



POKHARA UNIVERSITY

LAB REPORT ON

Internet Technology II (4)

In partial fulfillment in the degree of

Bachelor of Computer Information System(BCSIT)

Shulabh Shrestha

P.U. Reg No. 2024-2-08-0747

P.U. Roll No. 24080115

Submitted to

Department of Computer Information System

Uniglobe College

New Baneshwar, Kathmandu

Nov 2025

GITHUB LINK: <https://github.com/Lumineskz/IT2-Assessments/>

1. Design a menu page (menu.php) with 3 links:

- o ?page=home
- o ?page=about
- o ?page=contact

Using `$_GET['page']`, display the respective content dynamically (without multiple files).

2. Create a feedback form with fields: name, rating (1-5), and comment.

On submission:

- o Show the submitted data.

Use `$_SERVER['REQUEST_METHOD']` to check if the form was posted.

Source Code:

```
<!-- menu.php -->

<?php

$page = isset($_GET['page']) ? $_GET['page'] : 'home';

?>

<!DOCTYPE html>

<html>

<head>

<title>Menu Page</title>

</head>

<body style="font-family: Arial; margin: 40px;">

<h2>Dynamic Menu Page</h2>

<!-- Navigation Links -->

<nav>

<a href="?page=home">Home</a> |

<a href="?page=about">About</a> |

<a href="?page=contact">Contact</a>
```

```
</nav>

<hr>

<!-- Dynamic Page Content -->

<div>

<?php

if ($page == 'home') {

    echo "<h3>Welcome to the Home Page</h3><p>This is the home section.</p>";

} elseif ($page == 'about') {

    echo "<h3>About Us</h3><p>This is the about section.</p>";

} elseif ($page == 'contact') {

    echo "<h3>Contact Us</h3><p>This is the contact section.</p>";

} else {

    echo "<h3>Page not found!</h3>";

}

?>

</div>

<hr>

<h3>Feedback Form</h3>

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

    Name: <input type="text" name="name" required><br><br>

    Rating (1–5):<br>

    <input type="number" name="rating" min="1" max="5" required><br><br>

    Comment:<br>

    <textarea name="comment" rows="4" cols="40" required></textarea><br><br>

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

</form>

<?php

if ($_SERVER['REQUEST_METHOD'] == 'POST') {
```

```

$name = $_POST['name'];
$rating = $_POST['rating'];
$comment = $_POST['comment'];
echo "<hr><h3>Submitted Feedback:</h3>";
echo "Name: <strong>$name</strong><br>";
echo "Rating: <strong>$rating</strong><br>";
echo "Comment: <strong>$comment</strong><br><br>";
echo "<h4>Client & Server Info</h4>";
echo "Client IP: " . $_SERVER['REMOTE_ADDR'] . "<br>";
echo "Browser & OS: " . $_SERVER['HTTP_USER_AGENT'] . "<br>";
echo "Server Name: " . $_SERVER['SERVER_NAME'] . "<br>";
}

?>

</body>
</html>

```

Output:

Dynamic Menu Page

[Home](#) | [About](#) | [Contact](#)

Welcome to the Home Page

This is the home section.

Feedback Form

Name:

Rating (1–5):

Comment:

3. Build a PHP script that shows:

- o The client's IP address (`$_SERVER['REMOTE_ADDR']`)
- o The browser and OS (`$_SERVER['HTTP_USER_AGENT']`)
- o The server name (`$_SERVER['SERVER_NAME']`)

Source Code:

```
<?php

$clientIp = $_SERVER['REMOTE_ADDR'];

$userAgent = $_SERVER['HTTP_USER_AGENT'];

$serverName = $_SERVER['SERVER_NAME'];

$protocol = isset($_SERVER['HTTPS']) && $_SERVER['HTTPS'] === 'on' ? 'https' : 'http';

$serverUrl = $protocol . '://' . $serverName;

?>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Server and Client Environment Info</title>

</head>

<body>

    <h1>Environment Diagnostics</h1>

    <p>

        This page displays essential information about the client accessing this page and the server hosting it.

    </p>

    <hr>

    <h2>Client Information</h2>
```

```

<p>
    <strong>Client IP Address:</strong><br>
    <?php echo htmlspecialchars($clientIp); ?>
</p>

<p>
    <strong>Browser and OS (User Agent):</strong><br>
    <?php echo htmlspecialchars($userAgent); ?>
</p>

<hr>

<h2>Server Information</h2>

<p>
    <strong>Server Name:</strong><br>
    <?php echo htmlspecialchars($serverName); ?>
</p>

<div style="margin-top: 15px;">
    <p>Accessing this page via: <a href="<?php echo htmlspecialchars($serverUrl); ?>"><?php echo htmlspecialchars($serverUrl); ?></a></p>
</div>
</body>
</html>

```

Output:

Environment Diagnostics

This page displays essential information about the client accessing this page and the server hosting it.

Client Information

Client IP Address:
::1

Browser and OS (User Agent):
Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/142.0.0.0 Safari/537.36

Server Information

Server Name:
localhost

Accessing this page via: <http://localhost>

4. Design a pizza order form that remembers the user's choices (preserve input) after form submission.

Inputs:

- **Size (radio): Small, Medium, Large**
- **Toppings (checkboxes): Cheese, Mushroom, Onion, Olive**
- **Crust Type (dropdown): Thin, Regular, Thick**

```
<?php

$errors = [];

$size = "";
$crust = "";
$toppings = [];
$submitted = false;

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

    $submitted = true;

    // Retrieve inputs
    $size = $_POST["size"] ?? "";
    $crust = $_POST["crust"] ?? "";
    $toppings = $_POST["toppings"] ?? [];

    // Validation
    if (empty($size)) {
        $errors['size'] = "Please select a pizza size.";
    }

    if (empty($toppings)) {
        $errors['toppings'] = "Please select at least one topping.";
```

```
}

}

?>

<!DOCTYPE html>

<html>

<head>

<title>Pizza Order</title>

<style>

.error { color: red; }

body { font-family: Arial; margin: 20px; }

</style>

</head>

<body>

<h2>Pizza Order Form</h2>

<form method="POST">

<h3>Select Size:</h3>

<label>

<input type="radio" name="size" value="Small" <?= ($size == "Small") ? "checked" : "" ?>> Small

</label><br>

<label>

<input type="radio" name="size" value="Medium" <?= ($size == "Medium") ? "checked" : "" ?>> Medium

</label><br>

<label>

<input type="radio" name="size" value="Large" <?= ($size == "Large") ? "checked" : "" ?>> Large
```

```

</label><br>

<span class="error"><?= $errors['size'] ?? " "?></span>

<h3>Select Toppings:</h3>

<label>

    <input type="checkbox" name="toppings[]" value="Cheese"
        <?= in_array("Cheese", $toppings) ? "checked" : "" ?>> Cheese

</label><br>

<label>

    <input type="checkbox" name="toppings[]" value="Mushroom"
        <?= in_array("Mushroom", $toppings) ? "checked" : "" ?>> Mushroom

</label><br>

<label>

    <input type="checkbox" name="toppings[]" value="Onion"
        <?= in_array("Onion", $toppings) ? "checked" : "" ?>> Onion

</label><br>

<label>

    <input type="checkbox" name="toppings[]" value="Olive"
        <?= in_array("Olive", $toppings) ? "checked" : "" ?>> Olive

</label><br>

<span class="error"><?= $errors['toppings'] ?? " "?></span>

<h3>Select Crust Type:</h3>

<select name="crust">

    <option value="">-- Select Crust --</option>
    <option value="Thin" <?= ($crust == "Thin") ? "selected" : "" ?>>Thin</option>
    <option value="Regular" <?= ($crust == "Regular") ? "selected" : "" ?>>Regular</option>

```

```

<option value="Thick" <?= ($crust == "Thick") ? "selected" : "" ?>>Thick</option>
</select><br><br>

<button type="submit">Order Pizza</button>
</form>

<?php if ($submitted && empty($errors)): ?>
<h3>Your Order Summary</h3>
<p><strong>Size:</strong> <?= $size ?></p>
<p><strong>Crust:</strong> <?= $crust ?></p>
<p><strong>Toppings:</strong> <?= implode(", ", $toppings) ?></p>
<?php endif; ?>

</body>
</html>

```

Output:

Pizza Order Form

Select Size:

- Small
- Medium
- Large

Select Toppings:

- Cheese
- Mushroom
- Onion
- Olive

Select Crust Type:

Regular ▾

[Order Pizza](#)

Your Order Summary

Size: Small

Crust: Regular

Toppings: Cheese, Olive

5. Create a Secure Registration Form File: register.php

Requirements:

Form Fields:

Full Name (text), Username (text), Email (email), Password (password), Confirm Password (password), Age (number), Submit button

```
<?php

// Initialize variables to store form data and errors

$fullName = $username = $email = $age = "";
$errors = array();

// Function to sanitize user input

function sanitize_input($data) {

    $data = trim($data);

    $data = stripslashes($data);

    $data = htmlspecialchars($data);

    return $data;

}

// Process the form submission

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

    // --- 1. Sanitize and Validate Full Name ---

    $fullName = sanitize_input($_POST['fullName']);

    if (empty($fullName)) {

        $errors['fullName'] = "Full Name is required.';

    } elseif (strlen($fullName) < 3) {

        $errors['fullName'] = "Full Name must be at least 3 characters.';

    } elseif (!preg_match("/^([a-zA-Z ]*)$/", $fullName)) {
```

```

$errors['fullName'] = "Only letters and spaces allowed in Full Name.";

}

// --- 2. Sanitize and Validate Username ---

$username = sanitize_input($_POST['username']);

$usernamePattern = '/^([a-zA-Z0-9_]{5,15})$/';

if (empty($username)) {

    $errors['username'] = "Username is required./";

} elseif (!preg_match($usernamePattern, $username)) {

    $errors['username'] = "Username must be 5-15 characters and contain only alphanumeric characters or underscore./";

}

// --- 3. Sanitize and Validate Email ---

$email = sanitize_input($_POST['email']);

if (empty($email)) {

    $errors['email'] = "Email is required./";

} elseif (!filter_var($email, FILTER_VALIDATE_EMAIL)) {

    $errors['email'] = "Invalid email format./";

} elseif (strpos($email, ' ') !== false) {

    $errors['email'] = "Email must not contain spaces./";

}

// --- 4. Validate Password ---

$password = $_POST['password'];

$confirmPassword = $_POST['confirmPassword'];

$passwordPattern = '/^(?=.*[a-z])(?=.*[A-Z])(?=.*\d).{8,}$/';

```

```
if (empty($password)) {
    $errors['password'] = "Password is required.";
} elseif (!preg_match($passwordPattern, $password)) {
    $errors['password'] = "Password must be min 8 characters and contain at least one uppercase, one lowercase, and one number.";
}

// --- 5. Validate Confirm Password ---
if (empty($confirmPassword)) {
    $errors['confirmPassword'] = "Confirm Password is required.";
} elseif ($password !== $confirmPassword) {
    $errors['confirmPassword'] = "Passwords do not match.";
}

// --- 6. Sanitize and Validate Age ---
$age = sanitize_input($_POST['age']);
if (empty($age)) {
    $errors['age'] = "Age is required.";
} elseif (!is_numeric($age)) {
    $errors['age'] = "Age must be a number.";
} elseif ($age < 18 || $age > 100) {
    $errors['age'] = "Age must be between 18 and 100.";
}

// --- 7. If no errors, process the registration ---
if (empty($errors)) {
    // IMPORTANT: In a real-world scenario, you MUST hash the password before storing it.
    // Example: $hashed_password = password_hash($password, PASSWORD_DEFAULT);
```

```
// This is where database insertion logic would go using prepared statements.

// For demonstration purposes:
echo "Registration Successful!";

// Clear variables after success
$fullName = $username = $email = $age = "";

} else {
    echo "Validation Errors Found";
}

?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>User Registration</title>
    <style>
        .error { color: red; font-size: 0.9em; margin-top: 5px; }
        .form-group { margin-bottom: 15px; }
        label { display: block; font-weight: bold; }

    </style>
</head>
```

```
<body>

    <h1>User Registration</h1>

    <form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>">

        <div class="form-group">
            <label for="fullName">Full Name</label>
            <input type="text" id="fullName" name="fullName" value="<?php echo
                htmlspecialchars($fullName); ?>" required>
            <?php if (isset($errors['fullName'])) echo '<div class="error">' . $errors['fullName'] . '</div>; ?>
        </div>

        <div class="form-group">
            <label for="username">Username</label>
            <input type="text" id="username" name="username" value="<?php echo
                htmlspecialchars($username); ?>" required>
            <?php if (isset($errors['username'])) echo '<div class="error">' . $errors['username'] .
                '</div>; ?>
        </div>

        <div class="form-group">
            <label for="email">Email</label>
            <input type="email" id="email" name="email" value="<?php echo
                htmlspecialchars($email); ?>" required>
            <?php if (isset($errors['email'])) echo '<div class="error">' . $errors['email'] . '</div>; ?>
        </div>

        <div class="form-group">
```

```
<label for="password">Password</label>
<input type="password" id="password" name="password" required>
<small>Min 8 characters, must contain at least one uppercase, one lowercase, and one number.</small>
<?php if (isset($errors['password'])) echo '<div class="error">' . $errors['password'] .
'</div>'; ?>
</div>

<div class="form-group">
<label for="confirmPassword">Confirm Password</label>
<input type="password" id="confirmPassword" name="confirmPassword" required>
<?php if (isset($errors['confirmPassword'])) echo '<div class="error">' .
$errors['confirmPassword'] . '</div>'; ?>
</div>

<div class="form-group">
<label for="age">Age</label>
<input type="number" id="age" name="age" value="<?php echo htmlspecialchars($age); ?>" min="18" max="100" required>
<?php if (isset($errors['age'])) echo '<div class="error">' . $errors['age'] . '</div>'; ?>
</div>

<div class="form-group">
<input type="submit" value="Register">
</div>

</form>
</body>
```

</html>

Registration Successful!

User Registration

Full Name

Username

Email

Password

Min 8 characters, must contain at least one uppercase, one lowercase, and one number.

Confirm Password

Age

Register

6. Create a Simple Profile Picture Upload System

File: profile_upload.php

Requirements: Create a self-processing form with:

Form Fields: User Name (text input), Profile Picture (file input), Upload button

Validation Rules: Name is required (minimum 3 characters), File is required, Only image files allowed: JPG, JPEG, PNG, GIF, Maximum file size: 2MB, Check file upload error code

Processing: If validation passes:

- Create "uploads" folder if it doesn't exist
- Save file with original name
- Display success message
- Show the uploaded image (width: 200px)
- Display file information (name, size, type)

```
<?php

// Initialize variables

$errors = [];

$success = false;

$uploadedFilePath = "";

$info = [];

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

    // -----
    // 1. Validate User Name
    // -----
    $name = trim($_POST['username']);

    if (empty($name)) {
        $errors[] = "Name is required";
    }
}
```

```
} elseif (strlen($name) < 3) {

    $errors[] = "Name must be at least 3 characters long";

}

// -----
// 2. Validate File Upload
// -----

if (!isset($_FILES['profile_pic']) || $_FILES['profile_pic']['error'] == UPLOAD_ERR_NO_FILE) {

    $errors[] = "Profile picture is required";

} else {

    $file = $_FILES['profile_pic'];

    // Check upload errors

    if ($file['error'] != UPLOAD_ERR_OK) {

        $errors[] = "File upload error code: " . $file['error'];

    } else {

        $fileName = $file['name'];
        $fileTmp = $file['tmp_name'];
        $fileSize = $file['size'];
        $fileType = mime_content_type($fileTmp);

        // Allowed file types

        $allowedTypes = ['image/jpeg', 'image/jpg', 'image/png', 'image/gif'];

        if (!in_array($fileType, $allowedTypes)) {

            $errors[] = "Invalid file type. Only JPG, PNG, GIF allowed";

        }

    }

}
```

```
// Check file size - max 2MB

if ($fileSize > 2 * 1024 * 1024) {
    $errors[] = "File size exceeds 2MB limit";
}

}

// -----
// 3. If No Errors → Process Upload
// -----
if (empty($errors)) {

    // Create uploads folder if needed
    if (!is_dir("uploads")) {
        mkdir("uploads", 0777, true);
    }

    // Save file with original name
    $uploadedFilePath = "uploads/" . basename($fileName);

    if (move_uploaded_file($fileTmp, $uploadedFilePath)) {
        $success = true;
    }

    // Prepare file info
    $fileInfo = [
        "name" => $fileName,
```

```
"size" => round($fileSize / 1024 / 1024, 2) . " MB",
"type" => $fileType,
"location" => $uploadedFilePath
];
} else {
$errors[] = "Failed to save uploaded file.";
}
}
?
?>
```

```
<!DOCTYPE html>
<html>
<head>
<title>Profile Picture Upload</title>
</head>
<body>

<h2>Upload Profile Picture</h2>

<form action="" method="post" enctype="multipart/form-data">
<label>User Name:</label><br>
<input type="text" name="username" value=""><br><br>

<label>Profile Picture:</label><br>
<input type="file" name="profile_pic"><br><br>
```

```
<button type="submit">Upload</button>
</form>

<hr>

<?php if (!empty($errors)): ?>
<h3>Upload Errors:</h3>
<ul style="color:red;">
<?php foreach ($errors as $e): ?>
<li><?= $e ?></li>
<?php endforeach; ?>
</ul>
<?php endif; ?>

<?php if ($success): ?>
<h2 style="color:green;">Profile Picture Uploaded Successfully!</h2>
<p><strong>User Name:</strong> <?= htmlspecialchars($name) ?></p>

<h3>File Information:</h3>
<ul>
<li><strong>File Name:</strong> <?= $fileInfo['name'] ?></li>
<li><strong>File Size:</strong> <?= $fileInfo['size'] ?></li>
<li><strong>File Type:</strong> <?= $fileInfo['type'] ?></li>
<li><strong>Saved Location:</strong> <?= $fileInfo['location'] ?></li>
</ul>

<p></p>
```

```
<?php endif; ?>
```

```
</body>
```

```
</html>
```

Upload Profile Picture

User Name:

Profile Picture:

No file chosen

Profile Picture Uploaded Successfully!

User Name: lumi

File Information:

- **File Name:** Screenshot 2025-11-03 012745.png
- **File Size:** 0.16 MB
- **File Type:** image/png
- **Saved Location:** uploads/Screenshot 2025-11-03 012745.png

