
        alert("VALID INPUT");
    }
    else
    {
        alert("INVALID INPUT");
        document.myform.focus();
    }
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id"><br>
PASSWORD:<input type="password" name="pwd"></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok" onClick="validate()">
<input type="reset" value="clear" >
</form>
</body></html>

```





catalog.html x +

File F:/SACET%202022%20even%20sem/catalog.html

Gmail YouTube Maps Reading list

BOOK TITLE:

ok clear

Type here to search

EN 32°C 5:35 PM 3/20/2022

Order.html x +

File F:/SACET%202022%20even%20sem/Order.html

Gmail YouTube Maps Reading list

LOGIN ID :

TITLE :

NO.OF BOOKS :

COST OF BOOK:

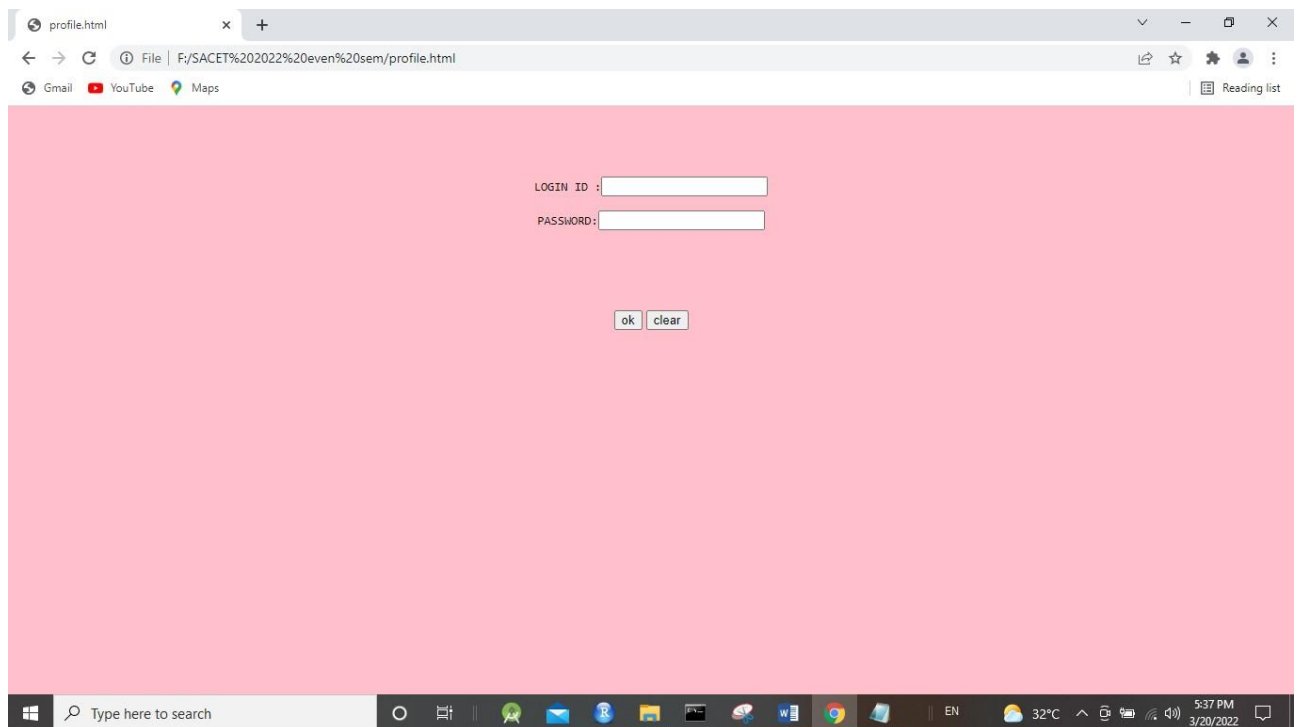
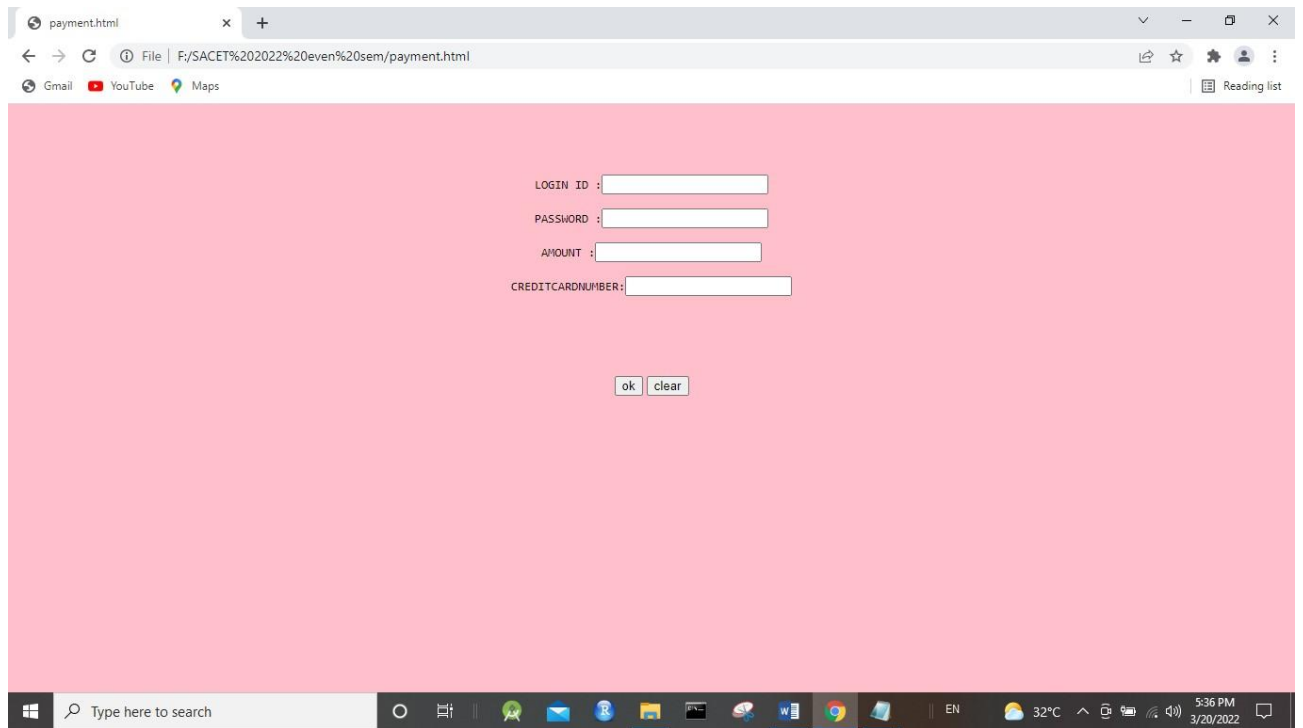
DATE :

ok clear

Type here to search

EN 32°C 5:35 PM 3/20/2022





## RESULT:

Thus the web page for online book store is created and its webpages are validated using Javascript.

**AIM:**

To write a java program to invoke servlets from HTML form.

**PROCEDURE:*****client.html:***

- (1) Create a web page using HTML form that contains the fields such as text, password and one submit button.
- (2) Set the URL of the server as the value of form's action attribute.
- (3) Run the HTML program.
- (4) Submit the form data to the server.

***server.java:***

- (1) Define the class server that extends the property of the class HttpServlet
- (2) Handle the request from the client by using the method service() of HttpServlet class.
- (3) Get the parameter names from the HTML form by using the method getParameterNames().
- (4) Get the parameter values from the HTML forms by using the method getParameter().
- (5) Send the response to the client by using the method of PrintWriter class.

**PROGRAM:****MySrv.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;
public class MySrv extends HttpServlet {

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

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01 Transitional//EN\">");
        out.println("<HTML>");
        out.println(" <HEAD><TITLE>A Servlet</TITLE></HEAD>");
        out.println(" <BODY>");

        //Getting HTML parameters from Servlet

        String username=request.getParameter("uname");
        String password=request.getParameter("pwd");
        if((username.equals("user")) && (password.equals("pswd")))
        {
            out.println(" <h1> Welcome to "+username);
        }
        else
        {
```

```

out.println(" <h1> Registration success ");
out.println(" <a href='./index.html'> Click for Home page </a>");
    }
    out.println(" </BODY>");
    out.println("</HTML>");
    out.close();
}

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

```

### Registration.html:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
```

```

<HTML>
<HEAD>
<TITLE> New Document </TITLE>
<META NAME="Generator" CONTENT="EditPlus">
<META NAME="Author" CONTENT="">
<META NAME="Keywords" CONTENT="">
<META NAME="Description" CONTENT="">
</HEAD>

<BODY bgcolor='#e600e6'>
<form action='./MySrv' method="post">
<center> <h1> <u> Login Page </u></h1>

<h2> Username : <input type="text" name="uname"/>
        Password : <input type="password" name="pwd"/>
        <input type="submit" value="click me"/>
</center>
</form>
</body>
</HTML>

```

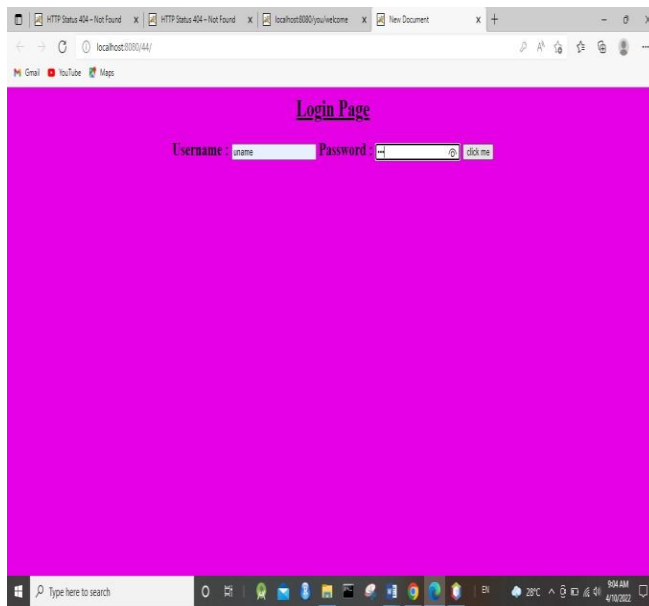
### web.xml:

```

<web-app>
<servlet>
    <servlet-name>MySrv</servlet-name>
    <servlet-class>MySrv</servlet-class>
</servlet>
<servlet-mapping>
    <servlet-name>MySrv</servlet-name>
    <url-pattern>/MySrv</url-pattern>
</servlet-mapping>
<welcome-file-list>
    <welcome-file>index.html</welcome-file>
</welcome-file-list>
</web-app>

```

## OUTPUT:



**AIM:**

To write a Java Program for Session Tracking Using Hidden Form Fields. This servlet demonstrates session tracking using hidden form fields by displaying the shopping cart for a bookworm. Note that, if you try this servlet, the buttons at the bottom of the page it generates don't take you anywhere real.

**PROCEDURE:**

1. Create a web page using HTML form that contains the fields such as text, password and one submit button.
2. Set the URL of the server as the value of form's action attribute.
3. Ask if the user wants to add more items or check out.
4. Include the current items as hidden fields so they'll be passed on and submit to self.

**PROGRAM:****register.html:**

```
<html>
<body bgcolor = "cyan">
<center>
<h1>WELCOME TO REGISTRATION PAGE</h1>
<form action="/registerone" METHOD="post">
Name: <input type="text" name = "name"><br><br>
Password: <input type="password" name="password"><br><br>
PROFESSION:
<select name="profession">
<option value="engineer">ENGINEER</option>
<option value="teacher">TEACHER</option>
<option value="businessman">BUSINESSMAN</option>
</select><br><br>
<input type="submit" value="REGISTER">
</form>
</center>
</body>
</html>
```

**web.xml**

```
<web-app>
<welcome-file-list>
<welcome-file>register.html</welcome-file>
</welcome-file-list>
<servlet>
<servlet-name>RegistrationServletOne</servlet-name>
<servlet-class>RegistrationServletOne</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>RegistrationServletOne</servlet-name>
<url-pattern>/registerone</url-pattern>
</servlet-mapping>
</web-app>
```

```

<servlet-name>RegistrationServletTwo</servlet-name>
<servlet-class>RegistrationServletTwo</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>RegistrationServletTwo</servlet-name>
<url-pattern>/registertwo</url-pattern>
</servlet-mapping>
</web-app>

```

### **RegistrationServletOne.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;
public class RegistrationServletOne extends HttpServlet
{
    public void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException
    {
        String name = request.getParameter("name");
        String password = request.getParameter("password");
        String profession = request.getParameter("profession");
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html><body bgcolor = wheat>");
        out.println("<center>");
        out.println("<h1>COMPLETE THE REGISTRATION</h1>");
        out.println("<form action = ./registertwo method = post>");
        out.println("<input type = hidden name = name value = " + name + ">");
        out.println("<input type = hidden name = password value = " + password + ">");
        out.println("<input type = hidden name = profession value = " + profession + ">");
        out.println("EMAIL ID:<input type =text name = email><br><br>");
        out.println("PHONE NO:<input type =text name = cell><br><br>");
        out.println("<input type =submit value=registernow>");
        out.println("</center>");
        out.println("</body></html>");
        out.close();
    }
}

```

### **RegistrationServletTwo.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;
public class RegistrationServletTwo extends HttpServlet
{
    public void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException

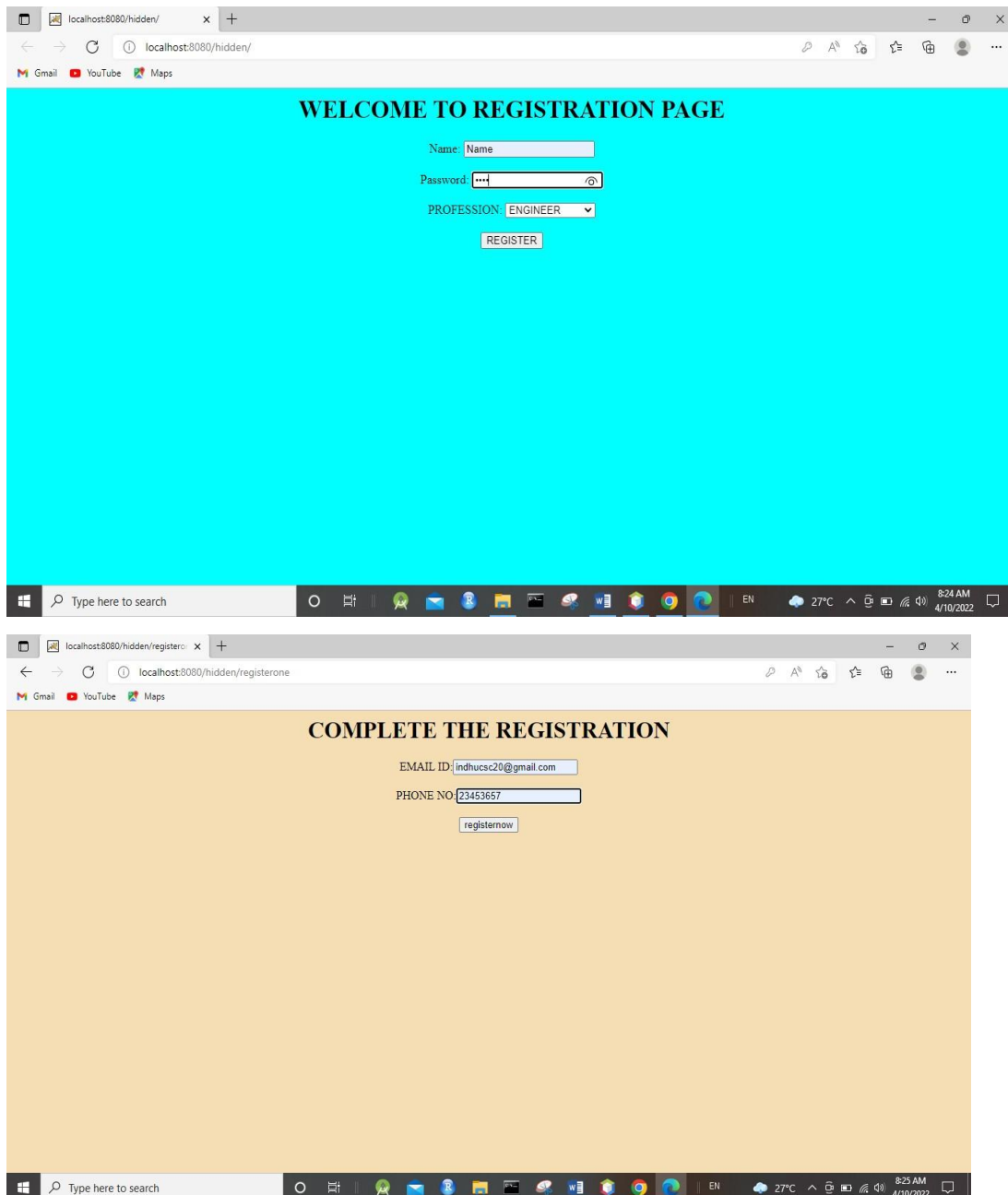
```

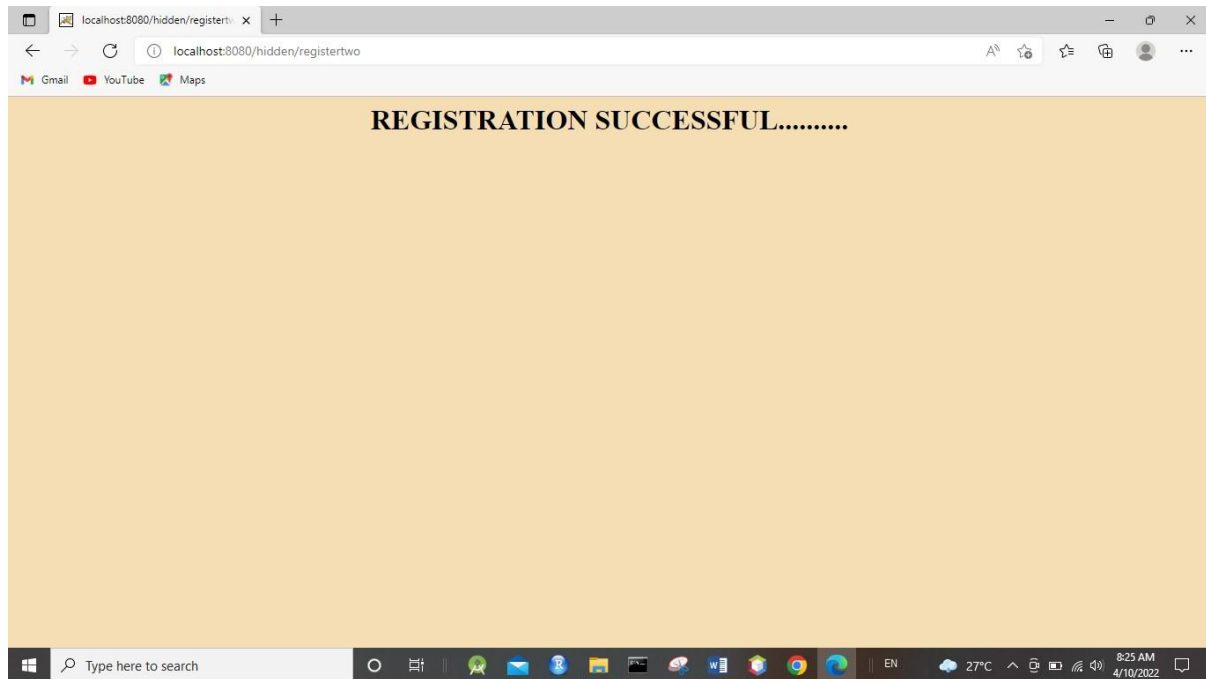
```

{
String name = request.getParameter("name");
String password = request.getParameter("password");
String profession = request.getParameter("profession");
String email = request.getParameter("email");
String cell = request.getParameter("cell");
response.setContentType("text/html");
PrintWriter out = response.getWriter();
out.println("<html><body bgcolor = wheat>");
out.println("<center>");
out.println("<h1>REGISTRATION SUCCESSFUL .....</h1>");
out.println("</center>");
out.println("</body></html>");
out.close();
}

```

### Output:





**RESULT:**

Thus the Java program for Session Tracking using hidden form fields has been executed successfully



**AIM:**

To write a Java Program for Session tracking a hit count. This servlet uses session tracking to count the number of times a client has accessed it.

**PROCEDURE:**

1. Get the current session object, create one if necessary
2. Increment the hit count for this page. The value is saved in this client's session under the name "tracker.count".
3. Display the hit count for this page

**PROGRAM:****PageHitCounter.java**

```
import java.io.*;
import java.sql.Date;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class PageHitCounter extends HttpServlet {

    private int hitCount;

    public void init() {
        // Reset hit counter.
        hitCount = 0;
    }

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

        // Set response content type
        response.setContentType("text/html");

        // This method executes whenever the servlet is hit
        // increment hitCount
        hitCount++;
        PrintWriter out = response.getWriter();
        String title = "Total Number of Hits";
        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\">" + hitCount + "</h2>\n" +
            "</body>\n" +
            "</html>");
    }
}
```

```

    );
}

public void destroy() {
    // This is optional step but if you like you
    // can write hitCount value in your database.
}
}

```

## Web.xml

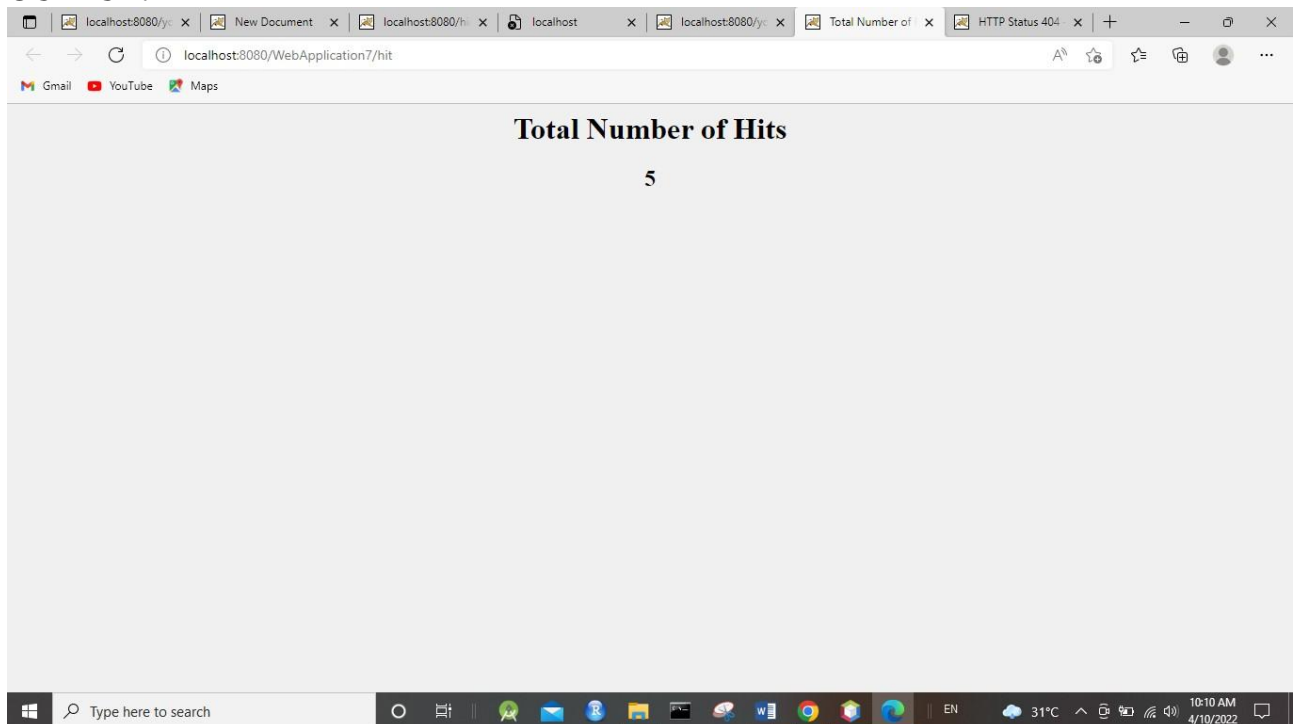
```

<servlet>
    <servlet-name>PageHitCounter</servlet-name>
    <servlet-class>PageHitCounter</servlet-class>
</servlet>

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

```

## OUTPUT:



## RESULT:

Thus the Java program for session tracking a hit count has been executed successfully.

**AIM:**

To write java servlet programs to conduct online examination and to display student mark list available in a database

**PROCEDURE:****Client:**

1. In index.html on the client side declare the contents that you like to transfer to the server using html form and input type tags.
2. Create a submit button and close all the included tags.

**Server:**

1. Import all necessary packages
2. Define a class that extends servlet
3. In the doPost() method, do the following:
  - i) Set the content type of the response to "text/html"
  - ii) Create a writer to the response
  - iii) Get a parameter from the request
  - iv) If its value is equal to right answer then add 5 to mark variable
  - v) Similarly repeat step
  - vi) for all parameters
  - vii) Display the result in an html format using the writer

**Student Mark List Database:**

1. Import necessary java packages and javax packages and classes
2. Create a class that extends HttpServlet and implements ServletException
3. and IOException
4. In the doGet() method, do the following:
  - i) Create a PrintWriter object
  - ii) Open a connection with the data source name
  - iii) Write a sql query and execute to get the resultset
  - iv) Display the resultset information in html form

**PROGRAM:****Servlet Code:**

```
import java.io.*;
import java.sql.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class StudentServlet3 extends HttpServlet
{
    String message, Seat_no, Name, ans1, ans2, ans3, ans4, ans5; int Total=0;
    Connection connect; Statement stmt=null; ResultSet rs=null;
    public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
    {
        try
        {
            String url="jdbc:odbc:NEO"; Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
            connect=DriverManager.getConnection(url, " ", " "); message="Thank you for participating in online Exam";
        }
    }
}
```

```

catch(ClassNotFoundException cnfex){ cnfex.printStackTrace();
}
catch(SQLException sqlex){ sqlex.printStackTrace();
}
catch(Exception excp){ excp.printStackTrace();
}
Seat_no=request.getParameter("Seat_no"); Name=request.getParameter("Name");
ans1=request.getParameter("group1"); ans2=request.getParameter("group2");
ans3=request.getParameter("group3"); ans4=request.getParameter("group4");
ans5=request.getParameter("group5"); if(ans1.equals("True"))
Total+=2;
if(ans2.equals("False"))
Total+=2;
if(ans3.equals("True"))
Total+=2;
if(ans4.equals("False"))
Total+=2;
if(ans5.equals("False"))
Total+=2; try
{
Statement stmt=connect.createStatement();
String query="INSERT INTO student"+"Seat_no,Name,Total"+" VAL-
UES('"+Seat_no+"','"+Name+"','"+Total+"')";
int result=stmt.executeUpdate(query); stmt.close();
}catch(SQLException ex){
}
response.setContentType("text/html"); PrintWriter out=response.getWriter(); out.println("<html>");
out.println("<head>"); out.println("</head>"); out.println("<body bgcolor=cyan>");
out.println("<center>"); out.println("<h1>"+message+"</h1>\n");
out.println("<h3>Yours results stored in our database</h3>"); out.print("<br><br>");
out.println("<b>"+ "Participants and their Marks"+"</b>"); out.println("<table border=5>");
try
{
Statement stmt=connect.createStatement(); String query="SELECT * FROM student";
rs=stmt.executeQuery(query); out.println("<th>"+ "Seat_no"+"</th>");
out.println("<th>"+ "Name"+"</th>"); out.println("<th>"+ "Marks"+"</th>"); while(rs.next())
{
out.println("<tr>");
out.print("<td>"+rs.getInt(1)+"</td>");
out.print("<td>"+rs.getString(2)+"</td>");
out.print("<td>"+rs.getString(3)+"</td>");
out.println("</tr>");
}
out.println("</table>");
}
catch(SQLException ex){ } finally
{
try
{
if(rs!=null)
rs.close();
if(stmt!=null)
stmt.close();
if(connect!=null)

```

```

connect.close();
}
catch(SQLException e){ }
}
out.println("</center>");
out.println("</body></html>");
Total=0;
} }

```

### HTML Code:

```

<html><head><title>Database Test</title></head> <body>
<center><h1>Online Examination</h1> </center>
<form action="StudentServlet3.view" method="POST"> <div align="left"><br></div>
<b>Seat Number:</b> <input type="text" name="Seat_no"> <div align="Right">
<b>Name:</b> <input type="text" name="Name" size="50"><br> </div>
<br><br>
<b>1. Every host implements transport layer.</b><br> <input type="radio" name="group1"
value="True">True <input type="radio" name="group1" value="False">False<br>
<b>2. It is a network layer's responsibility to forward packets reliably from source to destina-
tion</b><br>
<input type="radio" name="group2" value="True">True
<input type="radio" name="group2" value="False">False<br>
<b>3. Packet switching is more useful in bursty traffic</b><br> <input type="radio" name="group3"
value="True">True<input type="radio" name="group3" value="False">False<br> <b>4. A phone
network uses packet switching</b><br> <input type="radio" name="group4" value="True">True
<input type="radio" name="group4" value="False">False<br>
<b>5. HTML is a Protocol for describing web contents</b><br> <input type="radio" name="group5"
value="True">True
<input type="radio" name="group5" value="False">False<br> <br><br><br>
<center>
<input type="submit" value="Submit"><br><br> </center>
</form></body></html>

```

### OUTPUT:



### RESULT:

Thus to write java servlet programs to conduct online examination and to display student mark list available in a database was successfully executed and verified.

**AIM:**

To convert the static web pages into dynamic web pages using servlets (or JSP) and cookies.

**PROCEDURE:**

1. We will create ahtml form for entering the user name,password and card ID.
2. From the above HTML form, the servlet program is invoked in which the validity of the user name,password and card id is checked.if it is a valid user then the welcome message will be displayed otherwise the "invalid user" message will be displayed. In this servlet we set the cookies in which the current user name is stored.
3. Compile the above servlet Login servlet.java and copy its class file in tomcats folder at c:\tomcatdirectory\webapps\examples\WEB-INF\classes.
4. Then edit the web.xml in WEB-INF folder.We must store he user information such as user name,password and card id in the web.xml using init-param.
5. On successful login , the information from the cookie is checked and shopping cart page for corressponding user can be displayed.
6. Compile the above servlet LoginSuccess.java and copy its class file in the tomcat's folder at c:\tomcatdirectory\webapps\examples\WEB-INF\classes.
7. Then edit the web.xml in WEB-INF folder.
8. Start tomcat web server.Open the web browser and display the login form created in step1.

**PROGRAM:****Loginform.html**

```
<!DOCTYPE html>
<html>
<head>
<body>
<form action="http://localhost:8080/shopping/LoginServlet" method="post">
Enter username:
<input type="text" value="" name="User"><br><br>
enter password:
<input type="password" value="" name="password"><br><br>
enter card ID:
<input type="text" value="" name="CardID"><br><br>
<input type="submit" value="login">
</form>
</body>
</html>
```

**LoginServlet.java**

```
package shopping;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class LoginServlet extends HttpServlet
{
    protected void doPost(HttpServletRequest req, HttpServletResponse res) throws
    ServletException,IOException
```

```

{
    res.setContentType("text/html");
    PrintWriter out=res.getWriter();
    String usr=req.getParameter("User");
    String pwd=req.getParameter("password");
    String card=req.getParameter("CardID");

    boolean flag=true;
    String[] userID=getInitParameter("usernames").split(",");
    String[] password=getInitParameter("passwords").split(",");
    String[] cardids=getInitParameter("cardIDs").split(",");
    int i;
    for(i=0;i<userID.length;i++)
    {
        if(userID[i].equals(usr) && password[i].equals(pwd)&&cardids[i].equals(card))
        {
            flag=false;
            Cookie cookie1=new Cookie("CurrentUser",usr);
            Cookie cookie2=new Cookie("CreditCard",card);
            res.addCookie(cookie1);
            res.addCookie(cookie2);
            out.println("<h2>Welcome "+usr+"</h2><hr>");
            out.println("<h2>Select the book you would like to purchase<h2><hr>");
            out.println("<form action='LoginSuccess'>");
            out.println("<input type=radio name='book' checked value='Let us C'/>Let us C<br>");

            out.println("<input type=radio name='book' value='Exploring Python'/>Exploring
Python<br>");
            out.println("<input type=radio name='book' value='Mastering C'/>Mastering C<br>");
            out.println("<input type=submit value='purchase'><hr>");

        }
    }
    if(flag==true)
    {
        out.println("<h4>Invalid user name or password or card number,please try again by
clicking following link</h4>");
        out.println("<a href='LoginForm.html'>"+ "LoginForm.html");
    }
}
}

LoginSuccess.java
package shopping;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class LoginSuccess extends HttpServlet
{

```

protected void doGet(HttpServletRequest req, HttpServletResponse res) throws ServletException, IOException

```
{
Cookie[] mycookie=req.getCookies();
res.setContentType("text/html");
PrintWriter out=res.getWriter();
String book=req.getParameter("book");
out.print("<h2>welcome "+mycookie[0].getValue()+"</h2><hr>");
out.print("<h3>Thank you for purchasing book:"+book+"</h3><hr>");
out.print("<h3>Rs.250 debited from credit card: "+mycookie[1].getValue());
out.close();
}
}
```

### **Web.xml**

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-
app_3_1.xsd">
<servlet>
  <init-param>
    <param-name>usernames</param-name>
    <param-value> indhu,abc,xyz</param-value>
  </init-param>
  <init-param>
    <param-name>passwords</param-name>
    <param-value>indhu,abc,xyz</param-value>
  </init-param>
  <init-param>
    <param-name>cardIDs</param-name>
    <param-value>111111,222222,333333</param-value>
  </init-param>
  <servlet-name>LoginServlet</servlet-name>
  <servlet-class>shopping.LoginServlet</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>LoginServlet</servlet-name>
  <url-pattern>/LoginServlet</url-pattern>
</servlet-mapping>
<servlet>
  <servlet-name>LoginSuccess</servlet-name>
  <servlet-class>shopping.LoginSuccess</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>LoginSuccess</servlet-name>
  <url-pattern>/LoginSuccess</url-pattern>
</servlet-mapping>
</web-app>
```



## OUTPUT:



http://localhost:8084/shopping1/LoginForm.html

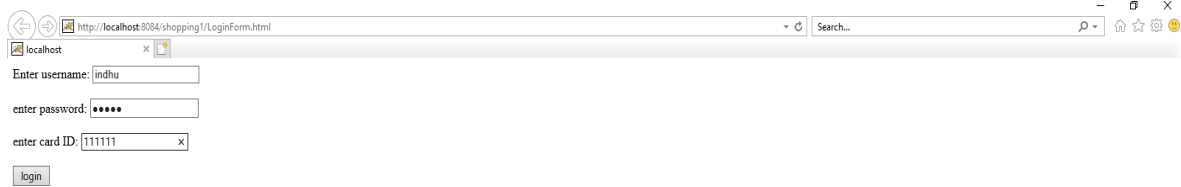
localhost

Enter username:

enter password:

enter card ID:

login



http://localhost:8084/shopping1/LoginForm.html

localhost

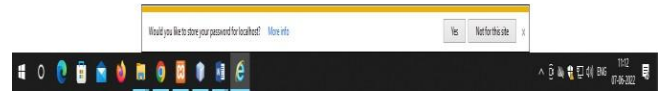
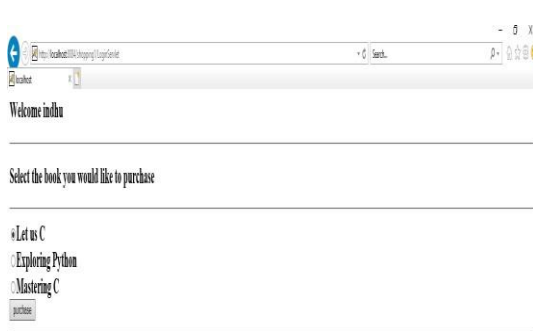
Enter username:

enter password:

enter card ID:

login





## RESULT:

Thus the conversion of the static web pages into dynamic web pages using servlets cookies has been executed successfully.

To convert the static web pages into dynamic web pages using JSP. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database.

1. Create your own directory under tomcat/webapps (e.g. tr1).
2. Copy the html files in tr1.
3. Copy the jsp files also into tr1.
4. Start tomcat give the following command.
  - a. Catalina.bat run
  - b. At install-dir/bin
5. At I.E give url as <http://localhost:8081/tr1/main.html>.

```
<html>
<body bgcolor="pink">
<br><br><br><br><br><br>
<h1 align="center"><u>ONLINE BOOK STORAGE</u></h1><br><br><br>
<h2 align="center"><PRE>
<b> Welcome to online book storage.
Press LOGIN if you are having id
Otherwise press REGISTRATION
</b></PRE></h2>
<br><br><pre>
<div align="center"><a href="/tr/login.html">LOGIN</a>
href="/tr/login.html">REGISTRATION</a></div></pre>
</body></html>
```

[illegible]

**Reg.html:**

```
<html>
<body bgcolor="pink"><br><br>
<form name="myform" method="post" action="/tr1/reg.jsp">
<div align="center"><pre>
NAME :<input type="text" name="name"><br>
ADDRESS :<input type="text" name="addr"><br>
CONTACT NUMBER : <input type="text" name="phno"><br>
LOGIN ID : <input type="text" name="id"><br>
PASSWORD : <input type="password" name="pwd"></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok"
onClick="validate()">()>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset"
value="clear">
</form>
</body>
</html>
```

**Profile.html:**

```
<html>
<body bgcolor="pink"><br><br>
<form name="myform" method="post" action="/tr1/profile.jsp">
<div align="center"><pre>
LOGIN ID : <input type="text" name="id"><br>
</pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok"
onClick="validate()">()>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset"
value="clear">
</form>
</body>
</html>
```

**Catalog.html:**

```
<html>
<body bgcolor="pink"><br><br><br>
<form method="post" action="/tr1/catalog.jsp">
<div align="center"><pre>
BOOK TITLE : <input type="text" name="title"><br>
</pre><br><br>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok"
name="button1">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear"
name="button2">
</form>
</body>
</html>
```

```
<html>  
<body bgcolor="pink"><br><br><br>  
<form method="post" action="/tr1/order.jsp">  
    <div align="center"><pre>  
LOGIN ID :<input type="text" name="id"><br>  
PASSWORD : <input type="password" name="pwd"><br>  
TITLE :<input type="text" name="title"><br>  
NO. OF BOOKS : <input type="text" name="no"><br>  
DATE : <input type="text" name="date"><br>  
CREDIT CARD NUMBER : <input type="password" name="cno"><br></pre><br><br>  
    </div>  
    <br><br>  
    <div align="center">  
        <input type="submit" value="ok" name=""button1"">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
        type="reset"  
        value="clear" name=""button2"">  
    </form>  
</body>  
</html>
```

```
% @page import="java.sql.*"%
% @page import="java.io.*"%
<%
out.println("<html><body bgcolor=\"pink\">");
String id=request.getParameter("id");
String pwd=request.getParameter("pwd");
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
Statement stmt=con.createStatement();
String sqlstmt="select id,password from login where id="+id+" and password="+pwd+"";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
flag=1;
}
if(flag==0)
{
out.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
out.println(" <a href=\"/tr1/login.html\">press LOGIN to RETRY</a>");
}
else
{
out.println("VALID LOGIN ID<br><br>");
out.println("<h3><ul>");
out.println("<li><ahref=\"/profile.html\"><fontcolor=\"black\">USER
PROFILE</font></a></li><br><br>");
}
```

```

out.println("<li><a href=\"catalog.html\"><fontcolor=\"black\">BOOKS
CATALOG</font></a></li><br><br>");
out.println("<li><a href=\"order.html\"><fontcolor=\"black\">ORDER
CONFIRMATION</font></a></li><br><br>");
out.println("</ul>");
}
out.println("<body></html>");
%>

```

### **Reg.jsp:**

```

%@page import="java.sql.*"%
%@page import="java.io.*"%
<%
out.println("<html><body bgcolor=\"pink\">");
String name=request.getParameter("name");
String addr=request.getParameter("addr");
String phno=request.getParameter("phno");
String id=request.getParameter("id");
String pwd=request.getParameter("pwd");
int no=Integer.parseInt(phno);
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
Statement stmt=con.createStatement();
String sqlstmt="select id from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
if(id.equals(rs.getString(1)))
{
flag=1;
}
}
if(flag==1)
{
out.println("SORRY LOGIN ID ALREADY EXISTS TRY AGAIN WITH NEW ID <br><br>");
out.println("<a href=\"tr1/reg.html\">press REGISTER to RETRY</a>");
}
else
{
Statement stmt1=con.createStatement ();
stmt1.executeUpdate ("insert into login values (+name+\",\"+addr+\",\"+no+\",\"+id+\",\"+pwd+)");
out.println ("YOU DETAILS ARE ENTERED <br><br>");
out.println ("<a href =\"tr1/login.html\">press LOGIN to login</a>");
}
out.println ("</body></html>");
%>

```

### **Profile.jsp:**

```

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

```

```

<% @page import="java.io.*"%>
<%
out.println ("<html><body bgcolor=\`pink\`>");
String id=request.getParameter("id");
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.regiserDriver(d);
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
Statement stmt=con.createStatement ();
String sqlstmt="select * from login where id="+id+"";
ResultSet rs=stmt.executeQuery (sqlstmt);
int flag=0;
while(rs.next())
{
out.println ("<div align=\`center\`>");
out.println ("NAME :"+rs.getString(1)+"<br>");
out.println ("ADDRESS :"+rs.getString(2)+"<br>");
out.println ("PHONE NO :"+rs.getString(3)+"<br>");
out.println ("</div>");
flag=1;
}
if(flag==0)
{
out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
out.println("<a href=\`/tr1/profile.html\`>press HERE to RETRY </a>");
}
out.println ("</body></html>");
%>

```

### **Catalog.jsp:**

```

<% @page import="java.sql.*"%>
<% @page import="java.io.*"%>
<%
out.println ("<html><body bgcolor=\`pink\`>");
String title=request.getParameter ("title");
Driver d=new oracle.jdbc.driver.OracleDriver ();
DriverManager.regiserDriver (d);
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
Statement stmt=con.createStatement ();
String sqlstmt="select * from book where title="+title+"";
ResultSet rs=stmt.executeQuery (sqlstmt);
int flag=0;
while(rs.next())
{
out.println ("<div align=\`center\`>");
out.println ("TITLE :"+rs.getString(1)+"<br>");
out.println ("AUTHOR :"+rs.getString(2)+"<br>");
out.println ("VERSION:"+rs.getString(3)+"<br>");
out.println ("PUBLISHER :"+rs.getString(4)+"<br>");
out.println ("COST :"+rs.getString(5)+"<br>");
out.println ("</div>");
flag=1;
}

```

```

}
if(flag==0)
{
out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
out.println("<a href='\"/tr1/catalog.html\"'>press HERE to RETRY </a>");
}
out.println("</body></html>");
%>

```

### Order.jsp:

```

<% @page import="java.sql.*"%>
<% @page import="java.io.*"%>
<%
out.println("<html><body bgcolor='\"pink\"'>");
String id=request.getParameter("id");
String pwd=request.getParameter("pwd");
String title=request.getParameter("title");
String count1=request.getParameter("no");
String date=request.getParameter("date");
String cno=request.getParameter("cno");
int count=Integer.parseInt(count1);
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.regiserDriver(d);
Connection con=
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
Statement stmt=con.createStatement();
String sqlstmt="select id, password from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0,amount,x;
while(rs.next())
{
if(id.equals(rs.getString(1))&& pwd.equals(rs.getString(2)))
{
flag=1;
}
}
if(flag==0)
{
out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
out.println("<a href='\"/tr1/order.html\"'>press HERE to RETRY </a>");
}
else
{
Statement stmt2=con.createStatement();
String s="select cost from book where title='"+title+"'";
ResultSet rs1=stmt2.executeQuery(s);
int flag1=0;
while(rs1.next())
{
flag1=1;
x=Integer.parseInt(rs1.getString(1));
amount=count*x;
}
}
}
%>

```

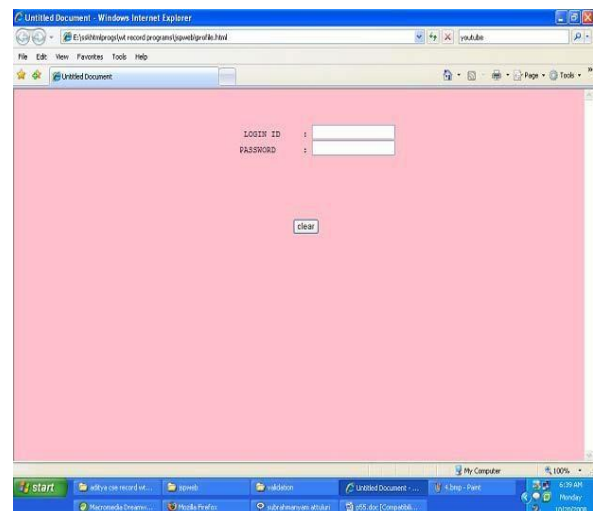
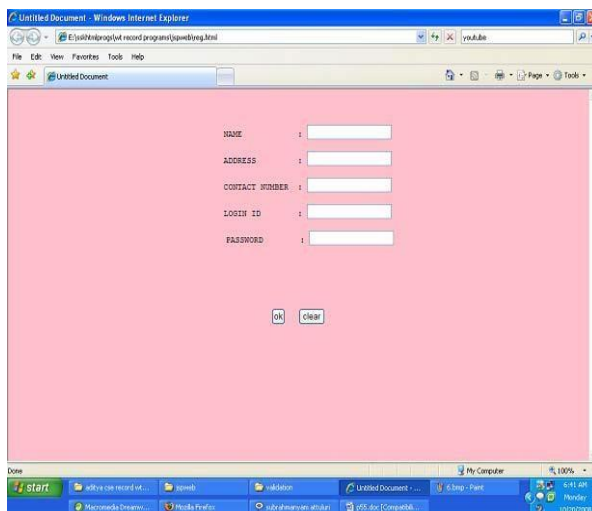
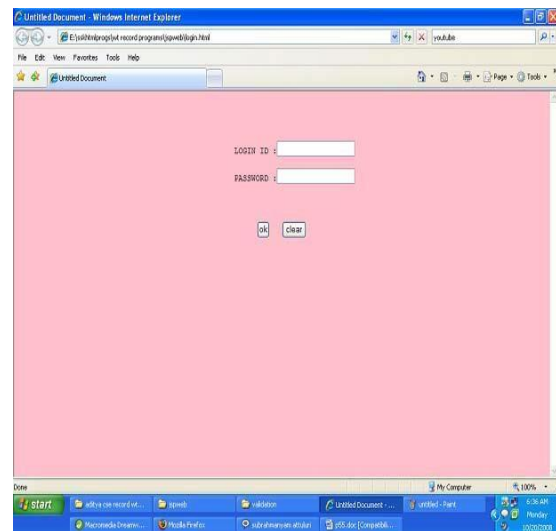
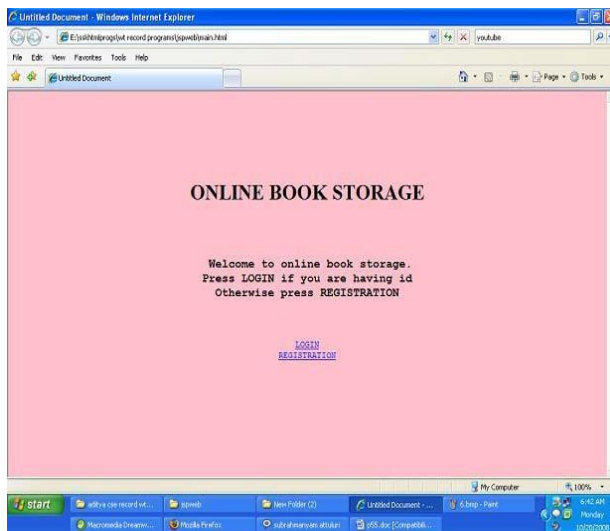


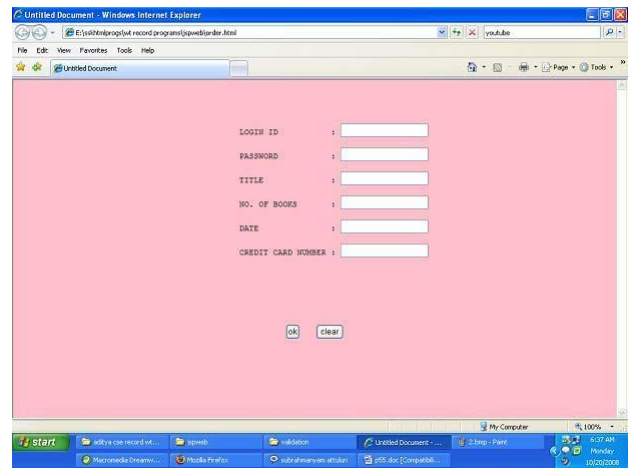
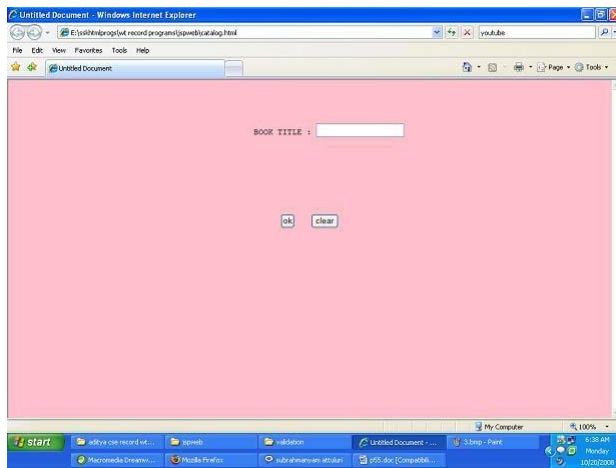
```

out.println("AMOUNT :"+amount+"<br><br><br><br>");
Statement stmt1=con.createStatement ();
stmt1.executeUpdate ("insert into details ("+"id+"","+"title+"","+"amount+"","+"date+"","+"cno+"");");
out.println ("YOU ORDER HAS TAKEN<br>");
}
if(flag1==0)
{
out.println("SORRY INVALID BOOK TRY AGAIN <br><br>");
out.println("<a href='\"/tr1/order.html\"'>press HERE to RETRY </a>");
}
}
out.println ("</body></html>");%>

```

## OUTPUT:





## RESULT:

The static web pages are converted into dynamic web pages using JSP for book catalogue.

**AIM:**

To create and save an XML document at the server, which contain some users information. To develop Java Program takes user id as an input and returns the user details by taking the user information from the XML document.

**PROCEDURE:**

1. Save Students information in the XML file on the specific location.
2. Create and Establish the server connection between html file and XML file in the host
3. Get the user ID as input
4. Display the user's information.

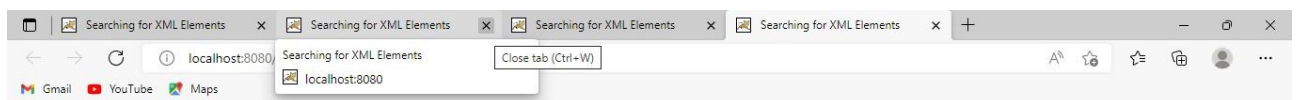
**PROGRAM :****index.html:**

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE>Searching for XML Elements </TITLE>
<SCRIPT>
function readXMLData()
{
var xmlDocumentObject, id , name , addr, phone, email;
xmlDocumentObject=new XMLHttpRequest();
xmlDocumentObject.open("GET","userlist.xml",false);
xmlDocumentObject.send();
xmlDocumentObject=xmlDocumentObject.responseXML;
id = xmlDocumentObject.getElementsByTagName("userid");
name = xmlDocumentObject.getElementsByTagName("username");
address = xmlDocumentObject.getElementsByTagName("address");
phone = xmlDocumentObject.getElementsByTagName("phone");
email = xmlDocumentObject.getElementsByTagName("email");
for (i = 0; i < id.length; i++)
{
output=id[i].firstChild.nodeValue;
if (output == document.getElementById("myText").value)
{displayDIV.innerHTML = id[i].firstChild.nodeValue + "<br> " + name[i].firstChild.nodeValue
+"<br> " +address[i].firstChild.nodeValue + "<br> " +
phone[i].firstChild.nodeValue+"<br>" +email[i].firstChild.nodeValue;
} } }
</SCRIPT>
</HEAD>
<BODY>
<H1>Search User</H1>
<input type="text" id="myText" value="">
<input type="BUTTON" VALUE="Get User Details" ONCLICK="readXMLData()">
<P>
<DIV ID="displayDIV"> </DIV>
</BODY>
</HTML>
```

### userlist.xml:

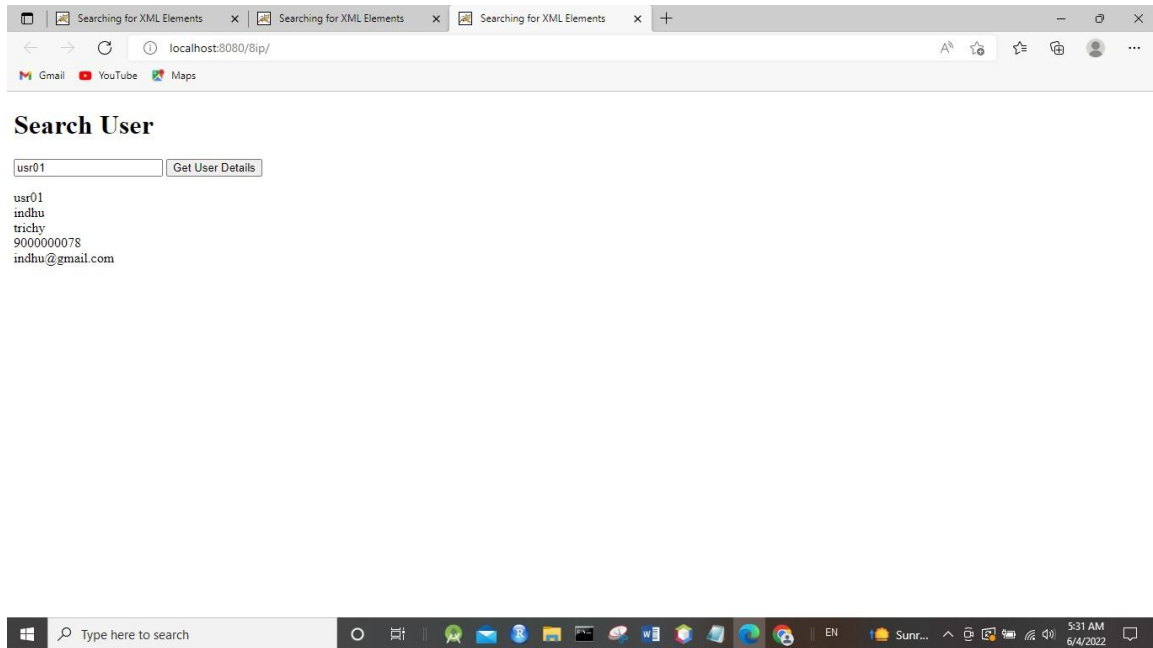
```
<userlist>
<userid>usr01</userid>
<username>indhu</username>
<address>trichy</address>
<phone>9000000078</phone>
<email>indhu@gmail.com</email>
<userid>usr02</userid>
<username>Pooja</username>
<address>chennai</address>
<phone>9111111111</phone>
<email>pooja@gmail.com</email>
<userid>usr03</userid>
<username>sadhana</username>
<address>telugana</address>
<phone>9222222222</phone>
<email>sadhana@gmail.com</email>
<userid>usr04</userid>
<username>sameera</username>
<address>bangalore</address>
<phone>9555555555</phone>
<email>sameera@gmail.com</email>
<userid>usr05</userid>
<username>naveena</username>
<address>Perambalur</address>
<phone>9666666666</phone>
<email>naveena@gmail.com</email>
</userlist>
```

### OUTPUT:



### Search User





## RESULT:

Thus the Java Program takes user id as an input and returns the user details by taking the user information from the XML document has been executed successfully.

**AIM:**

To validate the form using PHP regular expression.

**PROCEDURE:**

1. Form is created for class registration with fields.
2. These fields are validated using PHP code.
3. Form is displayed.

**PROGRAM:****index.php:**

```
<!DOCTYPE HTML>
<html>
<head>
<style>
.error {color: #FF0000;}
</style>
</head>
<body>
<?php
$nameErr = $emailErr = $genderErr = $websiteErr = "";
$name = $email = $gender = $comment = $website = "";
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    if (empty($_POST["name"])) {
        $nameErr = "Name is required";
    } else {
        $name = test_input($_POST["name"]);
        if (!preg_match("/^[a-zA-Z-' ]*$/",$name)) {
            $nameErr = "Only letters and white space allowed";
        }
    }
    if (empty($_POST["email"])) {
        $emailErr = "Email is required";
    } else {
        $email = test_input($_POST["email"]);
        if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
            $emailErr = "Invalid email format";
        }
    }
    if (empty($_POST["website"])) {
        $website = "";
    } else {
        $website = test_input($_POST["website"]);
```

```

    if (!preg_match("/\b(?:?:https?|ftp):\\\/|www\\.)([-a-z0-9+&@#\/%?=_!:,;])*[-a-z0-9+&@#\/%?=_!:,;]/i",$website)) {
        $websiteErr = "Invalid URL";
    }
}
if (empty($_POST["comment"])) {
    $comment = "";
} else {
    $comment = test_input($_POST["comment"]);
}
if (empty($_POST["gender"])) {
    $genderErr = "Gender is required";
} else {
    $gender = test_input($_POST["gender"]);
}
}
function test_input($data) {
    $data = trim($data);
    $data = stripslashes($data);
    $data = htmlspecialchars($data);
    return $data;
}
?>
<h2>PHP Form Validation Example</h2>
<p><span class="error">* required field</span></p>
<form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]);?>">
    Name: <input type="text" name="name" value="<?php echo $name;?>">
    <span class="error">* <?php echo $nameErr;?></span>
    <br><br>
    E-mail: <input type="text" name="email" value="<?php echo $email;?>">
    <span class="error">* <?php echo $emailErr;?></span>
    <br><br>
    Website: <input type="text" name="website" value="<?php echo $website;?>">
    <span class="error"><?php echo $websiteErr;?></span>
    <br><br>
    Comment: <textarea name="comment" rows="5" cols="40"><?php echo
    $comment;?></textarea>
    <br><br>
    Gender:
    <input type="radio" name="gender" <?php if (isset($gender) &&
    $gender=="female") echo "checked";?> value="female">Female
    <input type="radio" name="gender" <?php if (isset($gender) && $gender=="male")
    echo "checked";?> value="male">Male
    <input type="radio" name="gender" <?php if (isset($gender) && $gender=="other")
    echo "checked";?> value="other">Other
    <span class="error">* <?php echo $genderErr;?></span>

```

```

<br><br>
<input type="submit" name="submit" value="Submit">
</form>
<?php
echo "<h2>Your Input:</h2>";
echo $name;
echo "<br>";
echo $email;
echo "<br>";
echo $website;
echo "<br>";
echo $comment;
echo "<br>";
echo $gender;
?>
</body>
</html>

```

## OUTPUT:

**Absolute classes registration**

\* required field.

Name:  \*

E-mail:  \*

Time:

Classes:

Gender: ☐ Female ☐ Male \*

**Your given values are as :**

← → ↻ ⓘ localhost/ip%20lab/index1.php

🔍 New Tab 🌐 pytnex.ipynb - Cola...

## Absolute classes registration

\* required field.

Name:  \*

E-mail:  \*

Time:

Classes:

Gender: ☐ Female ☐ Male \*

## Your given values are as:

indhu  
indhu@gmail.com  
www.indhu.com  
hai  
female

## RESULT:

The form is validated using PHP regular expression.



**AIM:**

To store a PHP form data into database.

**PROCEDURE:**

1. Form is created with fields name, mail id, contact and address.
2. Table is created in mysql.
3. The input data entered into the fields are stored using PHP code.

**PROGRAM:****index.php:**

```
<!DOCTYPE html>

<html>

<head>

<style>

.error {color: #FF0000;}

</style>

</head>

<body>

<?php

$nameErr = $emailErr = $genderErr = $websiteErr = "";

$name = $email = $gender = $comment = $website = $result = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {

    if (empty($_POST["name"])) {

        $nameErr = "Name is required";

    } else {

        $name = test_input($_POST["name"]);

        if (!preg_match("/^[a-zA-Z ]*$/",$name)) {

            $nameErr = "Only letters and white space allowed";

        }

    }

}
```

```

if (empty($_POST["email"])) {
    $emailErr = "Email is required";
} else {
    $email = test_input($_POST["email"]);
    if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
        $emailErr = "Invalid email format";
    }
}

if (empty($_POST["website"])) {
    $website = "";
} else {
    $website = test_input($_POST["website"]);
    if (!preg_match("/^b(?:(:https?|ftp):\\\/\\\/www\\.)[-a-z0-9+&@#\\/%?=_~|!.,;]*[-a-z0-9+&@#\\/%=_~|]/i",$website)) {
        $websiteErr = "Invalid URL";
    }
}

if (empty($_POST["comment"])) {
    $comment = "";
} else {
    $comment = test_input($_POST["comment"]);
}

if (empty($_POST["gender"])) {
    $genderErr = "Gender is required";
} else {
    $gender = test_input($_POST["gender"]);
}

$servername = "localhost";

```

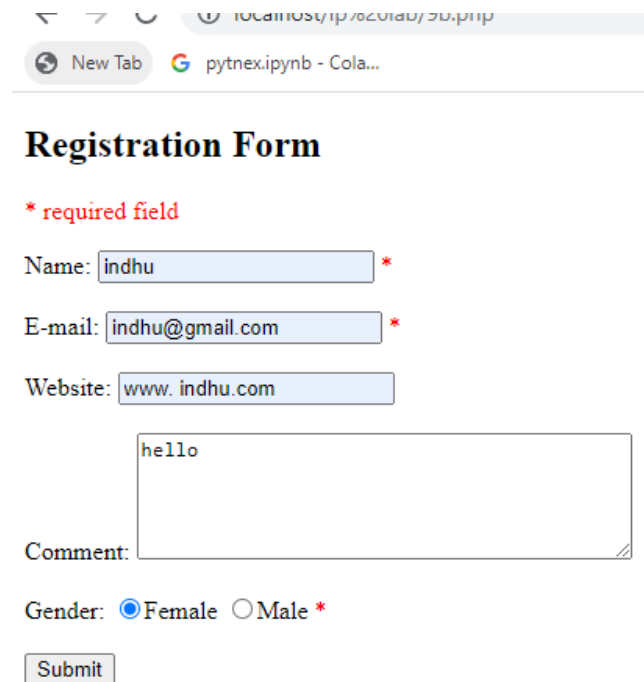
```

$username = "root";
$password = "";
$dbname = "iplab";
$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$sql = "INSERT INTO register (name, email,website,comments,gender)
VALUES ('$name', '$email', '$website','$comment', '$gender')";
if ($conn->query($sql) === TRUE) {
    $result="New Record Inserted Successfully";
} else {
    echo "Error: " . $sql . "<br>" . $conn->error;
}
$conn->close();
}
function test_input($data) {
    $data = trim($data);
    $data = stripslashes($data);
    $data = htmlspecialchars($data);
    return $data;
}
?>
<h2>Registration Form</h2>
<p><span class="error">* required field</span></p>
<form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]);?>">
Name: <input type="text" name="name">

```

```
<span class="error">* <?php echo $nameErr;?></span>
<br><br>
E-mail: <input type="text" name="email">
<span class="error">* <?php echo $emailErr;?></span>
<br><br>
Website: <input type="text" name="website">
<span class="error"><?php echo $websiteErr;?></span>
<br><br>
Comment: <textarea name="comment" rows="5" cols="40"></textarea>
<br><br>
Gender:
<input type="radio" name="gender" value="female">Female
<input type="radio" name="gender" value="male">Male
<span class="error">* <?php echo $genderErr;?></span>
<br><br>
<input type="submit" name="submit" value="Submit">
</form>
<?php
echo $result;
?>
</body>
</html>
```

## OUTPUT:



localhost/9b.php

New Tab pytnex.ipynb - Cola...

### Registration Form

\* required field

Name: indhu \*

E-mail: indhu@gmail.com \*

Website: www.indhu.com

Comment: hello

Gender: ☒ Female ☐ Male \*

Submit

### Registration Form

\* required field

Name: \*

E-mail: \*

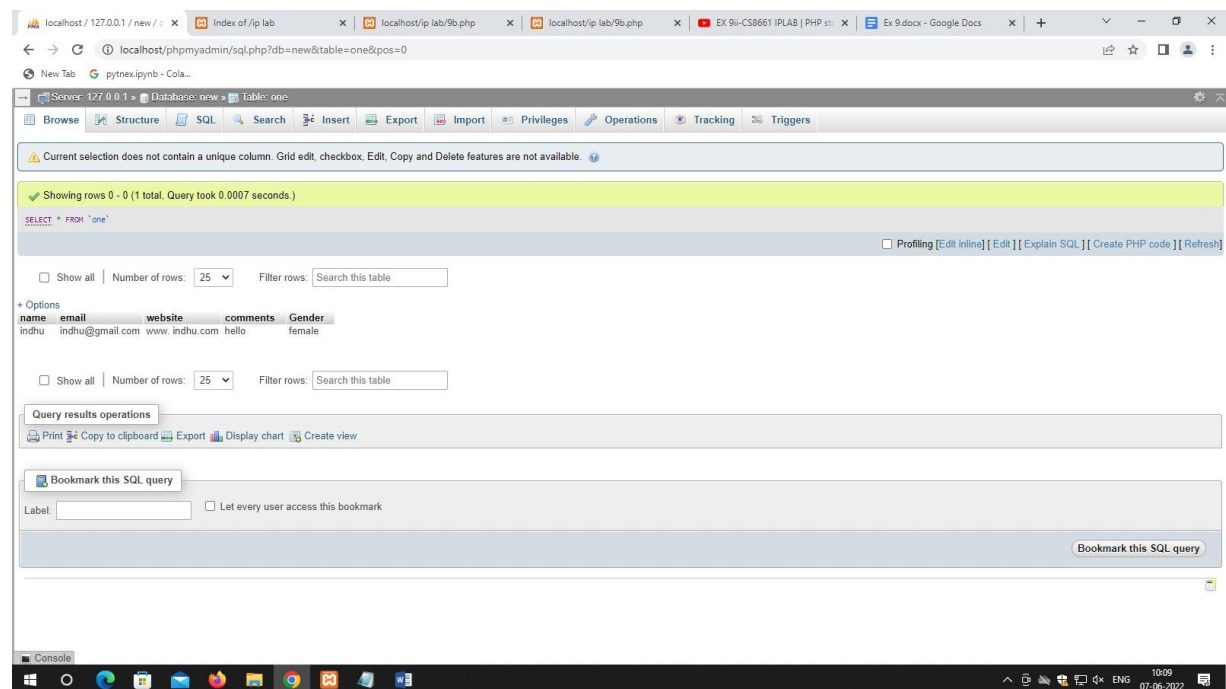
Website: Invalid URL

Comment:

Gender: ☐ Female ☐ Male \*

Submit

New Record Inserted Successfully



localhost / 127.0.0.1 / new / ...

localhost/phpmyadmin/sql.php?db=new&table=one&pos=0

Server: 127.0.0.1 > Database: new > Table: one

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 0 (1 total, Query took 0.0007 seconds)

SELECT \* FROM `one`

Options

name	email	website	comments	Gender
indhu	indhu@gmail.com	www.indhu.com	hello	female

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label:  ☐ Let every user access this bookmark

Bookmark this SQL query

Console

10:09 07-06-2022

## RESULT:

The PHP form data is stored into the database.

**AIM:**

To Write a web services for finding what people think by asking 500 people's opinion for any consumer product

**PROCEDURE:**

1. Open the home page.
2. Enter the login ID and type the comments then submit.
3. Retrieve comments with post id
4. Display the comments.

**PROGRAM:*****Index.php***

```
<!doctype html>
<html lang="en">
<head>
    <meta charset="UTF-8" />
    <title>jQuery Ajax Comment System - Demo</title>
    <link rel="stylesheet" href="css/style.css">
    <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.10.2/jquery.min.js"></script>
    <script src="js/script.js"></script>
</head>
<body>
    <div class="wrap">
        <h1>Maggy Noodles Comment System</h1>
        <?php
            // retrieve post
            include('config.php');
            include ('function.php');
            dbConnect();

            $query = mysql_query(
                'SELECT *
                FROM post
                WHERE post_id = 1');
            $row = mysql_fetch_array($query);
        ?>
        <div class="post">
            <h2><?php echo $row['post_title']?></h2>
            <p><?php echo $row['post_body']?></p>
        </div>
        <?php
            // retrieve comments with post id
            $comment_query = mysql_query(
                "SELECT *
                FROM comment
                WHERE post_id = {$row['post_id']}
                ORDER BY comment_id DESC
                LIMIT 15");
```

```

?>
<h2>Comments.... </h2>
<div class="comment-block">
<?php while($comment = mysql_fetch_array($comment_query)): ?>
    <div class="comment-item">
        <div class="comment-avatar">
            
        </div>
        <div class="comment-post">
            <h3><?php echo $comment['name'] ?> <span>said....</span></h3>
            <p><?php echo $comment['comment']?></p>
        </div>
    </div>
<?php endwhile?>
</div>
<h2>Submit new comment</h2>
<!--comment form -->
<form id="form" method="post">
    <!-- need to supply post id with hidden fild -->
    <input type="hidden" name="postid" value="<?php echo $row['post_id']?>">
    <label>
        <span>Name *</span>
        <input type="text" name="name" id="comment-name" placeholder="Your name here ... " required>
        </label>
        <label>
            <span>Email *</span>
            <input type="email" name="mail" id="comment-mail" placeholder="Your mail here... " required>
            </label>
            <label>
                <span>Your comment *</span>
                <textarea name="comment" id="comment" cols="30" rows="10" placeholder="Type your comment here... " required></textarea>
                </label>
                <input type="submit" id="submit" value="Submit Comment">
            </form>
        </div>
</body>
</html>

```

### ***Ajax\_Comment.php***

```

<?php
if (isset( $_SERVER['HTTP_X_REQUESTED_WITH'] )):
    include('config.php');
    include('function.php');
    dbConnect();

    if (!empty($_POST['name']) AND !empty($_POST['mail']) AND
!empty($_POST['comment']) AND !empty($_POST['postid'])) {
        $name = mysql_real_escape_string($_POST['name']);
        $mail = mysql_real_escape_string($_POST['mail']);
        $comment = mysql_real_escape_string($_POST['comment']);
        $postId = mysql_real_escape_string($_POST['postid']);
    }

```

```

        mysql_query("
            INSERT INTO comment
            (name, mail, comment, post_id)
            VALUES('{ $name}', '{ $mail}', '{ $comment}', '{ $postId}');
        }
    ?>
<div class="comment-item">
    <div class="comment-avatar">
        
    </div>
    <div class="comment-post">
        <h3><?php echo $name ?> <span>said. ..</span></h3>
        <p><?php echo $comment?></p>
    </div>
</div>

<?php
    dbConnect(0);
endif?>

```

### ***Config.php***

```

<?php
# db configuration
define('DB_HOST', 'localhost');
define('DB_USER', 'root');
define('DB_PASS', 'root');
define('DB_NAME', 'dbname');
?>

```

### ***Function.php***

```

<?php
/**
 * Connect to mysql server
 * @param bool
 * @use true to connect false to close
 */
function dbConnect($close=true){
    if (!$close) {
        mysql_close($link);
        return true;
    }
    $link = mysql_connect(DB_HOST, DB_USER, DB_PASS) or die('Could not connect to
MySQL DB ') . mysql_error();
    if (!mysql_select_db(DB_NAME, $link))
        return false;
}
/**
 * gravatar Image
 * @see http://en.gravatar.com/site/implement/images/
 */
function avatar($mail, $size = 60){
    $url = "http://www.gravatar.com/avatar/";
    $url .= md5( strtolower( trim( $mail ) ) );
}

```



```

        // $url .= "?d=" . urlencode( $default );
        $url .= "&s=" . $size;
        return $url;
    }
?>

Style.CSS
/* general styling */
*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    -webkit-box-sizing: border-box;
    -moz-box-sizing: border-box;
    -webkit-font-smoothing: antialiased;
    -moz-font-smoothing: antialiased;
    font-
        smoothing:
        antialiased;
}
body{
    font-
        smoothing:
        antialiased;
    text-rendering: optimizeLegibility;

    font: 12px Arial,Tahoma,Helvetica,FreeSans,sans-serif;
    text-transform: inherit;
    color: #333;
}
.wrap{ background: #e7edee;
width: 100%;
text-shadow: 0 1px 1px rgba(0, 0, 0, 0.2)

width: 720px;
margin: 15px auto;
padding: 15px 20px;
background: white;
border: 2px solid #DBDBDB;
}
-webkit-border-radius: 5px;
-moz-border-radius: 5px;
border-radius: 5px;
overflow: hidden;

a{ text-decoration: none; color: #333}
h1{
    font-family: Georgia, "Times New Roman", Times, serif;
    font-size: 2.8em;
    text-align: center;
    margin: 25px 0;
}
h2{font-size: 1.5em; margin: 8px 0}
h3{
    font-size: 1.2em;
    margin: 5px 0;

```

```
}  
h3 span{
```

```

        font-weight: normal;
        font-size: 1em;
    }
    .item{
        clear: both;
        margin:0;
        padding: 10px;
        overflow: hidden;
        border-top: 1px solid #DBDBDB;
    }
    .item:last-child{border-bottom:1px solid #DBDBDB}
    .item:hover{background: #f9f9f9}
    .post{
        padding: 10px 0;
        border-bottom: 1px solid #E6E6E6;
    }
    .comment-block{
        margin: 20px 0 20px 20px;
    }
    .comment-item{
        overflow: hidden;
        width: 500px;
        clear: both;
        padding: 10px;
        border: 1px solid #E6E6E6;
        border-radius: 5px;
        margin: 5px;
    }
    .comment-avatar{
        width: 60px;
        float: left;
    }
    .comment-avatar img{
        width: 60px;
        height: 60px;
        border-radius: 5px;
    }
    .comment-post{
        width: 400px;
        float: left;
        padding: 0 5px 0 10px;
    }
    #form{
        clear: both;
        margin: 10px;
        width: 500px;
    }

    /* form styling */
    input[type="text"],
    input[type="email"],
    input[type="tel"],
    input[type="url"],

```

```

textarea {
    width:100%;
    background: #fff;
    border: 1px solid #ddd;
    font-size: 13px;
    line-height: 20px;
    margin: 0;
    padding: 7px 10px;
    box-shadow: inset 0 1px 2px #eee;
    border:1px solid #CCC;
    margin:0 0 5px;
    border-radius:5px;
}

textarea {
    height:100px;
    max-width:100%;
}
input[type="submit"] {
    cursor:pointer;
    width:100%;
    border:none;
    background:#991D57;
    background-image:linear-gradient(bottom, #8C1C50 0%, #991D57 52%);
    background-image:-moz-linear-gradient(bottom, #8C1C50 0%, #991D57 52%);
    background-image:-webkit-linear-gradient(bottom, #8C1C50 0%, #991D57 52%);
    color:#FFF;
    margin:0 0 5px;
    padding:10px;
    border-radius:5px;
}
input[type="submit"]:hover {
    background-image:linear-gradient(bottom, #9C215A 0%, #A82767 52%);
    background-image:-moz-linear-gradient(bottom, #9C215A 0%, #A82767 52%);
    background-image:-webkit-linear-gradient(bottom, #9C215A 0%, #A82767 52%);
    -webkit-transition:background 0.3s ease-in-out;
    -moz-transition:background 0.3s ease-in-out;
    transition:background-color 0.3s ease-in-out;
}
input[type="submit"]:active {
    box-shadow:inset 0 1px 3px rgba(0,0,0,0.5);
}
input:focus,
textarea:focus {
    outline:0;
    border:1px solid #999;
}
label{
    display: block;
    margin: 5px 0;
    font-weight: 900;
    cursor: pointer;
}

```

```

.alert{
  display: none;
  padding: 8px 35px 8px 14px;
  margin: 20px 0;
  text-shadow: 0 1px 0 rgba(255, 255, 255, 0.5);
  color: #468847;
  background-color: #dff0d8;
  border-color: #d6e9c6;
  -webkit-border-radius: 4px;
  -moz-border-radius: 4px;
  border-radius: 4px;
}

```

### ***Script.js***

```

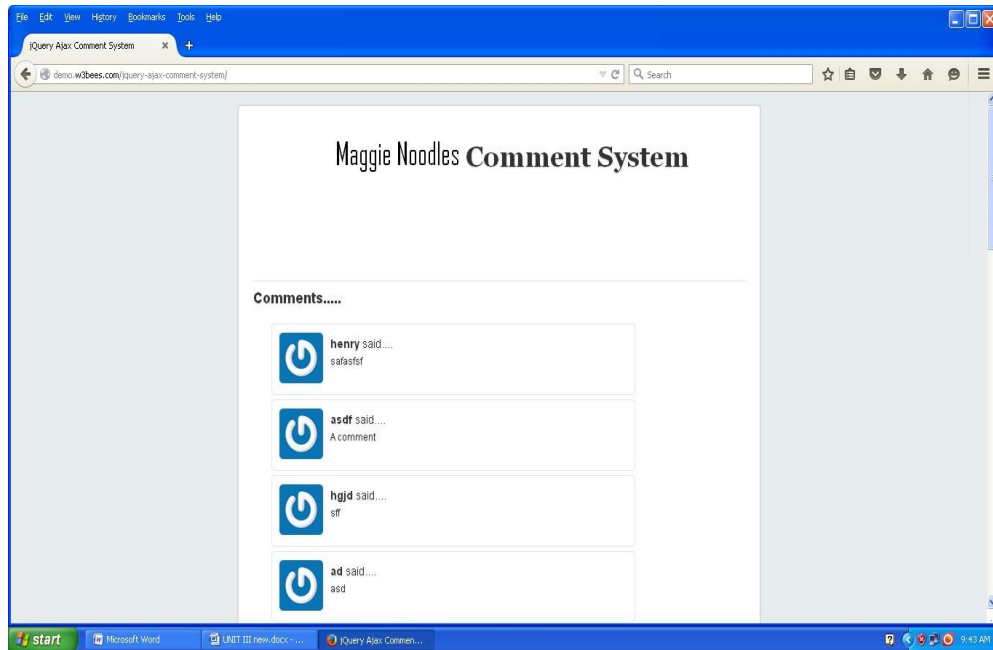
$(document).ready(function(){
  var form = $('form');
  var submit = $('#submit');

  form.on('submit', function(e) {
    // prevent default action
    e.preventDefault();
    // send ajax request
    $.ajax({
      url: 'ajax_comment.php',
      type: 'POST',
      cache: false,
      data: form.serialize(), //form serizlize data
      beforeSend: function(){
        // change submit button value text and disabled it
        submit.val('Submitting...').attr('disabled', 'disabled');
      },
      success: function(data){
        // Append with fadeIn see http://stackoverflow.com/a/978731
        var item = $(data).hide().fadeIn(800);
        $('.comment-block').append(item);

        // reset form and button
        form.trigger('reset');
        submit.val('Submit Comment').removeAttr('disabled');
      },
      error: function(e){
        alert(e);
      }
    });
  });
});

```

## OUTPUT:



## RESULT:

Thus a web services for finding what people think by asking 500 people's opinion for any consumer product has been executed successfully.

## VIVA QUESTIONS AND ANSWERS

1. **What are the three major components of HTML document?**
  - ☐ HTML declaration
  - ☐ The head
  - ☐ The body
2. **List out some of the HTML tags?**  
<LI>, <DIR>, <DL>, <DT>, <DD>, <MENU>, <OL>, </UL>
3. **What kind of tag is HTML?**  
Every HTML tag is either a container tag or standalone tag.
4. **How to format tags?**  
HTML provides a host of tags that we can use to change how text is displayed on a browser screen.
5. **Define HTML.**  
It is a simple page description language, which enables document creation for the web.
6. **List out the document structure tags.**  
<HTML>, <HEAD>, <BASE>, <ISINDEX>, <META>, <LINK>, <SCRIPT>, <STYLER>, <TITLE>, <BDO>, and <BODY>.
7. **What is CSS?**  
CSS stands for Cascading Style Sheets. Styles define how to display HTML elements.
8. **List the features of CSS?**
  - Text handling including fonts, sizing, styles and spacing.
  - Printing specific features, downloadable fonts
  - Support for vertical running text, multicolumn layout facilities.
9. **What are the three main parts of CSS syntax?**  
The CSS syntax is made up of three parts: a selector, a property and a value.
10. **Selector {property: value}**
  - The selector is normally the HTML element/tag we wish to define.
  - The property is the attribute we wish to change and each property can take a value.
  - The property and value are separated by a colon and surrounded by curly braces.
11. **How to insert a style sheet?**  
When a browser reads a style sheet, it will format the document according to it. There are three ways of inserting a style sheet:
  - ☐ External Style Sheet
  - ☐ Internal Style Sheet
  - ☐ Inline styles
  - ☐ Multiple style sheets
12. **List out the basic Internet Protocols.**  
TCP/IP, POP3, MIME, IMAP
13. **What are Web Servers?**  
A Web Server is software that accepts HTTP requests from web clients and returns an appropriate resource in the HTTP response.
14. **Define Web Clients.**
  - ☐ A Web Client is software that accesses a web server by sending an HTTP request message and processing the resulting HTTP response.
15. **How multi-tier architecture is differed from MVC architecture.**  
In multi tier architecture client tier never communicates directly with the data tier. All communications must pass through business tier. So it is called linear architecture. Where as in MVC, the view sends updates to controller, then controller updates model. So it is a triangular architecture.
16. **What is Session ID?**

A session ID is a unique identification string usually a long, random and alpha-numeric string, that is transmitted between the client and the server. Session IDs are usually stored in the cookies, URLs (in case url rewriting) and hidden fields of Web pages.

**17. What are the common mechanisms used for session tracking?**

- Cookies • SSLsessions • URL- rewriting

**18. Define protocol.**

A protocol is a formal set of rules that must be followed in order to communicate.

**19. What is the role of server?**

- Manages application tasks
- Handles storage
- Handles security
- Provides scalability
- Handles accounting and distribution

**20. Define internet.**

Network is an interconnection of systems to share data and information. Internet is network of network or collection of heterogeneous networks.

**21. Define XML.**

XML is a meta-markup language that provides a format for describing structured data. This facilitates more structured declarations of content and more meaningful search result across multiple platforms.

**22. Define DTD.**

- A DTD is a set of rules that specifies how to use XML markup. It contains specifications for each element, including what the element's attributes are, what values the attributes can take on and what elements can be contained in others.

**23. What are the XML rules for distinguishing between the content of a document and the Xml markup element?**

- The start of XML markup elements is identified by either the less than symbol (<), the apostrophe or single quote (') and the double quotation marks (") are used by XML for markup.
- To use these special characters as content within your document, you must use the corresponding general XML entity.

**24. List some examples of web services.**

SMS: <http://www.webservicex.net/sendsmsworld.asmx2>.

Whois: <http://www.webservicex.net/whois.asmx?op=GetWhoIS>

**25. List out some web service technologies?**

- XML• SOAP• WSDL

**26. What is SOAP?**

SOAP - Simple Object Access Protocol - protocol specification for exchanging structured information in the implementation of Web Services in computer networks. - relies on Extensible Markup Language (XML) for its message format, and usually relies on other Application Layer protocols, most notably Hypertext Transfer Protocol (HTTP) and Simple Mail Transfer Protocol (SMTP), for message negotiation and transmission.