**PART A**

**Experiment No. 9**

**A.1 AIM:**

Creating **Login** and **Registration** using PHP and MYSQL database

**A.2 Pre requisite:**

Basic Knowledge of MSQL and Session Tracking and PHP

**A.3 Outcome:**

After successful completion of this experiment students will be able to:

1. Design pages Login and Registration
2. Understating the use of Session Tracking in Websites.

**A.4 Theory:**

Here is the list of files along with their purpose.

* **database.sql**: This file contains a query to create table structure for the login-register script. You can either import this file or directly execute given queries in PHP-Myadmin or available database management tool.
* **register**.**php**: This file have an HTML registration form where user can enter his name, email and password. If registration data is valid, it will give success, else it will throw error.
* **login**.**php**: This file contains HTML login form where user can enter email and password. The Same page keep PHP code to check if given email/password is matched or not. If login is successful, it will redirect user to page-1 content.
* **db-config.php**: This file contains PHP code to create a connection with MySQL database and table. Login & Registration page includes this file to interact with MySQL data.
* **page-1.php & page-2.php**: These files contains sample content which are only accessible after login. If you try to access these pages without login, it will redirect you to login screen.
* **logout.php**: This file is used to destroy user data in PHP Session. This means that user will be logged out and redirected to login page.

**A.5 Procedure/Task:**

* Prepare the database  
  1 Create the database  
  2 Create the database table  
  3 Dump sample data on the table  
  4 Create database connection file

Firsly Create, registration form that allow users insert user details in database.

* Then, user login using his registered email and password. Now if email and password found in database, user login considered successful. After successful login, we will save user email in PHP session variable.
* Now on each content page, we will check if user email is available in session variable or not. If available, user can view content pages else he will be redirected to login page.
* If a user clicks on logout link, PHP session gets destroyed and user needs to login again to view content pages.
* This is how Registration/Login works to protect certain pages/features only for authorized/logged-in users
* Prepare the document. Save and close the file and name it as **EXP09\_Roll no\_Batch no.**

**Sample code:-**

**database.sql**

create database test;

use test;

CREATE TABLE IF NOT EXISTS `users` (

`id` int(11) NOT NULL AUTO\_INCREMENT,

`name` varchar(100) DEFAULT NULL,

`email` varchar(100) NOT NULL,

`password` varchar(100) NOT NULL,

PRIMARY KEY (ID)

);

<?php

// Check existence of id parameter before processing further

if(isset($\_GET["id"]) && !empty(trim($\_GET["id"]))){

// Include config file

require\_once "config.php";

**PART B**

|  |  |
| --- | --- |
| Roll No.: N049 | Name: Tarun Tanmay |
| Class: MBA Tech CE | Batch: B3 |
| Date of Experiment : | Date/Time of Submission : |
| Grade : |  |

**B.1 Code:**

Login Page

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">

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

<title>Login Page</title>

</head>

<body>

<nav>

<ul>

<a href=#>

<div class=lg></div> <img class=logo src='bid1.png'> </div>

</a>

<li><a href="login.php"><i class="glyphicon glyphicon-user"></i></a></li>

<li><a href=#>Gallery</a></li>

<li><a href=#>Auction</a></li>

<li><a href=#>Artwork</a></li>

<li><a href=#>Artist</a></li>

<li><a href=#>Home</a></li>

</ul>

</nav>

<div id='formhead'>

<div id='login'><a href="login.php">Login</a></div>

<div id='sign'><a href="signup.php">Sign-Up</a></div>

</div>

<?php

require('connection.php');

session\_start();

// When form submitted, check and create user session.

if (isset($\_POST['emailid'])) {

$emailid = stripslashes($\_REQUEST['emailid']);

$emailid = mysqli\_real\_escape\_string($mysqli, $emailid);

$password = stripslashes($\_REQUEST['password']);

$password = mysqli\_real\_escape\_string($mysqli, $password);

// Check user is exist in the database

$query = "SELECT \* FROM `login` WHERE `emailid`='$emailid'";

$result = mysqli\_query($mysqli, $query);

$rows = mysqli\_num\_rows($result);

if ($rows == 1) {

$\_SESSION['emailid'] = $emailid;

// Redirect to user dashboard page

echo "<div id='container'>

<h3 class='link'>Successful Login.</h3><br/>

<p class='link'>Click here to go to <a href='display.php'>user profile</a></p>

</div>";

} else {

echo "<div id='container'>

<h3 class='link'>Incorrect Username/password.</h3><br/>

<p class='link'>Click here to <a href='login.php'>Login</a> again.</p>

</div>";

}

} else {

?>

<div id="container">

<form name="login" action="" method="post">

<table align="center">

<tr>

<td>Email id:</td>

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

</tr>

<tr>

<td>Password:</td>

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

</tr>

<tr>

<td><input id='submit' type="submit" value="Submit"></td>

<td>

<button id='forgot' type="button">Forgot Password</button>

</td>

</tr>

</table>

</form>

</div>

<?php

}

?>

</body>

</html>

Login CSS

body {

margin: 0;

padding: 0;

background-color: seashell;

}

nav {

padding: 0px 0px 0px 0px;

margin: 0px 0px 50px 0px;

background-color: #10375C;

}

ul {

list-style-type: none;

margin: 0;

padding: 0;

overflow: hidden;

background-color: #10375C;

}

li {

float: right;

font-weight: 300px;

}

li a {

display: inline-block;

color: snow;

text-align: center;

padding: 14px 16px;

text-decoration: none;

font-size: 20px;

}

li a:hover {

background-color: rgb(116, 187, 9);

}

.logo {

width: auto;

height: 50px;

}

.lg {

float: left;

}

#container {

background-color: #BAE8E8;

border-radius: 0px 0px 10px 10px;

margin-left: auto;

margin-top: auto;

margin-bottom: auto;

margin-right: auto;

width: 50%;

padding: 10px;

position: relative;

}

#login {

background-color: #BAE8E8;

border-radius: 10px 10px 0px 0px;

width: 50%;

margin: auto;

position: relative;

padding: 10px;

}

#sign {

background-color: #85b4b4;

border-radius: 10px 10px 0px 0px;

width: 50%;

margin: auto;

position: relative;

padding: 10px;

}

#sign:hover {

background-color: #BAE8E8;

}

#formhead {

display: flex;

text-align: center;

width: 50%;

margin: auto;

}

form {

margin: auto;

}

#forgot {

background-color: #10375C;

border-radius: 10px;

max-width: 200px;

font-size: 12px;

padding: 2px 8px 3px 8px;

margin: 2px 10px;

color: snow;

}

#submit {

background-color: #10375C;

border-radius: 10px;

max-width: 85px;

font-size: 12px;

padding: 2px 8px 3px 8px;

margin: 2px;

color: snow;

}

td {

padding-left: 20px;

padding-bottom: 20px;

}

a {

text-decoration: none;

color: black;

}

.link {

margin: auto;

}

Sign-Up Page

<?php

include "connection.php";

?>

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">

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

<title>Sign Up</title>

<script>

function validateform() {

var fname = document.signup.firstname.value;

var lname = document.signup.lastname.value;

var password = document.signup.password.value;

var rpassword = document.signup.rpassword.value;

var emailid = document.signup.emailid.value;

var sex = document.signup.sex.value;

var phoneno = document.signup.phoneno.value;

var artists = document.getElementById("artists").value;

var address = document.signup.address.value;

var dob = document.signup.dob.value;

var type = document.signup.type.value;

if (fname == null || fname == "" || lame == null || lname == "" || password == null || password == "" || rpassword == null || rpassword == "" || emailid == null || emailid == "" || dob == null || dob == "" || sex == null || sex == "" || phoneno == null || phoneno == "" || address == null || address == "" || artists == null || artists == "" || type == null || type == "") {

alert("Fill in the blank space");

}

if (password.lenght < 6) {

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

} else if (password != rpassword) {

alert("Password is not same.");

}

if (phoneno.lenght == 10) {

alert("Phone number should be of 10 numbers");

}

}

</script>

</head>

<body>

<nav>

<ul>

<a href=#>

<div class=lg></div> <img class=logo src='bid1.png'> </div>

</a>

<li><a href="login.php"><i class="glyphicon glyphicon-user"></i></a></li>

<li><a href=#>Gallery</a></li>

<li><a href=#>Auction</a></li>

<li><a href=#>Artwork</a></li>

<li><a href=#>Artist</a></li>

<li><a href=#>Home</a></li>

</ul>

</nav>

<div id='formhead'>

<div id='login'><a href="login.php">Login</a></div>

<div id='sign'><a href="signup.php">Sign-Up</a></div>

</div>

<?php

require('connection.php');

// When form submitted, insert values into the database.

if (isset($\_REQUEST['emailid'])) {

// removes backslashes

$emailid = stripslashes($\_REQUEST['emailid']);

//escapes special characters in a string

$emailid = mysqli\_real\_escape\_string($mysqli, $emailid);

$firstname = stripslashes($\_REQUEST['firstname']);

$firstname = mysqli\_real\_escape\_string($mysqli, $firstname);

$password = stripslashes($\_REQUEST['password']);

$password = mysqli\_real\_escape\_string($mysqli, $password);

$lastname = stripslashes($\_REQUEST['lastname']);

$lastname = mysqli\_real\_escape\_string($mysqli, $lastname);

$dob = stripslashes($\_REQUEST['dob']);

$dob = mysqli\_real\_escape\_string($mysqli, $dob);

$sex = stripslashes($\_REQUEST['sex']);

$sex = mysqli\_real\_escape\_string($mysqli, $sex);

$phoneno = stripslashes($\_REQUEST['phoneno']);

$phoneno = mysqli\_real\_escape\_string($mysqli, $phoneno);

$address = stripslashes($\_REQUEST['address']);

$address= mysqli\_real\_escape\_string($mysqli, $address);

$artists = stripslashes($\_REQUEST['artists']);

$artists = mysqli\_real\_escape\_string($mysqli, $artists);

$type = stripslashes($\_REQUEST['type']);

$type = mysqli\_real\_escape\_string($mysqli, $type);

$query = "INSERT into `user` (`firstname`, `lastname`, `emailid`, `dateofbirth`, `sex`, `password`, `phoneno`, `address`, `artist`, `type`)

VALUES ('$firstname', '$lastname', '$emailid', '$dob', '$sex', '$password', '$phoneno', '$address', '$artists', '$type')";

$result = mysqli\_query($mysqli, $query);

$query = "INSERT into `login` (`emailid`, `upassword`)

VALUES ('$emailid','$password')";

$result = mysqli\_query($mysqli, $query);

if ($result) {

echo "<div id='container'>

<h3 class='link'>You are registered successfully.</h3><br/>

<p class='link'>Click here to <a href='login.php'>Login</a></p>

</div>";

} else {

echo "<div id='container'>

<h3 class='link'>Required fields are missing.</h3><br/>

<p class='link'>Click here to <a href='signup.php'>registration</a> again.</p>

</div>";

}

} else {

?>

<div id="container">

<form class="form" action="" method="post" onsubmit="return validateform()">

<table align="center">

<tr>

<td>First Name:</td>

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

</tr>

<tr>

<td>Last Name:</td>

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

</tr>

<tr>

<td>Email id:</td>

<td><input type="email" name="emailid"></td>

</tr>

<tr>

<td>Date of Birth:</td>

<td><input type="date" name="dob"></td>

</tr>

<tr>

<td>Gender:</td>

<td><input type="radio" name="sex" value="Male">Male

<input type="radio" name="sex" value="Female">Female

<input type="radio" name="sex" value="Others">Others</td>

</tr>

<tr>

<td>Password:</td>

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

</tr>

<tr>

<td>Re Enter Password:</td>

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

</tr>

<tr>

<td>Phone Number:</td>

<td><input type="tel" name="phoneno"></td>

</tr>

<tr rowspan=2>

<td>Address:</td>

<td><input type="textarea" name="address"></td>

</tr>

<tr>

<td>Preferred Artist:</td>

<td>

<select id="artists" name="artists">

<option value="Ram">Ram</option>

<option value="Sita">Sita</option>

<option value="Lakshman">Lakshman</option>

<option value="Hanuman">Hanuman</option>

</select>

</td>

</tr>

<tr>

<td>Painting:</td>

<td>

<input type="checkbox" name="type" value="Oil-Painting">Oil-Paining

<input type="checkbox" name="type" value="Water Colour">Water Colour

<input type="checkbox" name="type" value="Acrylic">Acrylic

</td>

</tr>

<tr>

<td colspan=2 align=center><input id="submit" type="submit" value="Submit"></td>

</tr>

</table>

</form>

</div>

<?php

}

?>

</body>

</html>

Sign-Up CSS

body {

margin: 0;

padding: 0;

background-color: seashell;

}

nav {

padding: 0px 0px 0px 0px;

margin: 0px 0px 50px 0px;

background-color: #10375C;

}

ul {

list-style-type: none;

margin: 0;

padding: 0;

overflow: hidden;

background-color: #10375C;

}

li {

float: right;

font-weight: 300px;

}

li a {

display: inline-block;

color: snow;

text-align: center;

padding: 14px 16px;

text-decoration: none;

font-size: 20px;

}

li a:hover {

background-color: rgb(116, 187, 9);

}

.logo {

width: auto;

height: 50px;

}

.lg {

float: left;

}

#container {

background-color: #BAE8E8;

border-radius: 0px 0px 10px 10px;

margin-left: auto;

margin-top: auto;

margin-bottom: auto;

margin-right: auto;

width: 50%;

padding: 10px;

position: relative;

}

#sign {

background-color: #BAE8E8;

border-radius: 10px 10px 0px 0px;

width: 50%;

margin: auto;

position: relative;

padding: 10px;

}

#login {

background-color: #85b4b4;

border-radius: 10px 10px 0px 0px;

width: 50%;

margin: auto;

position: relative;

padding: 10px;

}

#login:hover {

background-color: #BAE8E8;

}

#formhead {

display: flex;

text-align: center;

width: 50%;

margin: auto;

}

form {

margin: auto;

}

#submit {

background-color: #10375C;

border-radius: 10px;

max-width: 85px;

font-size: 12px;

padding: 2px 8px 3px 8px;

margin: 2px;

color: snow;

}

td {

padding-left: 20px;

padding-bottom: 20px;

}

a {

text-decoration: none;

color: black;

}

.link {

margin: auto;

}

Connection

<?php

DEFINE('DB\_USERNAME', 'root');

DEFINE('DB\_PASSWORD', 'root');

DEFINE('DB\_HOST', 'localhost');

DEFINE('DB\_DATABASE', 'painting');

$mysqli = new mysqli(DB\_HOST, DB\_USERNAME, DB\_PASSWORD, DB\_DATABASE);

// Check connection

if (!$mysqli) {

die("Connection failed: " . mysqli\_connect\_error());

}

?>

Session

<?php

include 'connection.php';

session\_start();

if(!isset($\_SESSION["emailid"])) {

header("Location: login.php");

exit();

}

?>

User Details Page

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">

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

<title>Sign Up</title>

</head>

<body>

<nav>

<ul>

<a href=#>

<div class=lg></div> <img class=logo src='bid1.png'> </div>

</a>

<li><a href="login.php"><i class="glyphicon glyphicon-user"></i></a></li>

<li><a href=#>Gallery</a></li>

<li><a href=#>Auction</a></li>

<li><a href=#>Artwork</a></li>

<li><a href=#>Artist</a></li>

<li><a href=#>Home</a></li>

</ul>

</nav>

<div id="container">

<?php

include('session.php');

$email = $\_SESSION['emailid'];

$sql = "SELECT \* from `user` where `emailid` = '$email'";

$result = $mysqli->query($sql);

$row = $result->fetch\_assoc()

?>

<table align="center">

<tr>

<td colspan=2 align=center><b>User Details</b></td>

</tr>

<tr>

<td>First Name:</td>

<td>

<?php echo $row['firstname']; ?>

</td>

</tr>

<tr>

<td>Last Name:</td>

<td>

<?php echo $row['lastname']; ?>

</td>

</tr>

<tr>

<td> Email ID:</td>

<td>

<?php echo $row['emailid']; ?>

</td>

</tr>

<tr>

<td>Date of Birth:</td>

<td>

<?php echo $row['dateofbirth']; ?>

</td>

</tr>

<tr>

<td>Gender:</td>

<td>

<?php echo $row['sex']; ?>

</td>

</tr>

<tr>

<td> Phone Number:</td>

<td>

<?php echo $row['phoneno']; ?>

</td>

</tr>

<tr>

<td>Address:</td>

<td>

<?php echo $row['address']; ?>

</td>

</tr>

<tr>

<td> Artist Prefered:</td>

<td>

<?php echo $row['artist']; ?>

</td>

</tr>

<tr>

<td> Painting Type:</td>

<td>

<?php echo $row['type']; ?>

</td>

</tr>

<tr>

<td colspan=2 align=center>

<a href='logout.php'><button id='submit'>Logout</button></a>

</td>

</tr>

</div>

</body>

</html>

User Detail CSS

body {

margin: 0;

padding: 0;

background-color: seashell;

}

nav {

padding: 0px 0px 0px 0px;

margin: 0px 0px 50px 0px;

background-color: #10375C;

}

ul {

list-style-type: none;

margin: 0;

padding: 0;

overflow: hidden;

background-color: #10375C;

}

li {

float: right;

font-weight: 300px;

}

li a {

display: inline-block;

color: snow;

text-align: center;

padding: 14px 16px;

text-decoration: none;

font-size: 20px;

}

li a:hover {

background-color: rgb(116, 187, 9);

}

.logo {

width: auto;

height: 50px;

}

.lg {

float: left;

}

#container {

background-color: #BAE8E8;

border-radius: 10px;

margin-left: auto;

margin-top: auto;

margin-bottom: auto;

margin-right: auto;

width: 50%;

padding: 10px;

position: relative;

}

td {

padding-left: 20px;

padding-bottom: 20px;

}

#submit {

background-color: #10375C;

border-radius: 10px;

max-width: 85px;

font-size: 12px;

padding: 2px 8px 3px 8px;

margin: 2px;

color: snow;

}

Logout Page

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">

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

<title>Sign Up</title>

</head>

<body>

<nav>

<ul>

<a href=#>

<div class=lg></div> <img class=logo src='bid1.png'> </div>

</a>

<li><a href="login.html"><i class="glyphicon glyphicon-user"></i></a></li>

<li><a href=#>Gallery</a></li>

<li><a href=#>Auction</a></li>

<li><a href=#>Artwork</a></li>

<li><a href=#>Artist</a></li>

<li><a href=#>Home</a></li>

</ul>

</nav>

<?php

session\_start();

// Destroy session

if (session\_destroy()) {

echo "<div id='container'>

<h3 class='link'>Logout successful.</h3><br/>

<p class='link'>Click here to <a href='login.php'>Login</a> again.</p>

</div>";

}

?>

Logout CSS

body {

margin: 0;

padding: 0;

background-color: seashell;

}

nav {

padding: 0px 0px 0px 0px;

margin: 0px 0px 50px 0px;

background-color: #10375C;

}

ul {

list-style-type: none;

margin: 0;

padding: 0;

overflow: hidden;

background-color: #10375C;

}

li {

float: right;

font-weight: 300px;

}

li a {

display: inline-block;

color: snow;

text-align: center;

padding: 14px 16px;

text-decoration: none;

font-size: 20px;

}

li a:hover {

background-color: rgb(116, 187, 9);

}

.logo {

width: auto;

height: 50px;

}

.lg {

float: left;

}

#container {

background-color: #BAE8E8;

border-radius: 10px;

margin-left: auto;

margin-top: auto;

margin-bottom: auto;

margin-right: auto;

width: 50%;

padding: 10px;

position: relative;

}

#submit {

background-color: #10375C;

border-radius: 10px;

max-width: 85px;

font-size: 12px;

padding: 2px 8px 3px 8px;

margin: 2px;

color: snow;

}

td {

padding-left: 20px;

padding-bottom: 20px;

}

a {

text-decoration: none;

color: black;

}

**B.2 Output**

Login Page

Graphical user interface, application

Description automatically generated

Login Confirmation

Graphical user interface, website

Description automatically generated

Sign-Up

Graphical user interface

Description automatically generated

Sign-Up Confirmation

Graphical user interface, text, website

Description automatically generated

User Details

Graphical user interface

Description automatically generated

Logout PageGraphical user interface, website

Description automatically generated

**B.3 Conclusion:**

Using PHP, we could register a user, then allow him to login, verify his login and registration, display details that a user might have entered in a form on another page, then session track using the email id. This can be used for verification and confirmation purposes.

**B.3 Observations and Learning:**

In the above experiment, we learnt the basics of PHP. After understanding the storage of .php files and their connectivity to the html pages, we wrote a php code to connect to the data base, add user details into the database tables, retrieve and display the details a user enters in the form that was designed using html and CSS and validated using JavaScript.

**B.4 Question of Curiosity**

Q1. What is use of **db-config.php** used in this Experiment? Answer with appropriate reason.

Answer

* The db-config.php file was named as connection.php in this experiment
* The use of this file is to make a connection with the php server and the database
* It creates an object named $mysqli that is latter used in other php files

Q2. Why Session Tracking is needed? What are different ways of session tracking?

Answer

* A session is a way to store information (in variables) to be used across multiple pages.
* Unlike a cookie, the information is not stored on the user’s computer.
* Session variables hold information about one single user, and are available to all pages in one application.
* Ways of session tracking are:
  + **Session Tracking in PHP by using Session:** In PHP, Sessions are called using the **session\_start()** function. Before creating any session, it first checks whether the session is already created or not. If no such session is created, then it creates a new session with the specified name.
  + Session Tracking in PHP using Cookie: In PHP, the **setcookie()** function defines a cookie. It's sent along with the other HTTP headers. Cookies must be sent before any HTML is sent to the page or they do not work, so the setcookie() function must appear before the <html>tag.