

ANNAI MIRA COLLEGE OF ENGINEERING AND TECHNOLOGY

NH-46, Chennai-Bengaluru National Highways,

Arappakkam, Ranipet-632517, Tamil Nadu, India

Telephone : 04172-292925 Fax : 04172-292926

Email : amcet.rtet@gmail.com/info@amcet.in Web : www.amcet.in

DEPARTMENT OF INFORMATION TECHNOLOGY



IT3401 – WEB ESSENTIALS LABORATORY

Name :

Register Number :

Year & Branch :

Semester :

Academic Year :

ANNAI MIRA COLLEGE OF ENGINEERING AND TECHNOLOGY

NH-46, Chennai-Bengaluru National Highways,

Arappakkam, Ranipet-632517, Tamil Nadu, India

Telephone : 04172-292925 Fax : 04172-292926

Email : amcet.rtet@gmail.com/info@amcet.in Web : www.amcet.in

DEPARTMENT OF INFORMATION TECHNOLOGY



IT3401 – WEB ESSENTIALS LABORATORY

CERTIFICATE

This is to Certify that the Bonafide record of the practical work done by
..... Register Number : of IInd
year **B.TECH (INFORMATION TECHNOLOGY)** submitted for the **B.TECH IT** practical
examination (IV th Semester) in **IT3401 – WEB ESSENTIALS LABORATORY** during the
academic year 2024 – 2025.

Staff in-Charge

Head of the Department

Submitted for the practical examination held on _____ .

Internal Examiner

External Examiner

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

DATE :

Creation of Interactive Web Sites

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)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>AMCET - Department of Information Technology</title>
  <style>
    body {
      background-color: cornsilk;
      text-align: center;
      font-family: Arial, sans-serif;
    }
    h1 {
      color: navy;
    }
    p {
      font-size: 16px;
      text-align: justify;
      padding: 10px;
    }
    ul {
      list-style-type: none;
      padding: 0;
    }
  </style>
</head>
<body>
```

```

        li {
            display: inline;
            margin-right: 10px;
        }
        a {
            text-decoration: none;
            color: navy;
        }
        a:hover {
            text-decoration: underline;
        }
    </style>
</head>
<body>

    <h1>Annai Mira College of Engineering and Technology, Vellore</h1>
    <h2>Welcome to the Department of Information Technology</h2>

    <div>
        <!-- Navigation Menu -->
        <ul>
            <li><a href="#">Home</a></li>
            <li><a href="Department.html">Department</a></li>
            <li><a href="Examination.html">Examination</a></li>
            <li><a href="Admission.html">Admission</a></li>
            <li><a href="Faculties.html">Faculties</a></li>
            <li><a href="Facilities.html">Facilities</a></li>
            <li><a href="About_Us.html">About Us</a></li>
            <li><a href="Contact_Us.html">Contact Us</a></li>
        </ul>
    </div>

    <p>
        Annai Mira College of Engineering and Technology (AMCET),
        established in 2012 under the R.T. Educational Trust, is located in
        Vellore, Tamil Nadu, along the Chennai-Bengaluru National Highway. The
        college is affiliated with Anna University, Chennai, and approved by the
        All India Council for Technical Education (AICTE), New Delhi. AMCET
        offers a range of undergraduate and postgraduate programs across various
        engineering disciplines.
    </p>

    <p>
        Our vision is to become the most preferred engineering college in
        Tamil Nadu by creating a student-centric ecosystem that fosters
        excellence. We are committed to achieving academic excellence, ensuring
        industry readiness, fostering industry collaborations, obtaining quality
        accreditations, and promoting an innovation ecosystem.
    </p>

    <p>
        The Department of Information Technology offers a B.Tech program
        designed to equip students with the necessary skills and knowledge to
        excel in the rapidly evolving IT industry. Our curriculum is regularly

```

updated to reflect current industry trends and technological advancements.

</p>

<p>

AMCET has demonstrated outstanding academic performance, securing 4th place among 314 engineering colleges in Tamil Nadu and 1st position in Vellore and surrounding districts in the Anna University Examinations of 2023. Our students have achieved top ranks, with notable accomplishments including:

</p>

G. Divya (B.E EEE) - 3rd Rank with 9.25 CGPA among 9,542 participants.

P. Giri Prasath (B.E MECH) - 4th Rank with 9.33 CGPA among 12,074 participants.

V. Hemamalini (B.E ECE) - 8th Rank with 9.24 CGPA among 14,507 participants.

<p>

For more information about our programs, admissions, and facilities, please visit our official website: https://amcet.in.

</p>

</body>

</html>

Department Page (Department.html)

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

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

```
<title>AMCET - Department of Information Technology</title>
```

```
<link rel="stylesheet" type="text/css" href="mystyle.css">
```

```
<style>
```

```
body {
```

```
background-color: cornsilk;
```

```
text-align: center;
```

```
font-family: Arial, sans-serif;
```

```
}
```

```
h1 {
```

```
color: navy;
```

```
}
```

```
h2 {
```

```
background-color: lightblue;
```

```
color: navy;
```

```
text-align: center;
```

```
text-decoration: underline;
```

```
}
```

```
p {
```

```
font-size: 16px;
```

```
text-align: justify;
```

```
padding: 10px;
```

```

    }
    /* Navigation Menu */
    ul {
        list-style-type: none;
        background-color: brown;
        padding: 10px;
    }
    li {
        display: inline;
        padding: 18px;
    }
    li a {
        color: white;
        text-decoration: none;
    }
    li:hover {
        background-color: yellow;
        color: black;
    }
}
</style>
</head>
<body>

<h1>Annai Mira College of Engineering and Technology, Ranipet</h1>
<h2>Welcome to the Department of Information Technology</h2>

<div>
    <ul>
        <li><a href="#">Home</a></li>
        <li><a href="Department.html">Department</a></li>
        <li><a href="Examination.html">Examination</a></li>
        <li><a href="Admission.html">Admission</a></li>
        <li><a href="Faculties.html">Faculties</a></li>
        <li><a href="Facilities.html">Facilities</a></li>
        <li><a href="About_Us.html">About Us</a></li>
        <li><a href="Contact_Us.html">Contact Us</a></li>
    </ul>
</div>



<p>
    The Department of Information Technology was established in 1999.
    Our motto is to enhance the development and competitive potential
    of students to meet the current trends of the IT field in
    society.
</p>

<p>
    Our department has a team of well-qualified and experienced
    faculty members. They dedicate their efforts to emerging technologies
    and guide students towards technological and industrial
    advancements.
</p>

<p>

```

The faculty members are actively engaged in research and development in trending technologies, ensuring students are well-equipped to face challenges and adapt to evolving IT sector demands.

</p>

</body>

</html>

Webpage (webpage.html)

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

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

```
  <title>Welcome to IT Department</title>
```

```
  <link rel="stylesheet" type="text/css" href="mystyle.css">
```

```
</head>
```

```
<body>
```

```
  <h1>Annai Mira College of Engineering and Technology, Ranipet</h1>
```

```
  <h2>Welcome to the Department of Information Technology</h2>
```

```
  <div>
```

```
    <!-- Navigation Menu -->
```

```
    <ul>
```

```
      <li><a href="webpage.html">Home</a></li>
```

```
      <li><a href="Department.html">Department</a></li>
```

```
      <li><a href="Examination.html">Examination</a></li>
```

```
      <li><a href="Admission.html">Admission</a></li>
```

```
      <li><a href="Faculties.html">Faculties</a></li>
```

```
      <li><a href="Facilities.html">Facilities</a></li>
```

```
      <li><a href="About_Us.html">About Us</a></li>
```

```
      <li><a href="Contact_Us.html">Contact Us</a></li>
```

```
    </ul>
```

```
  </div>
```

```
  
```

```
  <p>
```

Annai Mira College of Engineering and Technology, an institution of academic excellence, was established in 1999

with a vision to serve humanity through technical higher education. This college is affiliated with Anna University,

Chennai, and is recognized by the Government of Tamil Nadu. It offers six B.E./B.Tech. programs and four P.G. programs.

All courses are approved by the All India Council for Technical Education (AICTE), New Delhi, and accredited by NBA.

```
  </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.

EX NO : 2

DATE :

Form Validation using JavaScript

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 lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Validation</title>

  <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;  
    border: none;  
}  
a {  
    text-decoration: none;  
}  
p {  
    font-size: 15px;  
    text-align: justify;  
}  
input[type=text], input[type=date], select {  
    width: 30%;  
    padding: 10px;  
    border: 1px solid #ccc;  
    border-radius: 4px;
```

```
    box-sizing: border-box;

    resize: vertical;
}

label {

    padding: 12px 12px 12px 0;

    display: inline-block;
}

input[type=submit] {

    background-color: #4CAF50;

    color: white;

    padding: 12px 20px;

    border: none;

    border-radius: 4px;

    cursor: pointer;
}

.container {

    border-radius: 5px;

    background-color: #b4b4b4;

    padding: 20px;
}

.col-25 {

    float: left;

    width: 15%;

    margin-top: 6px;

    background-color: #b4b4b4;
}

.col-75 {

    float: left;

    width: 75%;

    margin-top: 6px;

    background-color: #b4b4b4;
}

.row:after {
```

```
        content: "";
        display: table;
        clear: both;
        background-color: #b4b4b4;
    }
</style>
</head>
<body>

<h1>Annai Mira College of Enginnering and Technology , Ranipet</h1>
<h2>Welcome to Department of Information Technology</h2>

<div id="incss">
    <ul style="list-style-type:none;">
        <a href="#"><li>Home</li></a>
        <a href="#"><li>Department</li></a>
        <a href="#"><li>Examination</li></a>
        <a href="#"><li>Admission</li></a>
        <a href="#"><li>Faculties</li></a>
        <a href="#"><li>Facilities</li></a>
        <a href="#"><li>About Us</li></a>
        <a href="#"><li>Contact Us</li></a>
    </ul>
</div>

<div class="container">
    <form name="myform" action="#" method="post" onsubmit="return validate_form();">
        <div class="row">
            <div class="col-25">
                <label for="regno">Register Number</label>
            </div>
            <div class="col-75">
```

```
<input type="text" id="regno" name="regno" onchange="isregno()" placeholder="Your register
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="dob">Date of Birth</label>

  </div>

  <div class="col-75">

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

  </div>

</div>

<div class="row">

  <div class="col-25">

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

  </div>

  <div class="col-75">

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

  </div>

</div>

<div class="row">

  <div class="col-25">

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

  </div>

  <div class="col-75">
```

```
        <input type="text" id="fathername" 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() {

    let valid = true;

    let form = document.myform;

    if (form.regno.value == "" || form.studname.value == "" || form.dob.value == "" ||
        form.mothername.value == "" || form.fathername.value == "") {

        alert("Please fill in all required fields.");

        valid = false;

    } else {

        let result = `Your Register No is: ${form.regno.value}\n`;
        result += `Your Entered Name is: ${form.studname.value}\n`;
        result += `Your Date of Birth is: ${form.dob.value}\n`;
        result += `Your Mother Name is: ${form.mothername.value}\n`;
        result += `Your Father Name is: ${form.fathername.value}`;
        alert(result);

        form.regno.value = "";

        form.studname.value = "";

        form.dob.value = "";

        form.mothername.value = "";

        form.fathername.value = "";

        valid = false;

    }

    return valid;

}
```

```
function isregno() {
    let rn = document.myform.regno;
    if (isNaN(rn.value)) {
        alert("The Entered Value is not a Number");
        rn.focus();
        rn.select();
    }
}

function issntxts() {
    let sn = document.myform.studname;
    if (!isNaN(sn.value)) {
        alert("Please Enter a Text Value for Student Name...");
        sn.focus();
        sn.select();
    }
}

function issntxtm() {
    let mn = document.myform.mothername;
    if (!isNaN(mn.value)) {
        alert("Please Enter a Text Value for Mother Name...");
        mn.focus();
        mn.select();
    }
}

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

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


OUTPUT :

Annai Mira College of Engineering and Technology , Ranipet

Welcome to Department of Information Technology

Home Department Examination Admission Faculties Facilities About Us Contact Us

Register Number 12345678

Student Name lol

Date of Birth 03 / 05 / 2025

Mother Name qwerty

Father Name asdfgh

Submit

localhost:3000

Your Register No is: 12345678
Your Entered Name is: lol
Your Date of Birth is: 2025-03-05
Your Mother Name is: qwerty
Your Father Name is: asdfgh

OK

Annai Mira College of Engineering and Technology , Ranipet

Welcome to Department of Information Technology

Home Department Examination Admission Faculties Facilities About Us Contact Us

Register Number qwerty

Student Name Your name..

Date of Birth mm / dd / yyyy

Mother Name Your mother name..

Father Name Your father name..

Submit

localhost:3000

The Entered Value is not a Number

OK

Result:

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

EX NO : 3	Creation of simple PHP scripts
DATE :	

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:

Here is your properly formatted and structured PHP code:

```
<!DOCTYPE html>
<html>
<body>

<?php
// Creating Different Variables
$txt = "Hello world!";
$x = 5;
$y = 10.5;

echo $txt;
echo "<br>";
echo $x;
echo "<br>";
echo $y;
?>

</body>
</html>
```

Output:

```
Hello world!
5
10.5
```

Test Global Scope (Variable Outside Function)

```
<!DOCTYPE html>
<html>
<body>

<?php
$x = 5; // Global scope

function myTest() {
    // Using $x inside this function will generate an error
    echo "<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 Inside 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: (Error, since $x is not defined
outside)
```

Using 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	Handling multimedia content in web sites
Date :	

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.

Format	File	Description
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	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 :

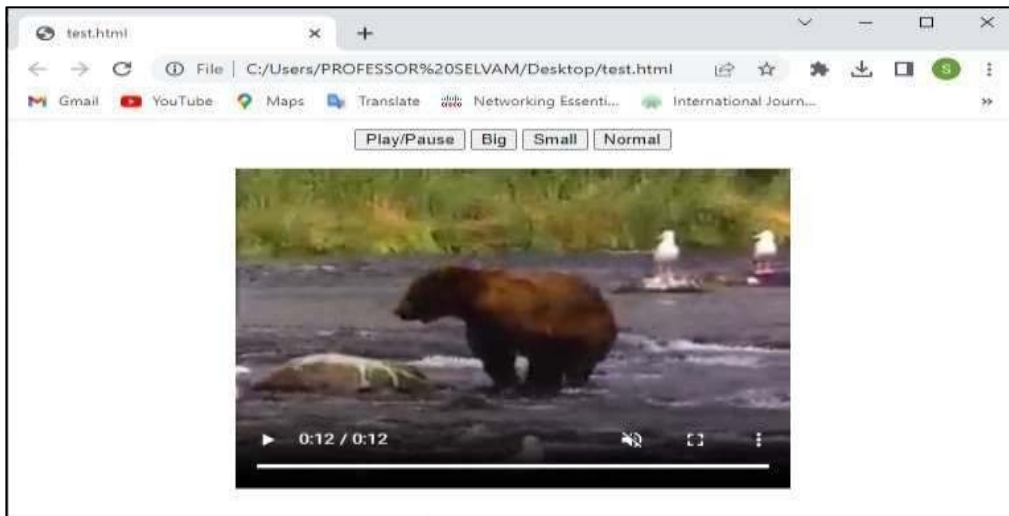
HTML Video

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Video Controls</title>
  <style>
    body {
      font-family: Arial, sans-serif;
    }
    .video-container {
      text-align: center;
      margin-top: 20px;
    }
    button {
      padding: 10px 15px;
      margin: 5px;
      font-size: 16px;
      cursor: pointer;
      border: none;
      background-color: #4CAF50;
      color: white;
      border-radius: 5px;
    }
    button:hover {
      background-color: #45a049;
    }
  </style>
</head>
<body>
  <div class="video-container">
```



```
<button onclick="playPause()">Play/Pause</button>
<button onclick="makeBig()">Big</button>
<button onclick="makeSmall()">Small</button>
<button onclick="makeNormal()">Normal</button>
<br><br>
<video id="video1" width="420" controls autoplay muted>
  <source src="http://commondatastorage.googleapis.com/gtv-videos-bucket/sample/
TearsOfSteel.mp4" type="video/mp4">
  <source src="movie.ogv" type="video/ogg">
  Your browser does not support the video tag.
</video>
</div>
<script>
var myVideo = document.getElementById("video1");
function playPause() {
  if (myVideo.paused) {
    myVideo.play();
  } else {
    myVideo.pause();
  }
}
function makeBig() {
  myVideo.width = 860;
}
function makeSmall() {
  myVideo.width = 320;
}
function makeNormal() {
  myVideo.width = 540;
}
</script>
</body>
</html>
```

Output :



HTML Audio

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
  <audio controls autoplay>
```

```
    <source src="https://github.com/rafaelreis-hotmart/Audio-Sample-files/blob/master/sample.ogg" type="audio/ogg">
```

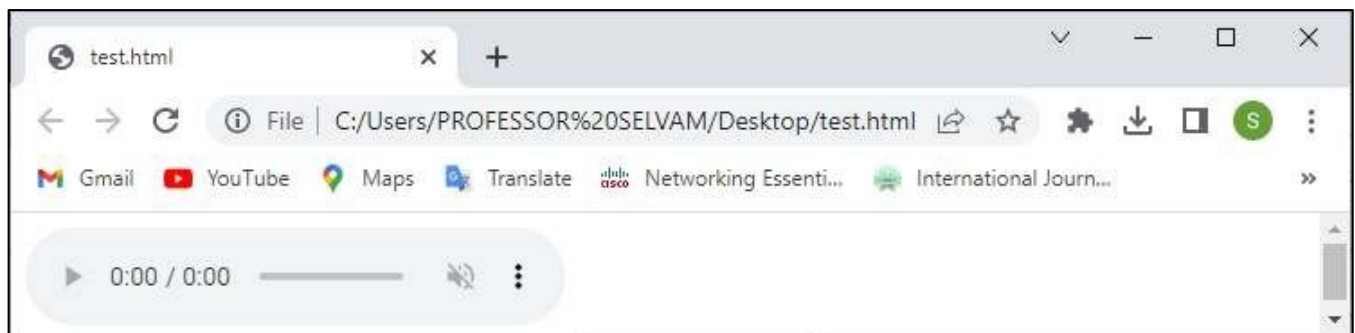
```
    <source src="https://github.com/rafaelreis-hotmart/Audio-Sample-files/raw/master/sample.mp3" type="audio/mp3">
```

```
  </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>
```

[illegible]

Result :

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

EX NO : 5B	Session tracking using hidden form fields
DATE :	

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. <br/><br/>");
    RequestDispatcher requestDispatcher =

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

    else if(userName.equals("sho") && password.equals("1234"))
    { out.println("Logged in successfully.<br/>"); out.println("Click
    on the below button to see " +

        "the values of Username and Password.<br/>");
    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. <br/><br/>");

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

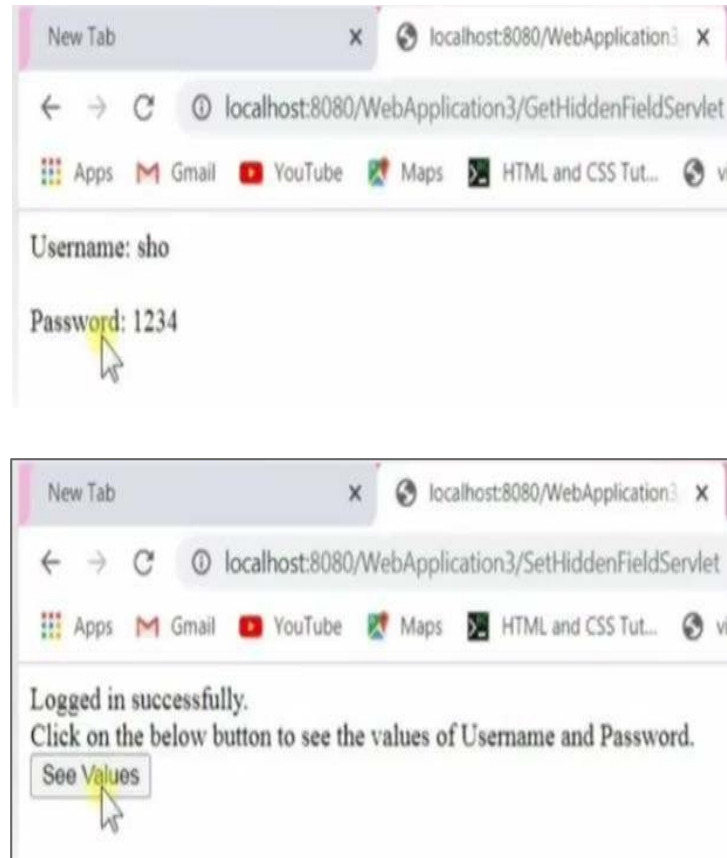
<welcome-file-list>

  <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.

EX NO : 5C	Session Tracking for a Hit Count
DATE :	

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) + "<BR>");
}
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.

EX NO : 6	Creation of Information Retrieval System
DATE :	

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>
    <br>

    <br>
    <label>Search Criteria :</label>

    <input type="text" name="search">
    <br>

    <br>
    <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><b>Name :</b></label>." ".$row["name"]." <br><br> ".
    "<label><b>Date of Birth :</b></label>." ".$row["dob"]." <br><br> ".
    "<label><b>Mobile No :</b></label>." ".$row["mobno"]." <br><br> ".
    "<label><b>E- Mail :</b></label>." ".$row["email"]." <br><br> ".
    "<label><b>Address :</b></label>." ".$row["address"]." <br>";
    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>";

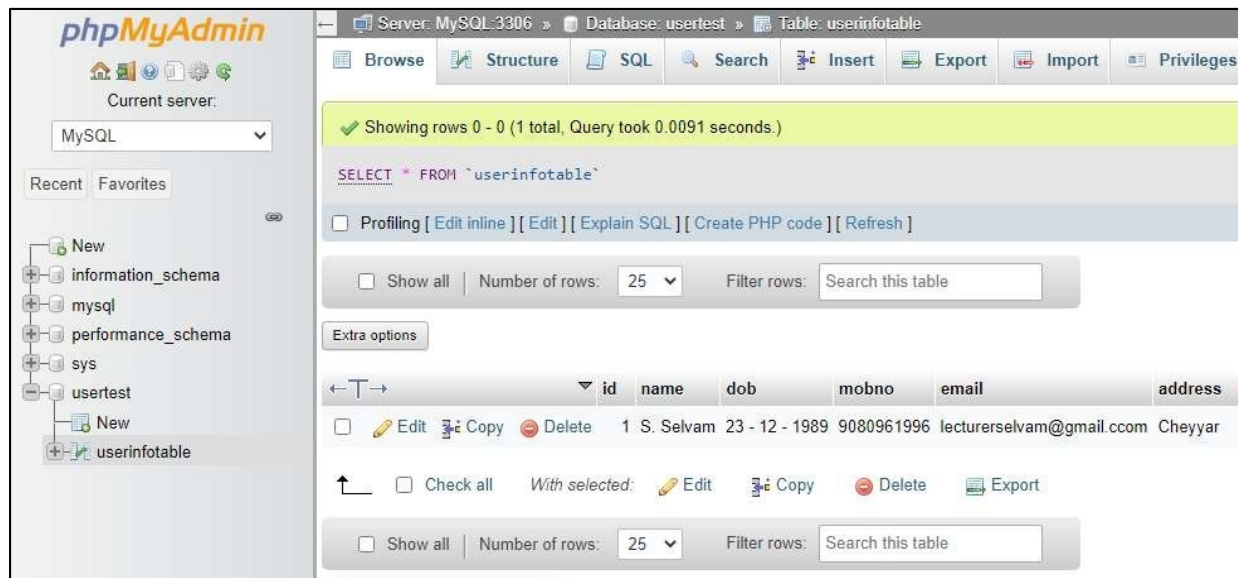
    echo "<h2> No Records Found...</h2>";
    echo "<h4 style = 'color:red;'> Enter Correct Criteria Match...</h4>";
    echo"</center>";

    echo"</body>";
    echo"</html>";

}
$conn->close();
?>

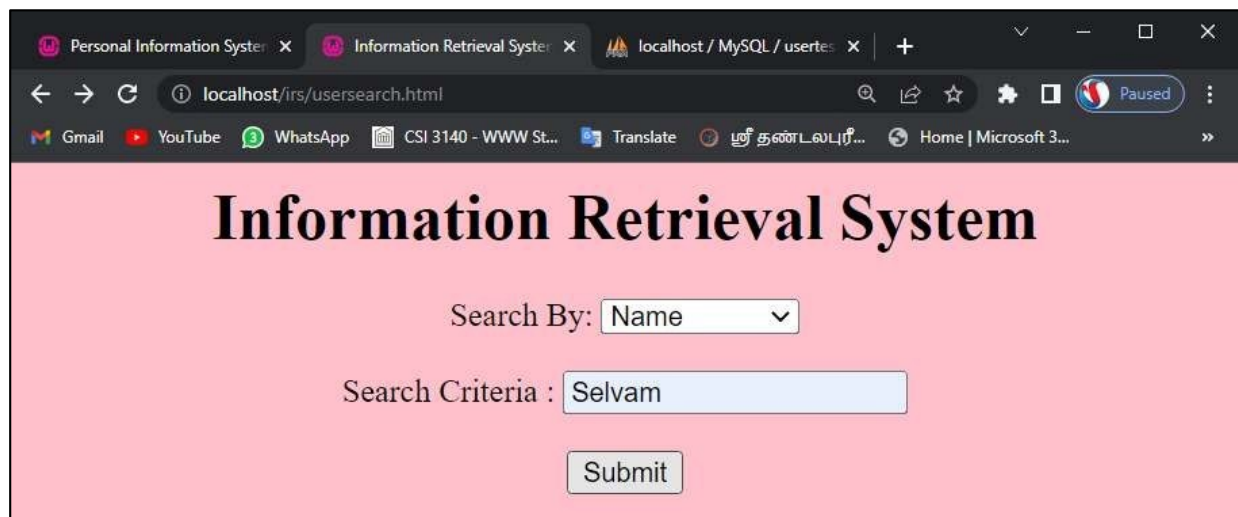
```

Output:



The screenshot shows the phpMyAdmin interface for a MySQL database named 'usertest'. The 'userinfotable' table is selected, and its structure is displayed. The table has the following columns: id, name, dob, mobno, email, and address. The table contains one row of data for S. Selvam.

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



The screenshot shows a web browser window displaying the 'Information Retrieval System' search interface. The search criteria are set to 'Name' and the search term is 'Selvam'. The 'Submit' button is visible.

Information Retrieval System

Search By:

Search Criteria :

Personal Information System x Information Retrieval System x localhost / MySQL / userse: x +

localhost/irs/phpSearchOption.php

Gmail YouTube WhatsApp CSI 3140 - WWW St... Translate ஸ்ரீ தண்டலபுரீ... Home | Microsoft 3...

Information Retrieval System

Retrived Information :

Name : S. Selvam

Date of Birth : 23 - 12 - 1989

Mobile No : 9080961996

E- Mail : lecturerselvam@gmail.ccom

Address : Cheyyar

Personal Information System x Information Retrieval System x localhost / MySQL / userse: x +

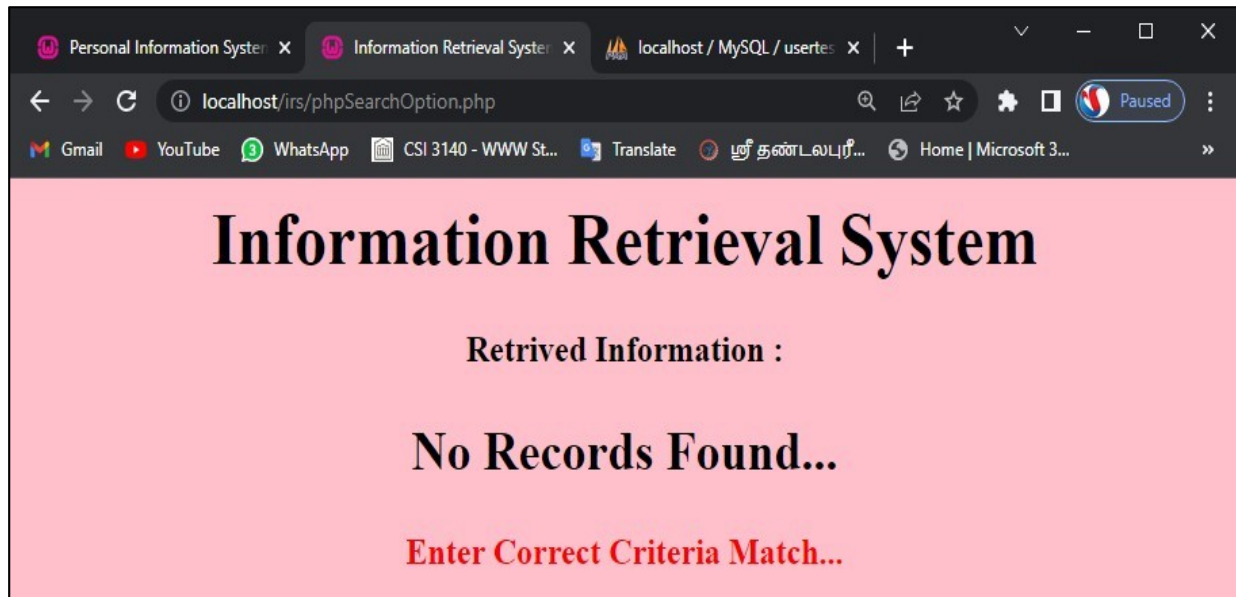
localhost/irs/usersearch.html

Gmail YouTube WhatsApp CSI 3140 - WWW St... Translate ஸ்ரீ தண்டலபுரீ... Home | Microsoft 3...

Information Retrieval System

Search By:

Search Criteria :



Result:

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

EX NO : 7	Creation of Personal Information System
DATE :	

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">

<br><br>

<label>Date of Birth:</label>

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

<br><br>

<label>Mobile No: </label>

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

<br><br>

<label>E-mail: </label>

<input type="text" name="email" placeholder="Enter Email">

<br><br>

<label>Address: </label>

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

<br><br>

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

</form>

</body>

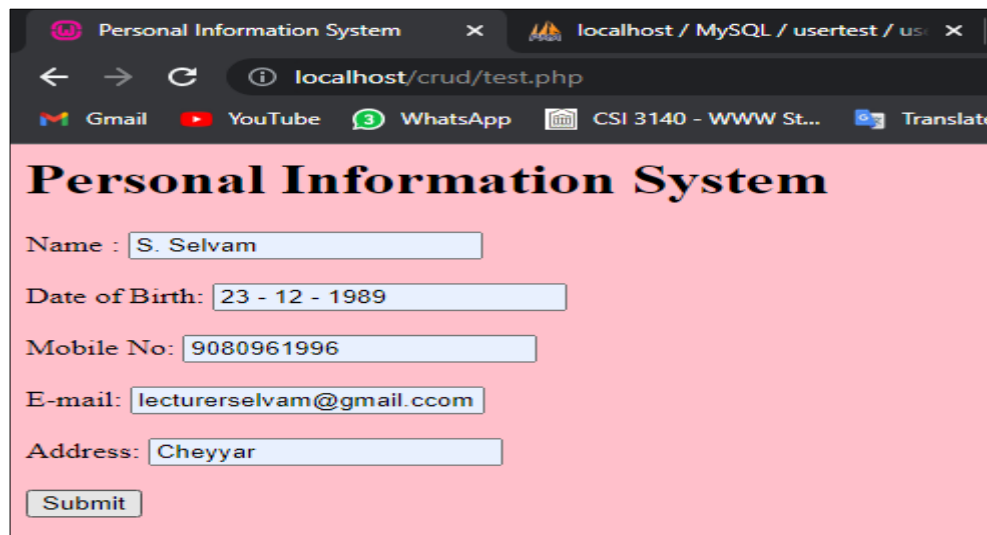
</html>
```

```
<?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:



Personal Information System

Name : S. Selvam

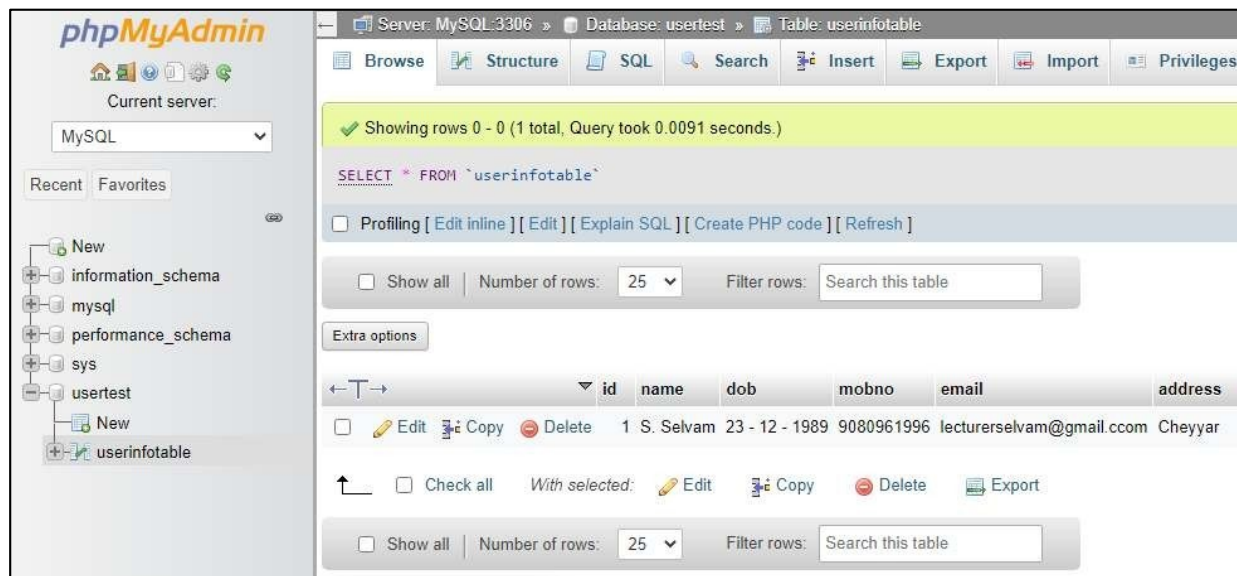
Date of Birth: 23 - 12 - 1989

Mobile No: 9080961996

E-mail: lecturerselvam@gmail.ccom

Address: Cheyyar

Submit



Server: MySQL:3306 » Database: usertest » Table: userinfotable

Showing rows 0 - 0 (1 total, Query took 0.0091 seconds.)

```
SELECT * FROM `userinfotable`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

	id	name	dob	mobno	email	address
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	S. Selvam	23 - 12 - 1989	9080961996	lecturerselvam@gmail.ccom	Cheyyar

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

Result:

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