

PODHIGAI

COLLEGE OF ENGINEERING AND TECHNOLOGY, TIRUPATTUR

DEPARTMENT OF INFORMATION TECHNOLOGY



B.Tech. INFORMATION TECHNOLOGY

IT3401 – WEB ESSENTIALS LABORATORY

MANUAL

NAME OF THE STUDENT :

REGISTER NUMBER :

YEAR & SEMESTER :

BRANCH :

ACADEMIC YEAR :

INDEX

Ex No.	Date	Experiments	Page No.	Staff Signature
1		Creation of Interactive Web Sites		
2		Form Validation using JavaScript		
3		Creation of Simple PHP Scripts		
4		Handling Multimedia Content in Web Sites		
5. A.		Invoke Servlets from HTML Forms		
5. B.		Session Tracking using Hidden Form Fields		
5. C.		Session Tracking for a Hit Count		
6		Creation of Information Retrieval System		
7		Creation of Personal Information System		

EX NO : 1	Creation of Interactive Web Sites
DATE :	

Aim:

To create the interactive web sites design using HTML and authoring tools.

Procedure:

1. Turn on the web server with necessary featured packages.
2. Confirm the running of the web server's control page by using local host url.
3. Start your website construction from webserver's localhost location.
4. Build the required html structure to deploy the appropriate web site.
5. Prepare and build the appropriate collection of required html pages.
6. Layout the web pages with relevant textual contents.
7. Style the html pages with Inline, Internal and External CSS Properties.
8. Format the html pages with required images with relevant options.
9. Prepare the html pages with anchor links to navigate with neighbouring pages.
10. Launch the website in the recommended web browser.

Program:

EXTERNAL CSS:

mystyle.css

```

body {
    background-color: lightblue;
}

h1 {
    color: navy;
    margin-left: 20px;
    text-align:center;
}

h2 {
    color: navy;
    margin-left: 20px;
    text-align:center;
    text-decoration: underline;
}

```

webpage.html

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" type="text/css"
href="file:///C:/Users/BLACK%20BILLA/Music/web2/mystyle.css">
</head>

<!-- INTERNAL CSS --
<style>
li{
display: inline;
padding: 18px;
color : white;

}
li:hover{
background-color: yellow;
color:black;
}
div{
background-color: brown;
padding: 2px;
margin:none;
border:none
}
a{
text-decoration:none;
}
p{

background-color:none;
font-size:15px;
text-align:justify;
}
```

```
</style>
<body>
<h1>Sri Balaji Chockalingam Engineering Colege, Arni</h1>
<h2>Welcome to Department of Information Technology</h2>
<div>
<!-- INLINE CSS -->
<ul style="list-style-type:none;">
<a href="#"><li>Home</li></a>
<a
href="file:///C:/Users/HOD%20IT%20DEPARTMENT/Documents/Department.html
">
<li>Department</li>
</a>
<a href="file:///C:/Users/HOD%20IT%20DEPARTMENT/Documents/
Examination.html">
<li>Examination</li>
</a>
<a href=" C:/Users/HOD%20IT%20DEPARTMENT/Documents/ Admission.html">
<li>Admission</li>
</a>
<a href=" C:/Users/HOD%20IT%20DEPARTMENT/Documents/ Faculties.html ">
<li>Faculties</li>
</a>
<a href=" C:/Users/HOD%20IT%20DEPARTMENT/Documents/ Facilities.html ">
<li>Facilities</li></a>
<a href="C:/Users/HOD%20IT%20DEPARTMENT/Documents/ About_Us.html">
<li>About Us</li>
</a>

<a href="C:/Users/HOD%20IT%20DEPARTMENT/Documents/ Contact_Us.html">
<li>Contact Us</li>
</a>
</ul>
</div>


<p>

Sri Balaji Chockalingam Engineering College, an institution of academic excellence, was established in the year 1999, with a cherished desire to serve the cause of humanity through technical higher education.

This college has been affiliated to Anna University, Chennai and has been recognized by the Government of TamilNadu. It is a Co-Educational Engineering College offering six B.E., / B.Tech., courses and four P.G. courses. All the courses have been recognized by the All India Council for Technical Education, New Delhi and accredited by NBA.

<p>

</body>

</html>

## Department.html

<!DOCTYPE html>

<html>

<head>

<title>SbcecInfoTech</title>

</head>

<body style="background-color:Cornsilk; text-align:center;">

<h1>Welcome to The Department of Information Technology</h1>

<p>

The Department of Information Technology was origin in since the year of 1999.

The motto of our department is considering the development and competitive potential

of the students

to meet the current trends of IT field in the society.

Our Department has an expert team of well qualified and professionally experienced academic members.

They dedicate their intellectual approaches to emerge the trending technology and direct the students

towards closely with technological and industrial activities by advisory layouts.

They are actively engaged in research and development activities on recent and current

trend technologies.

“The Students are well equipped to face the challenges in their resolution as well as to survive and adopt themselves with future scenarios in IT sectors”.

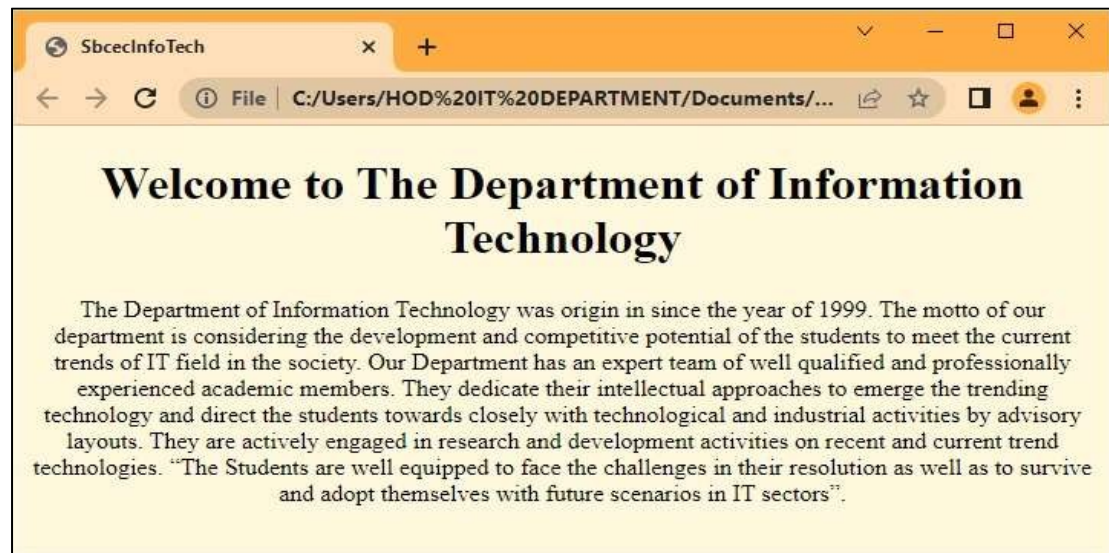
</p>

</body>

</html>

**Note :** Similarly create additional html pages for Examination, Admission, Faculties, Facilities, About\_Us, Contact\_Us Pages.

## OUTPUT :



## Result:

The Creation of interactive web sites design using HTML and authoring tools has been completed successfully.



|                  |                                         |
|------------------|-----------------------------------------|
| <b>EX NO : 2</b> | <b>Form Validation using JavaScript</b> |
| <b>DATE :</b>    |                                         |

**Aim:**

To validate the html forms at client side using Javascript.

**Procedure:**

1. Turn on the web server with necessary featured packages.
2. Confirm the running of the web server's control page by using local host url.
3. Start your website construction from webserver's localhost location.
4. Build the required html structure to deploy the appropriate web site.
5. Prepare and build the appropriate collection of required html pages.
6. Layout the web pages with relevant validating criteria and textual contents.
7. Style the html pages with Inline, Internal and External CSS Properties.
8. Format the html pages with required images with relevant options.
9. Prepare the html pages with anchor links to navigate with neighbouring pages.
10. Launch the website in the recommended web browser.

**Program:**

**Webpage for Validation.html**

```

<!DOCTYPE html>

<html>

<head>

<title>Validation</title>

</head>

<!-- INTERNAL CSS -->

<style>body {

 background-color: lightblue;

}

h1 {

 color: navy;

```

```
margin-left: 20px;

text-align:center;
}
h2 {
 color: navy;
 margin-left:
 20px;text-
 align:center;
text-decoration: underline;
}

 li{ display: inline;padding: 18px;
 color : white;
}
li:hover{
background-color: yellow;color:black;
}
div#incss{
background-color: brown;padding:
2px; margin:none;
border:none
}
a{
text-decoration:none;
}
p{
background-color:none; font-
size:15px;
text-align:justify;
}

/* Style inputs, select elements and textareas */
input[type=text],input[type=date], select{ width: 30%;
padding: 10px;
border: 1px solid
```

```

 #ccc;

 border-radius: 4px;

 box-sizing: border-box;
 resize: vertical;
 }
 /* Style the label to display next to the inputs */label {
 padding: 12px 12px 12px 0;
 display: inline-block;
 }
 /* Style the submit button */
 input[type=submit] { background-
 color: #4CAF50;color: white;
 padding: 12px 20px;
 border: none;
 border-radius: 4px;cursor:
 pointer; float:center;
 }

 /* Style the container */
 .container {
 border-radius: 5px;
 background-color: #b4b4b4;
 padding: 20px;
 }

 /* Floating column for labels: 25% width */
 .col-25 {
 float: left;
 width:
 15%;
 margin-top: 6px; background-color:

```

```

 #b4b4b4;
}

/* Floating column for inputs: 75% width */
.col-75 {
 float: left;

 width: 75%;
 margin-top: 6px; background-color:
 #b4b4b4;
}
/* Clear floats after the columns */
.row:after {
 content: "";
 display: table;
 clear: both;
background-color: #b4b4b4;
}
</style>

<body>

<h1>Sri Balaji Chockalingam Engineering Colege, Arani</h1>
<h2>Welcome to Department of Information Technology</h2>
<div id="incss">
<!-- INLINE CSS -->
<ul style="list-style-type:none;">
 Home
 Department
 Examination
 Adission
 Faculties
 Facilities
 About Us

 Contact Us

```

</ul>

</div>

<div class="container">

<form name="myform" action="#" method="post" onSubmit="return validate\_form();">

<div class="row">

<div class="col-25">

<label for="fname">Regiser Number</label>

</div>

<div class="col-75">

<input type="text" id="regno" name="regno" onchange="isregno()" placeholder="Your regiser number...">

</div>

</div>

<div class="row">

<div class="col-25">

<label for="lname">Student Name</label>

</div>

<div class="col-75">

<input type="text" id="lname" name="studname" onchange="issntxts()" placeholder="Your name..">

</div>

</div>

<div class="row">

<div class="col-25">

<label for="lname">Date of Birth</label>

</div>

<div class="col-75">

<input type="date" id="lname" name="dob" placeholder="Your date of birth..">

</div>

</div>

<div class="row">

<div class="col-25">

```

 <label for="lname">Mother Name</label>

 </div>

 <div class="col-75">

 <input type="text" id="lname" name="mothername" onchange="issntxtm()" placeholder="Your
 mother name..">

 </div>

</div>
<div class="row">

 <div class="col-25">

 <label for="lname">Father Name</label>

 </div>

 <div class="col-75">

 <input type="text" id="lname" name="fathername" onchange="issntxtf()" placeholder="Your
 father name..">

 </div>

</div>

 <div class="col-100" align="middle">

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

 </div>

</form>

</div>

<script type="text/javascript">
<!--
function validate_form()
{
 valid = true;if (
 (document.myform.regno.value == "")&&
 (document.myform.studname.value == "")&&
 (document.myform.dob.value == "")&&

 (document.myform.mothername.value == "")&&
 (document.myform.fathername.value == ""))
 {

```

```
alert ("Please fill in the Correct Value.");valid =
false;
}
else if (document.myform.regno.value == "")
{
alert ("Please fill in the 'Your Register' box.");valid =
false;
}
else if (document.myform.studname.value == "")
{
alert ("Please fill in the 'Your Student Name' box.");valid =
false;
}
else if (document.myform.dob.value == "")
{
alert ("Please fill in the 'Your Date of Birth' box.");valid =
false;
}
else if (document.myform.mothername.value == "")
{
alert ("Please fill in the 'Your Mother Name' box.");valid =
false;
}
else if (document.myform.fathername.value == "")
{
alert ("Please fill in the 'Your Father Name' box.");valid =
false;
}

else
{
var result="";
```

```
result= "Your Register No is : "+ document.myform.regno.value;
result =result +"\nYour Entered Name is "+ document.myform.studname.value;result
=result +"\nYour Date of Birth is "+ document.myform.dob.value;
result =result +"\nYou Mother Name is "+ document.myform.mothername.value;result
=result +"\nYour Father Name is "+ document.myform.fathername.value;alert (result);
```

```
valid = false; document.myform.regno.value="";
```

```
document.myform.studname.value="";
document.myform.dob.value="";
document.myform.mothername.value="";
document.myform.fathername.value="";
}
return valid;
}
function isregno()
{
var rn=document.myform.regno;
if(isNaN(rn.value)==true)
{
alert("The Entered Value is not a Number");rn.focus();
rn.select();
}
}

function issntxts()
{
var sn=document.myform.studname;
if(isNaN(sn.value)==false)
{
alert("Please Enter a Text Value to Student Name...");
sn.focus();
sn.select();
}
}
```



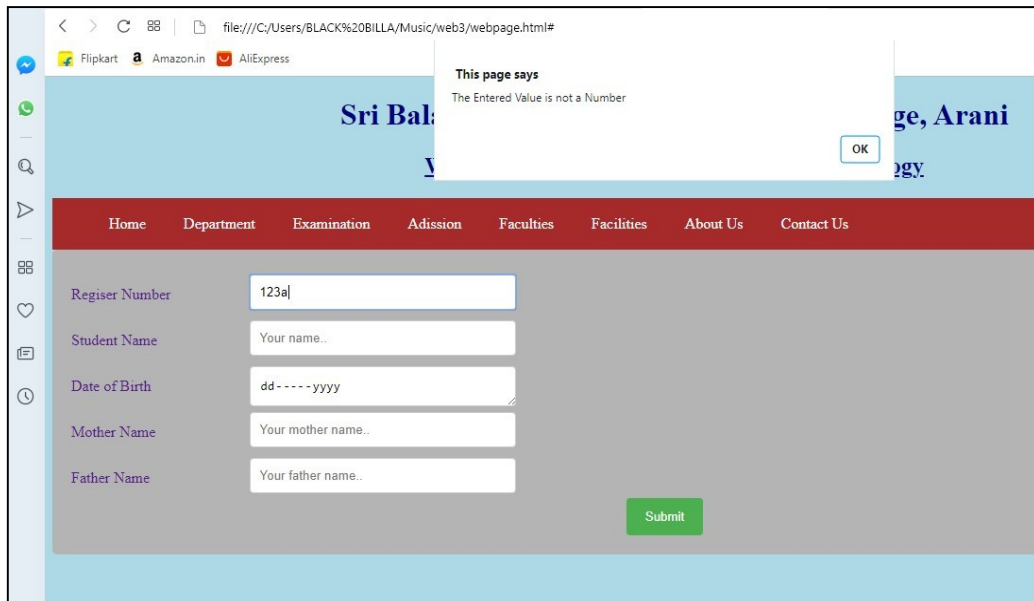
```
function issntxtm()
{
var mn=document.myform.mothersname;
if(isNaN(mn.value)==false)
{
alert("Please Enter a Text Value to Mother Name...");

mn.focus();
mn.select();
}
}

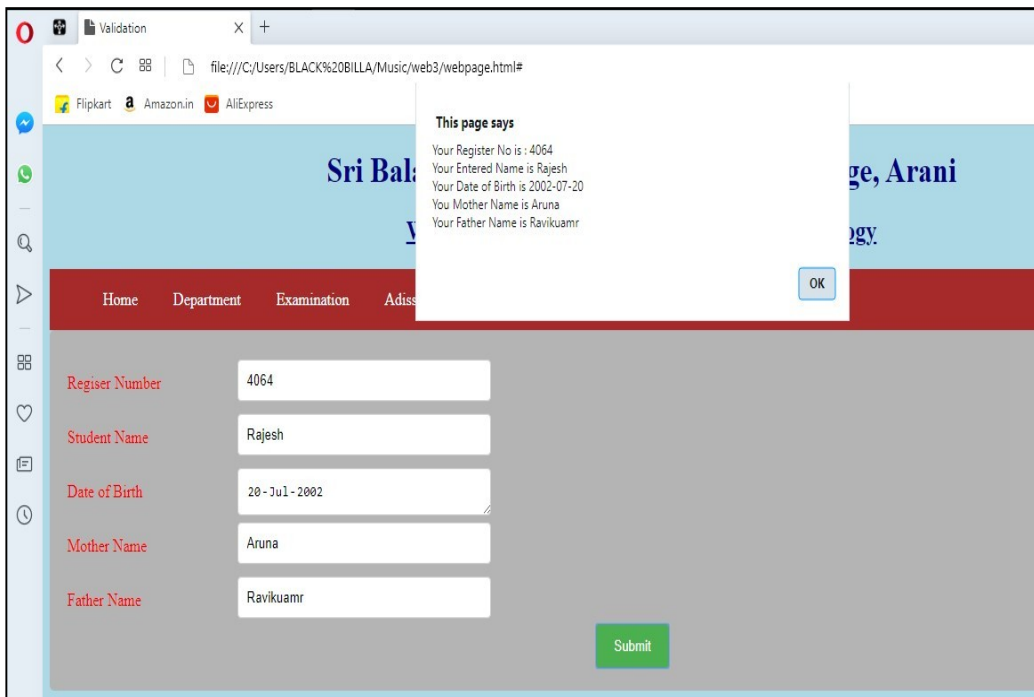
function issntxtf()
{
var fn=document.myform.fathername;
if(isNaN(fn.value)==false)
{
alert("Please Enter a Text Value to Father Name...");fn.focus();
fn.select();
}
}

//-->
</script>
</body>
</html>
```

## OUTPUT :



A screenshot of a web browser displaying a registration form. The browser's address bar shows the file path: file:///C:/Users/BLACK%20BILLA/Music/web3/webpage.html#. The page has a light blue header with the text "Sri Bal" and "ge, Arani". Below the header is a red navigation bar with links: Home, Department, Examination, Adission, Faculties, Facilities, About Us, and Contact Us. The main content area is a registration form with the following fields: "Regiser Number" (containing "123a"), "Student Name" (placeholder "Your name.."), "Date of Birth" (placeholder "dd - ---- -yyyy"), "Mother Name" (placeholder "Your mother name.."), and "Father Name" (placeholder "Your father name.."). A green "Submit" button is at the bottom right. An error message box is displayed, stating: "This page says: The Entered Value is not a Number".



A screenshot of the same web browser displaying the registration form after successful submission. The browser's address bar shows the same file path. The page layout is identical to the first screenshot. The form fields now contain the following data: "Regiser Number" (4064), "Student Name" (Rajesh), "Date of Birth" (20-Jul-2002), "Mother Name" (Aruna), and "Father Name" (Ravikuamr). The green "Submit" button is still present. A success message box is displayed, stating: "This page says: Your Register No is : 4064, Your Entered Name is Rajesh, Your Date of Birth is 2002-07-20, You Mother Name is Aruna, Your Father Name is Ravikuamr".

## Result:

The validation of html forms at client side using HTML and authoring tools has been completed successfully.

<b>EX NO : 3</b>	<b>Creation of simple PHP scripts</b>
<b>DATE :</b>	

**Aim:**

To create the simple PHP scripts using PHP Interpreters.

**Procedure:**

1. Turn on the web server with necessary featured packages.
2. Confirm the running of the web server's control page by using local host url.
3. Start your website construction from webserver's localhost location.
4. Build the required html structure to deploy the appropriate web site.
5. Prepare and build the appropriate collection of PHP scripts.
6. Layout the web pages with relevant PHP code contents.
7. Format the html pages with required images with relevant options.
8. Run the required output in the recommended web browser.

**Program:**

**Creating Different Variables**

```

<!DOCTYPE html>
<html>
<body>
<?php
$txt = "Hello world!";
$x = 5;
$y = 10.5;
echo $txt;
echo "
";
echo $x; echo
"
";echo
$y;
?>
</body>
</html>

```

**Output :**

```

Hello
world!5
10.5

```

### Test Global Scope (Variable at outside of the function)

```
<!DOCTYPE html>
<html>
<body>
<?php
$x = 5; // global scope
function myTest() {
 // using x inside this function
 will generate an error
 "<p>Variable x inside function is:
 $x</p>";
}
myTest();
echo "<p>Variable x outside function is: $x</p>";
?>
</body> </html>
```

#### Output:

```
Variable x inside function is:
Variable x outside function
is: 5
```

### Test Local Scope (Variable at inside of the function)

```
<!DOCTYPE html>
<html>
<body>
<?php
function myTest() {
 $x = 5; // local scope
 echo "<p>Variable x inside function is: $x</p>";
}
myTest();
// using x outside this function will generate an
error
echo "<p>Variable x outside function is:
$x</p>";
?>
</body>
</html>
```

**Output:**

Variable x inside function is: 5

Variable x outside function is:

**Using of Global keyword to access a global variable within a function**

```
<!DOCTYPE html>
<html>
<body>
<?php
$x = 5;
$y = 10;
function
myTest() {
global $x, $y;

$y = $x + $y;
}
myTest(); // run function
echo "The value obtained by accessing the variables using Global
keyword is : $y";
?>
</body>
</html>
```

**Output :**

The value obtained by accessing the variables using Global  
keyword is : 15.

**Result:**

The Creation of simple php scripts using php interpreters has been completed  
successfully.

**Ex No : 4**

**Date :**

## **Handling multimedia content in web sites**

### **What is Multimedia?**

Multimedia comes in many different formats. It can be almost anything you can hear or see, like images, music, sound, videos, records, films, animations, and more. Web pages often contain multimedia elements of different types and formats. Multimedia on the web is sound, music, videos, movies, and animations.

### **Multimedia Formats**

Multimedia elements (like audio or video) are stored in media files. The most common way to discover the type of a file, is to look at the file extension. Multimedia files have formats and different extensions like: .wav, .mp3, .mp4, .mpg, .wmv, and .avi.

### **Common Video Formats**

The MP4, WebM, and Ogg formats are only supported by HTML. The controls attribute adds video controls, like play, pause, and volume. It is a good idea to always include width and height attributes. If height and width are not set, the page might flicker while the video loads. The <source> element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.

<b>Format</b>	<b>File</b>	<b>Description</b>
MPEG	.mpg .mpeg	MPEG. Developed by the Moving Pictures Expert Group. The first popular video format on the web. Not supported anymore in HTML.
AVI	.avi	AVI (Audio Video Interleave). Developed by Microsoft. Commonly used in video cameras and TV hardware. Plays well on Windows computers, but not in web browsers.
WMV	.wmv	WMV (Windows Media Video). Developed by Microsoft. Commonly used in video cameras and TV hardware. Plays well on Windows computers, but not in web browsers.
QuickTime	.mov	QuickTime. Developed by Apple. Commonly used in video cameras and TV hardware. Plays well on Apple computers, but not in web browsers.
RealVideo	.rm .ram	RealVideo. Developed by Real Media to allow video streaming with low bandwidths. Does not play in web browsers.
Flash	.swf .flv	Flash. Developed by Macromedia. Often requires an extra component (plug-in) to play in web browsers.
Ogg	.ogg	Theora Ogg. Developed by the Xiph.Org Foundation. Supported by HTML.

WebM	.webm	WebM. Developed by Mozilla, Opera, Adobe, and Google. Supported by HTML.
MPEG-4 or MP4	.mp4	MP4. Developed by the Moving Pictures Expert Group. Commonly used in video cameras and TV hardware. Supported by all browsers and recommended by YouTube.

### Common Audio Formats

MP3 is the best format for compressed recorded music. The term MP3 has become synonymous with digital music. If your website is about recorded music, MP3 is the choice. Only MP3, WAV, and Ogg audio are supported by the HTML standard. The controls attribute adds audio controls, like play, pause, and volume. The <source> element allows you to specify alternative audio files which the browser may choose from. The browser will use the first recognized format. The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.

Format	File	Description
MIDI	.mid .midi	MIDI (Musical Instrument Digital Interface). Main format for all electronic music devices like synthesizers and PC sound cards. MIDI files do not contain sound, but digital notes that can be played by electronics. Plays well on all computers and music hardware, but not in web browsers.
RealAudio	.rm .ram	RealAudio. Developed by Real Media to allow streaming of audio with low bandwidths. Does not play in web browsers.
WMA	.wma	WMA (Windows Media Audio). Developed by Microsoft. Plays well on Windows computers, but not in web browsers.
AAC	.aac	AAC (Advanced Audio Coding). Developed by Apple as the default format for iTunes. Plays well on Apple computers, but not in web browsers.
WAV	.wav	WAV. Developed by IBM and Microsoft. Plays well on Windows, Macintosh, and Linux operating systems. Supported by HTML.
Ogg	.ogg	Ogg. Developed by the Xiph.Org Foundation. Supported by HTML.
MP3	.mp3	MP3 files are actually the sound part of MPEG files. MP3 is the most popular format for music players. Combines good compression (small files) with high quality. Supported by all browsers.
MP4	.mp4	MP4 is a video format, but can also be used for audio. Supported by all browsers.

## Programs :

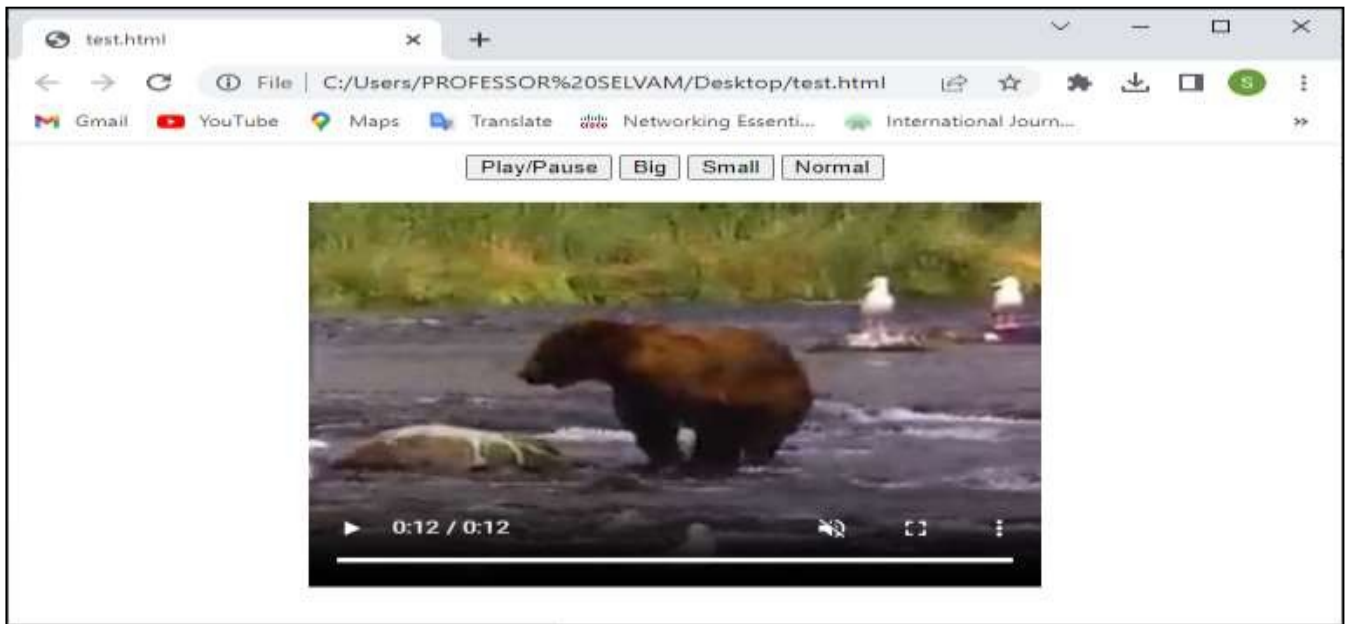
### HTML Video

```
<!DOCTYPE html>
<html>
<body>
<div style="text-align:center">
 <button onclick="playPause()">Play/Pause</button>
 <button onclick="makeBig()">Big</button>
 <button onclick="makeSmall()">Small</button>
 <button onclick="makeNormal()">Normal</button>

 <video id="video1" width="420" controls autoplay muted >
 <source src="file:///C:/Users/PROFESSOR%20SELVAM/Downloads/movie.mp4 "
 type="video/mp4">
 <source src="file:///C:/Users/PROFESSOR%20SELVAM/Downloads/movie.oog"
 type="video/ogg">
 </video>
</div>
<script>
var myVideo = document.getElementById("video1");
function playPause() {
 if (myVideo.paused)
 myVideo.play();
 else
 myVideo.pause();
}
function makeBig() {
 myVideo.width = 560;
}
function makeSmall() {
 myVideo.width = 320;
}
function makeNormal() {
 myVideo.width = 420;
}
</script>
</body>
</html>
```



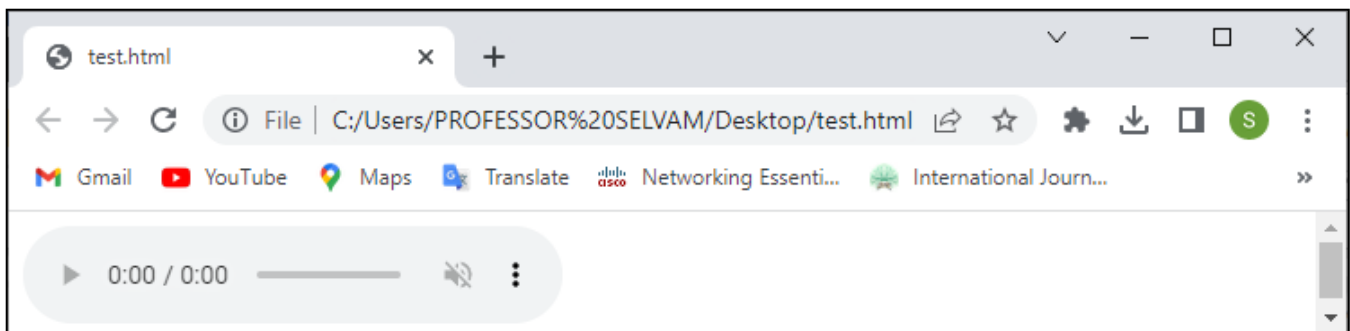
## Output :



## HTML Audio

```
<!DOCTYPE html>
<html>
<body>
<audio controls autoplay muted>
 <source src=" file:///C:/Users/PROFESSOR%20SELVAM/Downloads/horse.ogg"
 type="audio/ogg">
 <source src=" file:///C:/Users/PROFESSOR%20SELVAM/Downloads/horse.mp3"
 type="audio/mpeg">
</audio>
</body>
</html>
```

## Output :



## Result :

The Handling multimedia content in web sites using html multimedia tags has been executed successfully.

**EX NO : 5A**

**Date :**

## **INVOKING SERVLETS FROM HTML FORM**

**AIM:**

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

**ALGORITHM:**

**At Client Side**

1. Create a web page with file name "Client.html" using HTML form that contains First Name, Last Name, Email ID and Password fields by using input types such as text, password and 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.

**At Server Side**

**General Settings:**

1. Install Java with latest version and check the version of the java installation by using the following command in command prompt : "java --version", it will shows as follows as,

```
java version "20" 2023-03-21
```

```
Java(TM) SE Runtime Environment (build 20+36-2344)
```

```
Java HotSpot(TM) 64-Bit Server VM (build 20+36-2344, mixed mode, sharing)
```

- (1) Define the class server that extends the property of the class GenericServlet.
- (2) Handle the request from the client by using the method service() of GenericServlet 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.

**server.java:**

```
import java.io.*;
import java.util.*;
import jakarta.servlet.*;
public class server extends GenericServlet
{
 public void service(ServletRequest req,ServletResponse res)throws
 ServletException,IOException
 {
 // Set response content type
 res.setContentType("text/html");
```

```

 PrintWriter pw=res.getWriter();
pw.println("<body style='background-color:AntiqueWhite;'>");
 pw.println("<h1 style='text-align:center;'>"+ "Registration
Successful..."+"</h1>");
 Enumeration e=req.getParameterNames();
 while(e.hasMoreElements())
 {
 String str1=(String)e.nextElement();
 String str2=req.getParameter(str1);
 pw.println("<h2 style='text-align:center;'>"+str1+"= "+str2+"</h2>");
 }
pw.println("</body>");
 pw.close();
}
}

```

#### **web.xml:**

```

<web-app>
 <servlet>
 <servlet-name>Register</servlet-name>
 <servlet-class>server</servlet-class>
 </servlet>
 <servlet-mapping>
 <servlet-name>Register</servlet-name>
 <url-pattern>/server</url-pattern>
 </servlet-mapping>
</web-app>

```

#### **Client.html:**

```

<html>
<head>
<title>Invoking Servlet From HTML</title>
</head>
<body bgcolor="AntiqueWhite">
<form name="form1" method="post" action="http://localhost:8080/examples/server">
<fieldset>
<legend>Registration</legend>

```

First Name            :

  
  
[illegible]  
  
[illegible]  
  
[illegible]

```
<input type="password" name="Password " size="25">
```

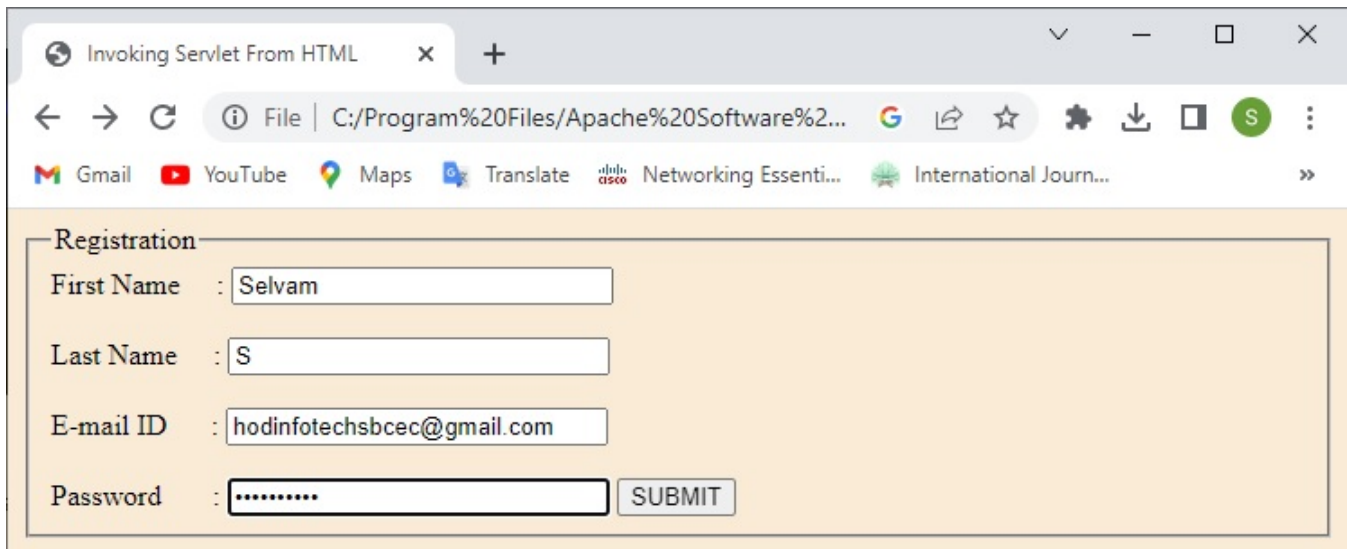
&lt;/fieldset&gt;

&lt;/form&gt;

&lt;/body&gt;

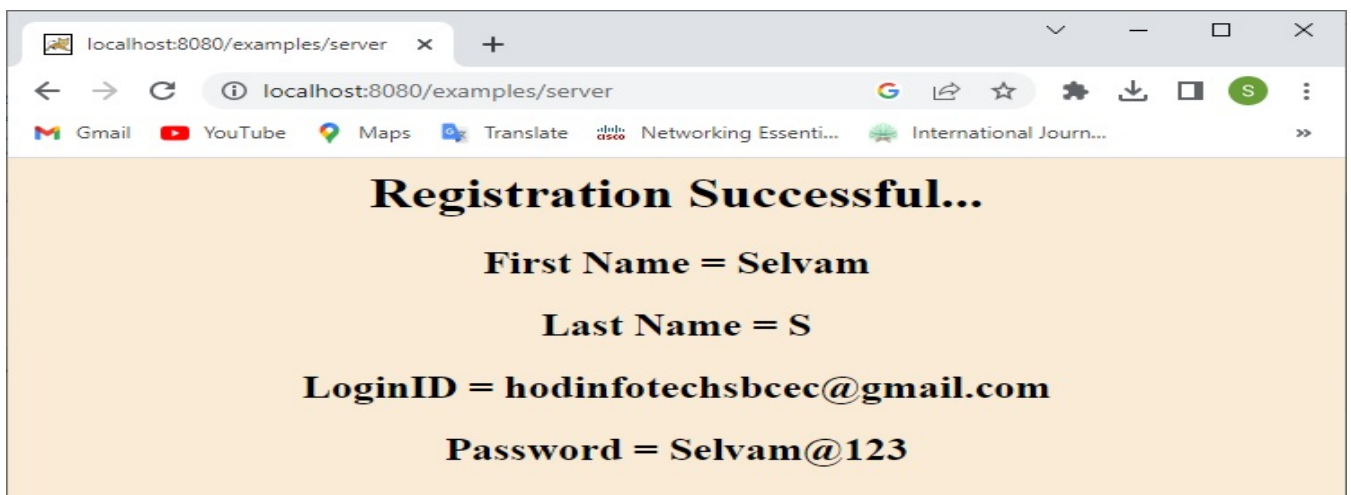
&lt;/html&gt;

## Output:



The screenshot shows a web browser window with the title 'Invoking Servlet From HTML'. The address bar displays the file path 'C:/Program%20Files/Apache%20Software%2...'. The browser's toolbar includes icons for back, forward, refresh, and search, along with a search bar containing 'File'. Below the address bar, there are several bookmarks: Gmail, YouTube, Maps, Translate, Cisco, Networking Essenti..., and International Journ... The main content area of the browser displays a registration form with the following fields and values:

Registration	
First Name	: Selvam
Last Name	: S
E-mail ID	: hodinfotechsbscec@gmail.com
Password	: .....
<input type="button" value="SUBMIT"/>	



The screenshot shows a web browser window with the title 'localhost:8080/examples/server'. The address bar displays 'localhost:8080/examples/server'. The browser's toolbar includes icons for back, forward, refresh, and search, along with a search bar containing 'localhost:8080/examples/server'. Below the address bar, there are several bookmarks: Gmail, YouTube, Maps, Translate, Cisco, Networking Essenti..., and International Journ... The main content area of the browser displays a confirmation message:

**Registration Successful...**

**First Name = Selvam**

**Last Name = S**

**LoginID = hodinfotechsbscec@gmail.com**

**Password = Selvam@123**

## Result :

The java servlet were invoked from HTML form using java program has been successfully completed.

<b>EX NO : 5B</b>	<b>Session tracking using hidden form fields</b>
<b>DATE :</b>	

**Aim:**

To perform session tracking using hidden form field.

**Procedure:**

1. Import the required header files.
2. Create SessionTracker as derived for the base class HttpServlet.
3. Define the doGet method with required HttpServletRequest and HttpServletResponse variables.
4. Set the content type of the response as "text/html".
5. Get the content of the response variable by getWrite() method.
6. Assign the content of the response variable for the PrintWriter class variable.
7. Get the content of the request variable by getSession() method.
8. Assign the content of the request variable for the HttpSession class variable.
9. Declare the required codes for Increment the hit count for this page.
10. The incremented value is saved in this client's session under the name "tracker.count".
11. Develop the required Dhtml Response using appropriate output variables.

**Program:**

**SetHiddenFieldServlet.java**

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class SetHiddenFieldServlet extends HttpServlet {
 private static final long serialVersionUID = 1L;
 public SetHiddenFieldServlet() {
 }
 protected void doPost(HttpServletRequest request,
```

```

HttpServletResponse response)
 throws ServletException, IOException {
response.setContentType("text/html");
PrintWriter out = response.getWriter();
String userName = request.getParameter("userName").trim();
String password = request.getParameter("password").trim();
if(userName == null || userName.equals("") ||
 password == null || password.equals(""))
{ out.print("Please enter both username " +
 "and password.

");
RequestDispatcher requestDispatcher =
 request.getRequestDispatcher("/login.html");
requestDispatcher.include(request, response);
}
else if(userName.equals("sho") && password.equals("1234")){
 out.println("Logged in successfully.
");
 out.println("Click on the below button to see " +
 "the values of Username and Password.
");
 out.print("<form action='GetHiddenFieldServlet' " +
 " method='POST'>");
 out.print("<input type='hidden' name='userName' " +
 " value='" + userName + "'>");
 out.print("<input type='hidden' name='password' " +
 " value='" + password + "'>");
 out.print("<input type='submit' value='See Values'>");
 out.print("</form>");
 out.close();
}else{
 out.print("Wrong username or password.

");
 RequestDispatcher requestDispatcher =
 request.getRequestDispatcher("/login.html");
 requestDispatcher.include(request, response);
}
}

```

```
 }
}
}
```

### **GetHiddenFieldServlet.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 GetHiddenFieldServlet extends HttpServlet {
 private static final long serialVersionUID = 1L;
 public GetHiddenFieldServlet() {
 }
 protected void doPost(HttpServletRequest request,
 HttpServletResponse response)
 throws ServletException, IOException {
 response.setContentType("text/html");
 PrintWriter out = response.getWriter();
 String userName = request.getParameter("userName").trim();
 String password = request.getParameter("password").trim();
 out.println("Username: " + userName + "

");
 out.println("Password: " + password);
 out.close();
 }
}
```

### **login.html**

```
<!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>Login</title>
</head>
<body>
 <form action="SetHiddenFieldServlet" method="post">
 Username:<input type="text" name="userName"/>

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

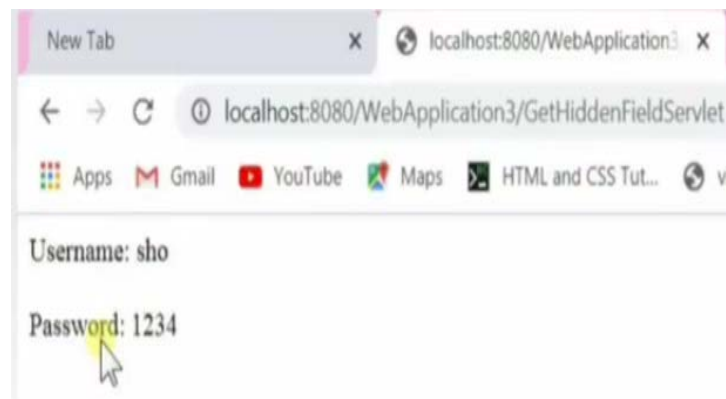
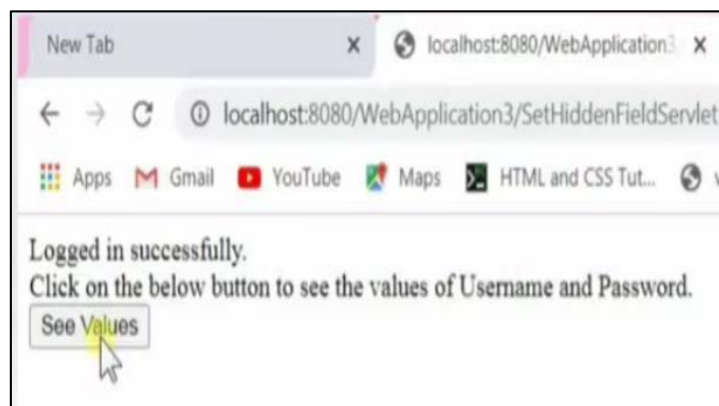
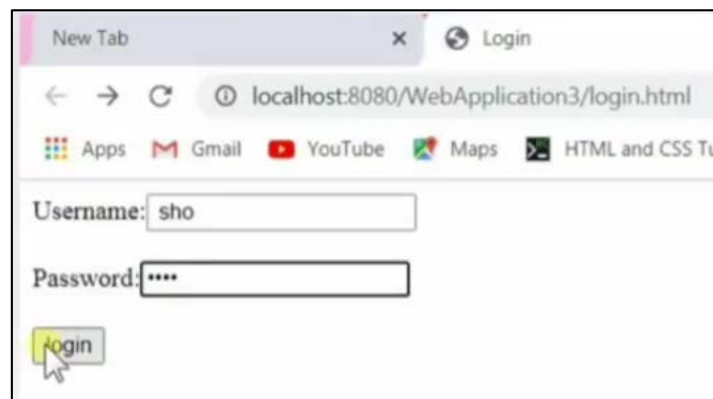
 <input type="submit" value="login"/>
 </form>
</body>
</html>
```

### **web.xml**

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app id="WebApp_ID" version="2.4"
xmlns="http://java.sun.com/xml/ns/j2ee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/j2ee
http://java.sun.com/xml/ns/j2ee/web-app_2_4.xsd">
 <servlet>
 <servlet-name>SetHiddenFieldServlet</servlet-name>
 <servlet-class>
 com.w3spoint.business.SetHiddenFieldServlet
 </servlet-class>
 </servlet>
 <servlet-mapping>
 <servlet-name>SetHiddenFieldServlet</servlet-name>
 <url-pattern>/SetHiddenFieldServlet</url-pattern>
 </servlet-mapping>
 <servlet>
 <servlet-name>GetHiddenFieldServlet</servlet-name>
 <servlet-class>
 com.w3spoint.business.GetHiddenFieldServlet
```

```
</servlet-class>
</servlet>
<servlet-mapping>
 <servlet-name>GetHiddenFieldServlet</servlet-name>
 <url-pattern>/GetHiddenFieldServlet</url-pattern>
</servlet-mapping>
<welcome-file-list>
 <welcome-file>login.html</welcome-file>
</welcome-file-list>
</web-app>
```

### Output:



**Result:**

The tracking of sessions using hidden form field has been completed successfully.

<b>EX NO : 5C</b>	<b>Session Tracking for a Hit Count</b>
<b>DATE :</b>	

**Aim:**

To perform session tracking for a hit count by viewing the web pages.

**Procedure:**

1. Import the required header files.
2. Create SessionTracker as derived for the base class HttpServlet.
3. Define the doGet method with required HttpServletRequest and HttpServletResponse variables.
4. Set the content type of the response as "text/html".
5. Get the content of the response variable by getWrite() method.
6. Assign the content of the response variable for the PrintWriter class variable.
7. Get the content of the request variable by getSession() method.
8. Assign the content of the request variable for the HttpSession class variable.
9. Declare the required codes for Increment the hit count for this page.
10. The incremented value is saved in this client's session under the name "tracker.count".
11. Develop the required Dhtml Response using appropriate output variables.

**Program:**

**SessionTracker.java**

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

public class SessionTracker extends HttpServlet {
 public void doGet(HttpServletRequest req, HttpServletResponse res)
 throws ServletException, IOException {
 res.setContentType("text/html");
 PrintWriter out = res.getWriter();
 // Get the current session object, create one if necessary
 HttpSession session = req.getSession();
 // Increment the hit count for this page. The value is saved
 // in this client's session under the name "tracker.count".
```

```

Integer count = (Integer)session.getAttribute("tracker.count");
 if (count == null)
 count = new Integer(1);
 else
 count = new Integer(count.intValue() + 1);
 session.setAttribute("tracker.count", count);
 out.println("<HTML><HEAD><TITLE>SessionTracker</TITLE></HEAD>");
 out.println("<BODY><H1>Session Tracking Demo</H1>");
 // Display the hit count for this page
 out.println("You've visited this page " + count +
 ((count.intValue() == 1) ? " time." : " times."));
 out.println("<P>");
 out.println("<H2>Here is your session data:</H2>");
 Enumeration enum = session.getAttributeNames();
 while (enum.hasMoreElements()) {
 String name = (String) enum.nextElement();
 out.println(name + ": " + session.getAttribute(name) + "
");
 }
 out.println("</BODY></HTML>");
}
}

```

### **web.xml**

```

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

```

**Output:**

## **Session Tracking Demo**

You've visited this page 4 times.

### **Here is your session data:**

tracker.count: 4

**Result:**

The tracking of sessions for hit count by viewing web pages for more than one time has been completed successfully.

<b>EX NO : 6</b>	<b>Creation of Information Retrieval System</b>
<b>DATE :</b>	

**Aim:**

To create the information retrieval system using web, PHP and MySQL.

**Procedure:**

1. Create a required database appropriate table structure.
2. Structure the table with required attributes as fields.
3. Create a php structure for database connection with required variables.
4. Check the connection with server name, user name, password, database name.
5. Create an html structure with the title of Information Retrieval System.
6. Create an html form with required form input elements.
7. Format the form input elements with appropriate attributes.
8. Use POST method to submit the form data into the database.
9. Create a submit button at end of the form.
10. Write required PHP lines to retrieve information from the corresponding table structure.

**Program:**

**usersearch.html**

```

<html>
<head>
<title>Information Retrieval System</title>
</head>
<body style="background-color : pink;">
<center>
<h1>Information Retrieval System</h1>
<form action="http://localhost/irs/phpSearchOption.php" method="post">
<label>Search By:</label>
<select name="column">
<option value="name">Name</option>
<option value="dob">Date of Birth</option>
<option value="mobno">Mobile No</option>
<option value="email">E-Mail</option>
<option value="address">Address</option>

```

```

 </select>

 <label>Search Criteria :</label>
 <input type="text" name="search">

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

</body>
</html>

```

### **phpsearchoption.php**

```

<?php
$search = $_POST['search'];
$column = $_POST['column'];
$servername = "localhost";
$username = "root";
$password = "";
$db = "usertest";
$conn = new mysqli($servername, $username, $password, $db);
if ($conn->connect_error){
 die("Connection failed: ". $conn->connect_error);
}
$sql = "select * from userinfotable where $column like '%$search%'";
$result = $conn->query($sql);
if ($result->num_rows > 0){
 while($row = $result->fetch_assoc()){
 echo"<head>";
 echo"<title>Information Retrieval System</title>";
 }
}

```



```

echo"</head>";
echo"<body style='background-color : pink;'>";
echo"<center>";
echo"<h1>Information Retrieval System</h1>";
echo"<h4>Retrived Information : </h4>";
echo "<label>Name :</label>." ".$row["name"]."

 ".
"<label>Date of Birth :</label>." ".$row["dob"]."

 ".
"<label>Mobile No :</label>." ".$row["mobno"]."

 ".
"<label>E- Mail :</label>." ".$row["email"]."

 ".
"<label>Address :</label>." ".$row["address"]."
";
echo"</center>";
echo"</body>";
echo"</html>";
}
} else {

echo"<head>";
echo"<title>Information Retrieval System</title>";
echo"</head>";
echo"<body style='background-color : pink;'>";
echo"<center>";
echo"<h1>Information Retrieval System</h1>";
echo"<h4>Retrived Information : </h4>";
echo "<h2> No Records Found...</h2>";
echo "<h4 style = 'color:red;'> Enter Correct Criteria Match...</h4>";
echo"</center>";
echo"</body>";
echo"</html>";
}
$conn->close();
?>

```

## Output:

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including 'usertest' and 'userinfotable'. The main panel displays the 'userinfotable' structure with columns: id, name, dob, mobno, email, and address. A query is executed: `SELECT * FROM `userinfotable``. The result shows one row of data for S. Selvam.

id	name	dob	mobno	email	address
1	S. Selvam	23 - 12 - 1989	9080961996	lecturerselvam@gmail.com	Cheyar

The screenshot shows the 'Information Retrieval System' search interface. It has a search bar with a dropdown menu set to 'Name'. The search criteria entered is 'Selvam'. A 'Submit' button is present.

Search By:

Search Criteria :

The screenshot shows the 'Information Retrieval System' result page. It displays the retrieved information for the search criteria 'Selvam'.

**Retrieved Information :**

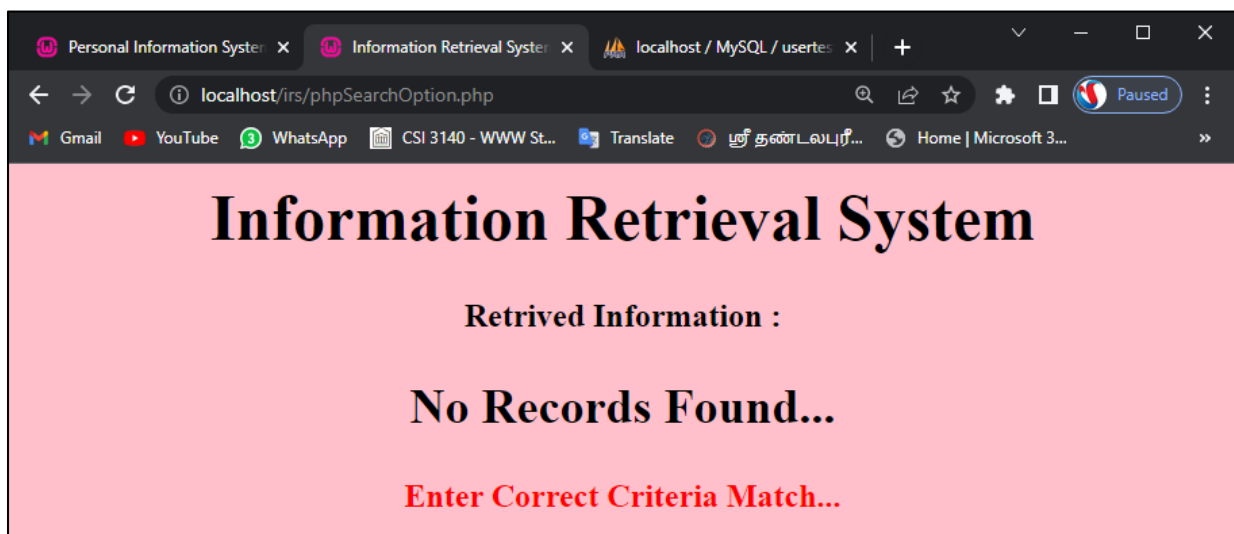
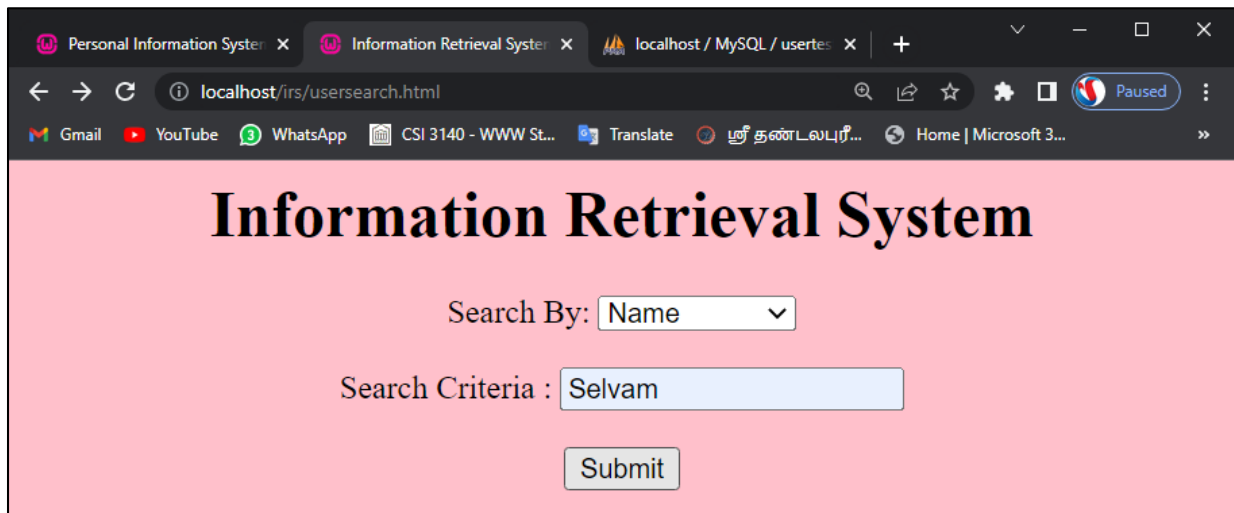
**Name :** S. Selvam

**Date of Birth :** 23 - 12 - 1989

**Mobile No :** 9080961996

**E- Mail :** lecturerselvam@gmail.com

**Address :** Cheyyar



### Result:

The creation of information retrieval system using web, PHP and MySQL has been completed successfully.

<b>EX NO : 7</b>	<b>Creation of Personal Information System</b>
<b>DATE :</b>	

**Aim:**

To create the personal information system using PHP and MySQL.

**Procedure:**

1. Create a required database appropriate table structure.
2. Structure the table with required attributes as fields.
3. Create a php structure for database connection with required variables.
4. Check the connection with server name, user name, password, database name.
5. Create an html structure with the title of Personal Information System.
6. Create an html form with required form input elements.
7. Format the form input elements with appropriate attributes.
8. Use POST method to submit the form data into the database.
9. Create a submit button at end of the form.
10. Write required PHP lines to get from the form elements and store into the corresponding table structure.

**Program:**

```

<?php
$servername = "localhost";
$username = "root";
$password = "";
$db="usertest";

// Create connection
$conn = new mysqli($servername, $username, $password,$db);

// Check connection
if ($conn->connect_error) {
 die("Connection failed: " . $conn->connect_error);
}

//echo "Connected successfully";

?>

```

```
<html>
<head>
<title> Personal Information System </title>
</head>
<body style="background-color : pink;">
<h1>Personal Information System</h1>

<form method="post">

<label>Name :</label>
<input type="text" name="name" placeholder="Enter Name">

<label>Date of Birth:</label>
<input type="text" name="dob" placeholder="Enter Date of Birth">

<label>Mobile No: </label>
<input type="text" name="mobno" placeholder="Enter Mobile No">

<label>E-mail: </label>
<input type="text" name="email" placeholder="Enter Email">

<label>Address: </label>
<input type="text" name="address" placeholder="Enter Address">

<input type="submit" name="submit" value="Submit">
</form>

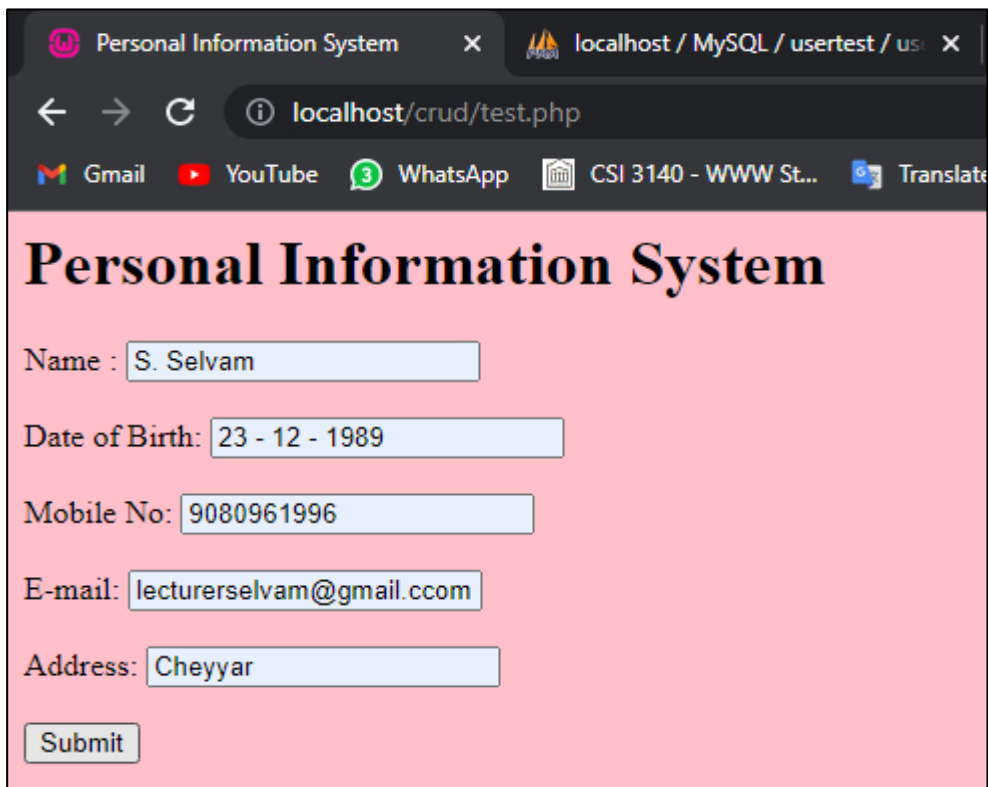
</body>
</html>
```

```

<?php
if(isset($_POST['submit']))
{
$name=$_POST['name'];
$dob=$_POST['dob'];
$mobno=$_POST['mobno'];
$email=$_POST['email'];
$address=$_POST['address'];
$qry="insert into userinfotable values(null,'$name',
'$dob','$mobno','$email','$address')";
if(mysqli_query($conn, $qry)){
echo '<script>alert("User Registered Successfully");</script>';
header('location:test.php');
}
else
{
echo mysqli_error($conn);
}
}
?>

```

**Output:**



The screenshot shows a web browser window with the address bar displaying 'localhost/crud/test.php'. The page has a pink background and a title 'Personal Information System'. Below the title, there are several input fields with their respective labels and values:

- Name : S. Selvam
- Date of Birth: 23 - 12 - 1989
- Mobile No: 9080961996
- E-mail: lecturerselvam@gmail.com
- Address: Cheyyar

At the bottom left, there is a 'Submit' button.

The screenshot displays the phpMyAdmin web interface. On the left, the 'Current server' is set to 'MySQL'. The database 'usertest' is selected, and the table 'userinfotable' is highlighted in the left sidebar. The main panel shows the 'Browse' tab with a successful query execution: 'SELECT \* FROM `userinfotable`'. The query result is displayed as a table with one row.

	id	name	dob	mobno	email	address
1	S. Selvam	23 - 12 - 1989	9080961996	lecturerselvam@gmail.com	Cheyvar	

**Result:**

The creation of personal information system using PHP and MySQL has been completed successfully.