Scripting Language Lab Report - BCA 4th Semester

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Abstract:

This report documents the practical exercises and experiments conducted in the Scripting Language course for the 4th semester of the Bachelor of Computer Applications (BCA) program. It provides a quick key concepts explored through semester HTML, JavaScript, and PHP.

Disclaimer:

The information presented in this report is intended for educational purposes only. While efforts have been made to ensure accuracy, any practical implementation should be validated by qualified professionals.

Prerequisite Knowledge:

- Basic Programming concepts
- Scripting languages such as JavaScript, and PHP.

Section 1 : JavaScript

lab 1

Q : WAP to display text in document

html

```
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>Document</title>
   <script src="script.js" defer></script>
 </head>
 <body>
   </body>
</html>
```

```
let myText = document.getElementById("my-text");
myText.textContent = "Hello, World! I am doing scripting lab report.";
```

Q : WAP to update text content of div element

html

lab 3

Q : WAP to increment count on button click

html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Document</title>
    <script src="script.js" defer></script>
  </head>
  <body>
    <input type="number" name="num-value" id="num-value" value="0" disabled />
    <button id="increment-btn">Increment</button>
  </body>
</html>
js
let numValue = document.getElementById('num-value');
let incrementBtn = document.getElementById('increment-btn');
incrementBtn.onclick = function() {
  let numValue.value = parseInt(let numValue.value) + 1;
}
```

lab 4

Q : WAP to display current date-time on button click

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Document</title>
    <script src="script.js" defer></script>
  </head>
  <body>
    <button onclick="showDateTime()">Show Date/button>
  </body>
</html>
js
let dateTimeElement = document.getElementById("date-time");
function showDateTime() {
  dateTimeElement.textContent = new Date();
}
lab 5
{\bf Q} : WAP to take number input from user and display corresponding day name
html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Document</title>
    <script src="script.js" defer></script>
  </head>
  <body>
    <!-- number in put between 1 to 7 -->
    <input type="number" min="1" max="7" id="day-num" />
    <button onclick="getDay()">Get Day</putton>
    </body>
</html>
js
let dayNum = document.getElementById("day-num");
let dayName = document.getElementById("day-name");
const days = [
  "Sunday",
  "Monday",
  "Tuesday",
  "Wednesday",
  "Thursday",
  "Friday",
```

```
"Saturday",
];

function getDay() {
  if (dayNum.value >= 1 && dayNum.value <= 7) {
    dayName.textContent = days[dayNum.value - 1];
  }
}</pre>
```

Q : WAP to change case of user input string

html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Document</title>
    <script src="script.js" defer></script>
  </head>
  <body>
    <!-- case conversion -->
    <input
      type="text"
      id="input-string"
      placeholder="Enter a string"
    /><br /><br />
    <button onclick="convertToUpperCase()">Upper Case</button>
    <button onclick="convertToLowerCase()">Lower Case</button><br /><br />
    <input type="text" id="output-string" placeholder="Output" />
  </body>
</html>
js
let inputString = document.getElementById("input-string");
let outputString = document.getElementById("output-string");
function convertToUpperCase() {
  outputString.value = inputString.value.toUpperCase();
}
function convertToLowerCase() {
  outputString.value = inputString.value.toLowerCase();
}
```

1ab 7

Q : WAP to generate random number between user given range

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Document</title>
    <script src="script.js" defer></script>
  </head>
  <body>
    <!-- random number generator -->
    <input type="number" id="min-range" placeholder="Min Range" />
    <input type="number" id="max-range" placeholder="Max Range" />
    <button onclick="generateRandomNumber()">Generate</button>
    <input type="number" id="output-num" placeholder="Random Number" disabled />
  </body>
</html>
js
let outputNum = document.getElementById("output-num");
function generateRandomNumber() {
  let minRange = parseInt(document.getElementById("min-range").value);
  let maxRange = parseInt(document.getElementById("max-range").value);
  let randomNum =
    Math.floor(Math.random() * (maxRange - minRange + 1)) + minRange;
  outputNum.value = randomNum;
}
```

Q : WAP to demonstrate setTimeout() to display text after 2 seconds

//set timout to display a text afetr 2 secnd

setTimeout(() => {

```
text.innerHTML = "I appeared after 2 seconds. WOW!";
}, 2000);
```

Q : WAP to client side from validation

html

```
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>Document</title>
   <script src="script.js" defer></script>
  </head>
  <body>
   <!-- client side from validation -->
    <form id="registerForm">
     <label for="username">Username:</label><br />
      <input type="text" id="username" name="username" /><br />
     <label for="email">Email:</label><br />
     <input type="text" id="email" name="email" /><br />
     <label for="password">Password:</label><br />
     <input type="password" id="password" name="password" /><br />
     <input type="submit" value="Submit" />
   </form>
   <div id="error"></div>
  </body>
</html>
```

```
document
  .getElementById("registerForm")
  .addEventListener("submit", function (event) {
    event.preventDefault();
   var username = document.getElementById("username").value;
   var email = document.getElementById("email").value;
   var password = document.getElementById("password").value;
   var errorDiv = document.getElementById("error");
   errorDiv.innerHTML = "";
   if (!username || !email || !password) {
     errorDiv.innerHTML = "All fields are required.";
      return;
    }
   var emailRegex = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$/;
    if (!emailRegex.test(email)) {
     errorDiv.innerHTML = "Please enter a valid email.";
      return;
```

```
if (password.length < 8) {
    errorDiv.innerHTML = "Password must be at least 8 characters long.";
    return;
}

// If all validations pass, you can submit the form here.
console.log("Form submitted");
});</pre>
```

Q : WAP to email regex validation

html

js

function validateEmail() {
 const emailInput = document.getElementById("email-input").value;
 const emailRegex = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}\$/;

 if (emailRegex.test(emailInput)) {
 document.getElementById("validation-result").textContent =
 "Valid email address.";
 } else {
 document.getElementById("validation-result").textContent =
 "Invalid email address.";
 }
}

lab 11

Q : WAP to demonstrate Confirm popup using dialogue box

```
<!DOCTYPE html>
<html lang="en">
  <head>
   <title>Document</title>
    <script src="script.js" defer></script>
  </head>
  <body>
   <!-- >Confirm Box Example -->
   </body>
</html>
js
const result = confirm("Are you sure you want to proceed?");
if (result) {
  document.getElementById("confirm-result").textContent = "User clicked OK.";
} else {
  document.getElementById("confirm-result").textContent =
   "User clicked Cancel.";
```

Q : WAP to demonstrate array and foreach loop

js

```
const fruits = ["apple", "orange", "banana", "grapes", "mango"];

// using for loop
let list = "";
fruits.forEach((fruit) => {
    list += fruit + ",";
});

alert(list);
```

lab 13

Q : WAP to demonstrate prompt popup using dialogue box

```
$users = ["rayyan", "elon", "iron man"];

$username = prompt("Enter your name");

if ($users.includes($username)) {
   alert("Welcome " + $username);
} else {
```

```
alert("Sorry, you are not valid user.");
}
```

Q : WAP to demonstrate cookie in js. create, update, delete, display cookie

html

```
//wap to store cookie
//wap to read cookie
//wap to delete cookie
function setCokkie(name, value, days) {
  var date = new Date();
  date.setTime(date.getTime() + days * 24 * 60 * 60 * 1000);
  var expires = "expires=" + date.toUTCString();
  document.cookie = name + "=" + value + ";" + expires + ";path=/";
}
function getCookie(name) {
  var cookies = document.cookie.split(";");
  for (var i = 0; i < cookies.length; i++) {</pre>
    var cookie = cookies[i].trim();
    if (cookie.startsWith(name + "=")) {
      return cookie.substring(name.length + 1);
   }
  return null;
}
function deleteCookie(name) {
  document.cookie = name + "=; expires=Thu, 01 Jan 1970 00:00:00 UTC; path=/;";
}
//set cookie
setCokkie("name", "rayyan balami", 30);
setCokkie("age", 20, 30);
//show cookie in web page without selecting any html element
let result = document.getElementById("result");
```

```
result.innerHTML = "cookie set: " + document.cookie;

//get cookie
result.innerHTML += "<br>name: " + getCookie("name");
result.innerHTML += "<br>age: " + getCookie("age");

//delete cookie
deleteCookie("name");
deleteCookie("age");

result.innerHTML += "<br>cookie deleted";
```

Q : Define Event handling in js. Demonstrate any three event

Event handling in JavaScript involves responding to user actions or system events within a web page. Events can be triggered by various interactions, such as clicking a button, hovering over an element, submitting a form, or resizing the browser window. To handle events, JavaScript provides event listeners or event handlers, which are functions that are executed when a specific event occurs.

Here's a brief demonstration of three common events and how to handle them:

html

```
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>Document</title>
   <script src="script.js" defer></script>
   <style>
      div {
       width: 100px;
       height: 100px;
        border: 1px solid black;
        margin: 1rem 0;
        display: grid;
        place-items: center;
   </style>
  </head>
  <body>
   <button>Click Me</putton>
   <div>hover me</div>
   <input type="text" placeholder="search ctrl + k" />
 </body>
</html>
```

```
//any 3 events examle js
```

```
// 1. Event: click
// Description: The click event occurs when an element is clicked.
// Example: When a user clicks on a button, change the text of the button to
'ckicked'.
let button = document.querySelector("button");
button.addEventListener("click", function () {
  button.textContent = "You Clicked Me !";
});
// 2. Event: mouseover
// Description: The mouseover event occurs when an element is moused over.
// Example: When a user div is moused over, change the border radius to 50% of top
left and bottom right.
let div = document.querySelector("div");
div.addEventListener("mouseover", function () {
  //top left and bottom right
  div.style.borderRadius = "50% 0";
  //top right and bottom left
  //div.style.borderRadius = '0 50%';
});
// 3. Event: keydown
// Description: The keydown event occurs when a key is pressed down.
// Example: When a user presses the 'ctrl + k' key, add focus to the input field.
let input = document.querySelector("input");
document.addEventListener("keydown", function (event) {
  if (event.ctrlKey && event.key === "k") {
    input.focus();
  }
});
```

Section 2: PHP

lab 1

```
{f Q} : WAP to demonstrate if-else statement in PHP
```

```
<?php

$balance = 5000;

function withdraw($amount) {
  global $balance;
  if ($amount > $balance) {
```

```
echo "Insufficient funds";
} else {
    $balance = $balance - $amount;
    echo "Withdrawal successful. <br>}

withdraw(3500);

?>
```

Q : WAP to demonstrate switch statement in php

php

```
<?php
$language = "PHP";

switch($language) {
    case "PHP":
        echo "Language is PHP";
        break;
    case "Java":
        echo "Language is Java";
        break;
    case "C#":
        echo "Language is C#";
        break;
    default:
        echo "Language is not listed";
}</pre>
```

1ab 3

 ${f Q}$: WAP to demonstrate different loop statements in PHP

```
<?php

//for loop
echo "for loop :-<br>";
for($i=0; $i<5; $i++){
    echo "iteration $i <br>";
}

//while loop
echo "<br>>while loop :- <br>:
$j = 0;
```

```
while($j<5){</pre>
   echo "iteration $j <br>";
   $j++;
//do while loop
echo "<br>o while loop :- <br>";
k = 0;
do{
   echo "iteration $k <br>";
    $k++;
}while($k<5);</pre>
//foreach loop
echo "<br>foreach loop :- <br>";
$colors = array("red", "green", "blue", "yellow");
foreach($colors as $value){
    echo "$value <br>";
}
```

 ${f Q}$: WAP to demonstrate continue and break statements in PHP

php

```
for ($i = 0; $i < 10; $i++) {
    if ($i == 3) {
        continue;
    }
    if ($i == 7) {
        break;
    }
    echo $i . "<br>";
}
```

1ab 5

 ${f Q}$: WAP to demonstrate calculation of the area of a circle using a function in PHP

```
function circleArea($radius){
    $area = 3.14 * $radius * $radius;
    return $area;
}
```

```
circleArea(5);
echo "When the radius is 5,<br> the area of the circle is " . circleArea(5) . "
cm<sup>2</sup><br>";
?>
```

Q : WAP to birthday countdown in PHP using day-time operation

php

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Birthday Countdown</title>
</head>
<body>
    <h2>Birthday Countdown</h2>
   <h4>Today : <?php echo date('Y-m-d'); ?></h4>
   <form method="post">
       <label for="birthday">Enter your birthday:</label>
       <input type="date" id="birthday" name="birthday" required>
       <button type="submit">Calculate Countdown</button>
   </form>
   <?php
   if ($_SERVER["REQUEST_METHOD"] == "POST") {
       $birthday = $_POST['birthday'];
       $currentDate = date('Y-m-d');
       // Calculate the difference in days between the current date and the birthday
       $diff = (strtotime($birthday) - strtotime($currentDate)) / (60 * 60 * 24);
       $diff = ceil($diff); // Round up to the nearest whole number
       if ($diff < 0) {</pre>
           echo "Your birthday is in the past!";
       } elseif ($diff == 0) {
           echo "Happy birthday!";
       } else {
           echo "Your birthday is in $diff days!";
       }
   }
   ?>
</body>
</html>
```

lab 7

Q : WAP to demonstrate different http method [POST, GET] in PHP

php

1ab 8

Q : WAP to read/write file and display its content in PHP

```
<?php

//WAP to read file and display its content in PHP

$fileName = "file.txt";
if(file_exists($fileName)) {
    $reader = fopen($fileName, "r");
    $writer = fopen($fileName, "w");
    if(!$reader || !$writer) {
        echo "Error opening file";
        die();
}</pre>
```

```
//write file
fwrite($writer, "Hello World this is wrttien from PHP");

//read file
    echo fread($reader, filesize($fileName));
fclose($reader);
fclose($writer);
} else {
    echo "File does not exist";
}
```

1ab 9

 $\ensuremath{\mathbf{Q}}$: WAP to demonstrate views count useing session in PHP

php

```
<?php
session_start();
if(isset($_SESSION['views']))
{
    $_SESSION['views'] = $_SESSION['views']+1;
}
else
{
    $_SESSION['views'] = 1;
}
echo "Views = ".$_SESSION['views'];
?>
```

lab 10

Q : WAP to demonstrate cookie [set, display, delete] in PHP

```
<?php

// Set cookie
$key = "user";
$value = "John";
$expire = time() + (60*60*24*7); // 7 days

setcookie($key, $value, $expire, "/");

// Get cookie</pre>
```

```
if(isset($_COOKIE['user'])) {
    echo "Cookie is set: " . $_COOKIE['user'];
} else {
    echo "Cookie is not set";
}
// Delete cookie if it's set
if(isset($_COOKIE['user'])) {
    setcookie($key, "", time() - 3600);
    echo "<br>Cookie deleted";
}
?>
```

Q : WAP to Send email using mail() function in PHP

```
<?php
// different ways to link files in PHP
// include
// description: include will include the file and if the file is not found, it will
throw a warning and continue the execution of the script
echo "include 'file.txt';<br>>";
echo "1. include 'file.txt';<br>";
include 'file.txt';
// include_once
// description: include_once will include the file and if the file is not found, it
will throw a warning and continue the execution of the script. It will also check if
the file has already been included and if so, it will not include it again.
echo "<br>>2. include_once 'file.txt';<br>";
include_once 'file.txt';
// require
// description: require will include the file and if the file is not found, it will
throw a fatal error and stop the execution of the script
echo "<br>>3. require 'file.txt';<br>";
require 'file.txt';
// require_once
// description: require_once will include the file and if the file is not found, it
will throw a fatal error and stop the execution of the script. It will also check if
the file has already been included and if so, it will not include it again.
echo "<br>>4. require_once 'file.txt';<br>";
```

```
require_once 'file.txt';
?>
```

Q : WAP to demonstrate exception handling (try-catch) in PHP

php

```
<?php
try {
   // Code that may throw exception
   numerator = 10;
   $denominator = 0;
   if($denominator == 0) {
        throw new Exception("Division by zero");
   }
   $result = $numerator / $denominator;
   echo "Division result: " . $result;
} catch(Exception $e) {
   // Code to handle exception
   echo "Exception caught: " . $e->getMessage();
} finally {
   // Optional block
   echo "<br>>Finally block is always executed";
}
```

lab 13

Q : WAP to Send email using mail() function in PHP

```
$\text{semails} = \text{array}("visionrayyan60517@gmail.com", "balamirayyan@gmail.com");
$\text{subject} = "Test Email";
$\text{message} = "This is a test email from PHP";
$\text{from} = "admin@gmail.com";
$\text{headers} = "From: $\text{from"};

foreach($\text{emails} as $\text{email}) {
    $\text{success} = \text{mail}($\text{email}, $\text{subject}, $\text{message}, $\text{headers});
    if($\text{success}) {
        echo "Email sent to $\text{email} < \text{br}>";
    } else {
        echo "Email failed to send to $\text{email} < \text{br}>";
    }
}
```

```
}
?>
```

Section 3: OOP in PHP

lab 1

Q : WAP to create class and object in php

php

```
class MyClass {
    public $prop1 = "I'm a class property!";

    public function setProperty($newval) {
        $this->prop1 = $newval;
    }

    public function getProperty() {
        return $this->prop1 . "<br />";
    }
}

$obj = new MyClass;
echo $obj->getProperty(); // Get the property value
$obj->setProperty("I'm a new property value!"); // Set a new one
echo $obj->getProperty(); // Read it out again to show the change
?>
```

lab 2

Q : WAP to demonstrate constructor and destructor in PHP

```
class MyClass {
   public function __construct() {
      echo 'The class "', __CLASS__, '" was initiated!<br />';
   }
   public function __destruct() {
      echo 'The class "', __CLASS__, '" was destroyed.<br />';
   }
   public function SayHello() {
      echo 'Hello, World!<br />';
   }
}
```

```
$obj = new MyClass;
$obj->SayHello();

//__CLASS__ gives name of current class
?>
```

 \mathbf{Q} : WAP to find the area of the triangle using \mathbf{OOP} in \mathbf{PHP}

php

```
<?php
class Triangle {
   public $base;
   public $height;
   public $area;
   public function __construct($base, $height) {
        $this->base = $base;
        $this->height = $height;
   }
   public function calculateArea() {
        $this->area = 0.5 * $this->base * $this->height;
   public function getArea() {
       return $this->area;
   }
}
$triangle = new Triangle(10, 20);
$triangle->calculateArea();
echo "Using OOP in PHP<br>";
echo "Area of the triangle is: " . $triangle->getArea() . " cm<sup>2</sup>";
?>
```

lab 4

Q : WAP to demonstrate Custom exception handling in PHP

```
<?php
class MyException extends Exception {</pre>
```

```
public function errorMessage() {
       //error message
        $errorMsg = 'Error on line '.$this->getLine().' in '.$this->getFile()
        .': <b>'.$this->getMessage().'</b>';
       return $errorMsg;
   }
}
//trigger exception
try {
   throw new MyException('This is an custom exception');
catch(MyException $e) {
   echo $e->errorMessage();
}
finally {
   echo "<br/>br>Finally block is always executed";
}
```

 ${f Q}$: WAP to demonstrate single, multi, hierarchical level inheritance in PHP ${f php}$

```
<?php
class Animal {
   function sound() {
       echo "Animal makes a sound";
   }
}
class Cat extends Animal {
 function sound() {
     echo "Cat meows";
 }
}
class Dog extends Animal {
   function sound() {
       echo "Dog barks";
   }
}
class GermanShepherd extends Dog {
 function sound() {
      echo "German Shepherd barks";
 }
}
```

```
$animal = new Animal();
$cat = new Cat();
dog = new Dog();
$germanShepherd = new GermanShepherd();
echo "single level inheritance in PHP : <br>>";
$animal->sound();
echo "<br>";
$dog->sound();
echo "<hr>><br>Multi level inheritance in PHP : <br>><br>";
$animal->sound();
echo "<br>";
$dog->sound();
echo "<br>";
$germanShepherd->sound();
echo "<hr>>Hierarchical inheritance in PHP : <br>>";
$animal->sound();
echo "<br>";
$cat->sound();
echo "<br>";
$dog->sound();
?>
```

 \mathbf{Q} : WAP to demonstrate multiple inheritance using interface in \mathbf{PHP}

```
// Demonstrate multiple inheritance in PHP

interface Smile {
    public function smile();
}

interface Eat {
    public function eat();
}

class Person implements Smile, Eat {
    public function smile() { //overriding
        echo "Person is smiling";
    }
    public function eat() { //overriding
```

```
echo "Person is eating";
}

echo "Multiple inheritance in PHP :<br>";

$person = new Person();

$person->smile();
echo "<br>";

$person->eat();
?>
```

Q : WAP to demonstrate use of this, self, parent keywords in PHP

php

```
<?php
class SuperMarket {
   public $name;
   public $location;
   public $owner;
   public function __construct($name, $location, $owner) {
        $this->name = $name;
        $this->location = $location;
        $this->owner = $owner;
   }
   public function display() {
        echo "Name: $this->name, Location: $this->location, Owner: $this->owner";
   }
  }
class BalamiStore extends SuperMarket {
   public const OWNER = "Balami";
   public function __construct($name, $location) {
        parent::__construct($name, $location, self::OWNER);
   }
  }
$balamiStore = new BalamiStore("Balami Store", "Everestpur");
$balamiStore->display();
```

lab 8

 $\ensuremath{\mathbf{Q}}$: WAP to demonstrate method overriding in PHP

php

```
class Swim {
    public function swim() {
        return "Swimming";
    }
}

class Human extends Swim {
    public function swim() {
        return "Human is swimming !!";
    }
}

$swim = new Swim();
echo "Swim class => " . $swim->swim() . "<br>";

$human = new Human();
echo "Human class => " . $human->swim() . "<br>";
```

1ab 9

 ${\bf Q}$: WAP to demonstrate encapsulation in PHP

```
class Message {
    private $message;

public function getMessage() {
        return $this->message;
    }

public function setMessage($newMessage) {
        $this->message = $newMessage;
    }
}

$message = new Message();
$message->setMessage("Hello, World!");
echo $message->getMessage();
```

Q : WAP to demonstrate static in PHP

php

```
class MyClass {
    public static $name;
    public static function getName() {
        return self::$name;
    }
}

echo "Static in OOP in PHP: <br>'';
MyClass::$name = "Rayyan Hero";
echo "Name: " . MyClass::getName();
?>
```

Section 4: PHP and Database

lab 1

 ${\bf Q}$: WAP to Register user in php fields: name, email, password, confirm password ${\bf html}$

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Document</title>
  </head>
  <body>
  <!-- post -->
  <h3>Register Form</h3>
  <form action="backend.php" method="post">
    <input type="text" name="name" placeholder="Name"><br><br>
    <input type="email" name="email" placeholder="Email"><br><br>
    <input type="password" name="password" placeholder="Password"><br><br>
    <input type="password" name="confirm_password" placeholder="Confirm Password"><br>
<br>
    <button type="submit" name="submit">Submit
  </form>
</body>
</html>
php
```

```
<?php
```

```
//create user Register in php
//db details
$Host = 'localhost';
$user = 'root';
$pass = '1234';
$db = 'rayyan';
//connect to db
$conn = new mysqli($Host, $user, $pass, $db);
if(!$conn){
    die('Could not connect: ' . $conn->connect_error);
//create user
if($_SERVER['REQUEST_METHOD'] == 'POST'){
  $name = $_POST['name'];
  $email = $_POST['email'];
  $password = $_POST['password'];
  $confirm_password = $_POST['confirm_password'];
  $error = array();
  if(! filter_var($email, FILTER_VALIDATE_EMAIL)){
    $error[] = 'Email is not valid';
  if(strlen($password) < 6){</pre>
    $error[] = 'Password must be at least 6 characters';
  }
  if($password != $confirm_password){
    $error[] = 'Password do not match';
  }
  if(! empty($error)){
    echo "";
    print_r($error);
    echo "";
    return;
  }
  $password = password_hash($password, PASSWORD_DEFAULT);
  $query = "INSERT INTO users (name, email, password) VALUES (?, ?, ?)";
  $stmt = $conn->prepare($query);
  $stmt->bind_param('sss', $name, $email, $password);
  if($stmt->execute()){
    echo "User created successfully";
  }else{
```

```
echo "Error: " . $conn->error;
}

$stmt->close();
$conn->close();
}
```

1ab 2

 ${\bf Q}$: WAP to Authentication user in php fields: name, email, password, confirm password ${\bf html}$

```
// DB details
$host = 'localhost';
$user = 'root';
$pass = '1234';
$db = 'rayyan';

// Connect to the database
$conn = new mysqli($host, $user, $pass, $db);
if ($conn->connect_error) {
    die('Could not connect: ' . $conn->connect_error);
}

// Authenticate user
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $email = $_POST['email'];
```

```
$password = $_POST['password'];
   $error = [];
   if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
        $error[] = 'Email is not valid';
   if (strlen($password) < 6) {</pre>
        $error[] = 'Password must be at least 6 characters';
   if (!empty($error)) {
       echo "";
        print_r($error);
        echo "";
        return;
   $query = "SELECT * FROM users WHERE email = ?";
   $stmt = $conn->prepare($query);
   $stmt->bind_param('s', $email);
   $stmt->execute();
   $result = $stmt->get_result();
   if ($result->num_rows > 0) {
        $user = $result->fetch_assoc();
        if (password_verify($password, $user['password'])) {
           echo "User authenticated";
           session_start();
           $_SESSION['user'] = $user;
           header('Location: index.php');
           exit;
        } else {
            echo "Invalid email or password";
   } else {
        echo "User not found";
   $stmt->close();
   $conn->close();
}
```

Q : WAP to upload file in PHP

```
<?php
// DB details
$host = 'localhost';
$user = 'root';
$pass = '1234';
$db = 'rayyan';
// Connect to the database
$conn = new mysqli($host, $user, $pass, $db);
if ($conn->connect_error) {
   die('Could not connect: ' . $conn->connect_error);
}
// store file in database
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
   $fileName = $_FILES['file']['name'];
   $fileExtension = pathinfo($fileName, PATHINFO_EXTENSION);
   $fileSize = $_FILES['file']['size'];
   $fileTmpName = $_FILES['file']['tmp_name'];
   //validate type
   $allowed = array('pdf', 'png', 'jpg', 'jpeg');
   if (!in_array($fileExtension, $allowed)) {
        echo "Invalid file type";
        return;
   }
   // validate size
   if ($fileSize > 5000000) { // 5MB
        echo "File too large";
        return;
    }
```

```
// add to file Directory
$fileDestination = 'uploads/' . $fileName;
move_uploaded_file($fileTmpName, $fileDestination);

// add to database
$query = "INSERT INTO files (name, type, size, path) VALUES (?, ?, ?, ?)";
$stmt = $conn->prepare($query);
$stmt->bind_param('ssss', $fileName, $fileExtension, $fileSize, $fileDestination);

if ($stmt->execute()) {
    echo "File uploaded successfully";
} else {
    echo "Error uploading file";
}

$stmt->close();
$conn->close();
}
```

Section 5 : jQuery, ajax, xhttprequest

lab 1

 ${f Q}$: WAP to hide, unhide, toggle visibility elements in DOM using jQuery

```
<!DOCTYPE html>
<html lang="en">
<head>
 <title>Document</title>
  <script src="https://code.jquery.com/jquery-3.7.1.js" integrity="sha256-</pre>
eKhayi8LEQwp4NKxN+CfCh+3q0VUtJn3QNZ0TciWLP4=" crossorigin="anonymous"></script>
  <script src="script.js" defer></script>
 <style>
   #target-element {
     width: 100px;
     height: 100px;
     background-color: rgb(0, 255, 13);
     display: grid;
      place-content: center;
     margin-top: 1rem;
 </style>
</head>
<body>
 <!-- post -->
```

```
<button id="show">Show</button>
  <button id="hide">Hide</button>
  <button id="toggle">Toggle</button>
  <div id="target-element">
     target Element
  </div>
  </body>
</html>
```

js

```
$(document).ready(function() {
    $('#show').click(function() {
        $('#target-element').show();
    });
    $('#hide').click(function() {
        $('#target-element').hide();
    });
    $('#toggle').click(function() {
        $('#target-element').toggle();
    });
});
```

lab 2

${\bf Q}$: WAP to use XMLHttpRequest and PHP

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Document</title>
  <script src="https://code.jquery.com/jquery-3.7.1.js" integrity="sha256-</pre>
eKhayi8LEQwp4NKxN+CfCh+3q0VUtJn3QNZ0TciWLP4=" crossorigin="anonymous"></script>
  <script src="script.js" defer></script>
</head>
<body>
  <!-- post -->
  <button id="show-height-width">Show Height and Width
  <div id="resultDiv"></div>
</body>
</html>
js
$(document).ready(function() {
    $('#show-height-width').click(function() {
        let h = window.innerHeight;
```

```
let w = window.innerWidth;
    $('#resultDiv').text(`Height: ${h}, Width: ${w}`);
});
});
```

Q : WAP to use XMLHttpRequest and PHP

html

```
<!DOCTYPE html>
<html lang="en">
<head>
 <title>Document</title>
 <script src="https://code.jquery.com/jquery-3.7.1.js" integrity="sha256-</pre>
eKhayi8LEQwp4NKxN+CfCh+3q0VUtJn3QNZ0TciWLP4=" crossorigin="anonymous"></script>
  <script src="script.js" defer></script>
</head>
<body>
  <h3>ajax POST/GET</h3>
 <input type="userInput" id="userInput" placeholder="Enter your name"><br><br>
 <button id="postBtn">Post Request
 <button id="getBtn">Get Request/button><br><br>
  <div id="resultDiv"></div>
</body>
</html>
```

```
let postBtn = document.getElementById("postBtn");
let getBtn = document.getElementById("getBtn");
let resultDiv = document.getElementById("resultDiv");
let userInput = document.getElementById("userInput");
postBtn.addEventListener("click", function () {
    postRequest(userInput.value);
});
getBtn.addEventListener("click", function () {
    getRequest();
});
//post request
function postRequest(userInput) {
   $.ajax({
        type: "POST",
        url: "http://localhost:8001/backend.php",
        data: { name: userInput },
        success: function (data) {
```

```
resultDiv.innerHTML = data;
       },
        error: function () {
            resultDiv.innerHTML = "error occurred during post request.";
        }
   });
}
//get request
function getRequest() {
    $.ajax({
        type: "GET",
        url: "http://localhost:8001/backend.php",
        success: function (data) {
            resultDiv.innerHTML = data;
        },
        error: function () {
            resultDiv.innerHTML = "error occurred during get request.";
        }
   });
}
```

php

```
if ($_SERVER['REQUEST_METHOD'] === 'POST' && !empty($_POST['name'])) {
    echo "Welcome " . $_POST['name'] . "!";
}

if ($_SERVER['REQUEST_METHOD'] === 'GET') {
    echo "This is a GET request";
}

?>
```

lab 4

Q : WAP to use XMLHttpRequest and PHP

```
<h3>XMLHttpRequest to send data</h3>
  <form id="userForm">
  <input type="userInput" id="userInput" placeholder="Enter your name"><br><br>
  <button type='submit' >Submit/button><br><br>
  </form>
  <div id="resultDiv"></div>
</body>
</html>
js
let userForm = document.getElementById("userForm");
let resultDiv = document.getElementById("resultDiv");
let userInput = document.getElementById("userInput");
userForm.addEventListener("submit", sendData);
//post request
function sendData(event) {
  event.preventDefault();
  const xhr = new XMLHttpRequest();
    xhr.open("POST", "/backend.php", true);
    xhr.setRequestHeader("Content-Type", "application/x-www-form-urlencoded");
    xhr.onreadystatechange = function() {
      if (xhr.status == 200) {
        resultDiv.innerHTML = xhr.responseText;
        resultDiv.innerHTML = "Error: " + xhr.status;
    }
    xhr.send("userInput=" + userInput.value);
}
php
<?php
if ($_SERVER['REQUEST_METHOD'] === 'POST' && !empty($_POST['userInput'])) {
    echo "Welcome " . $_POST['userInput'] . "!";
}
```

Section 6 : Wordpress

lab 1

?>

Q : Installation and setup

Q : Add post in website

Refrence the labreport

lab 3

Q : Add pages in website

Refrence the labreport

lab 4

Q : Add a new theme in website

Refrence the labreport

1ab 5

Q : Add a menu in website

Refrence the labreport

lab 6

Q :costumize theme

Refrence the labreport

EOF: Hope it was helpfull

Stay connected:





Stay tuned for more updates! <u>FeedBack</u> is always welcome.

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