GANPAT UNIVERSITY U.V. PATEL COLLEGE OF ENGINEERING

B.Tech 6th Semester CE/IT 2CEIT6PE1: Web Technology

Practical-6

Aim: Perform following programs of PHP file handling. Exercise-1:

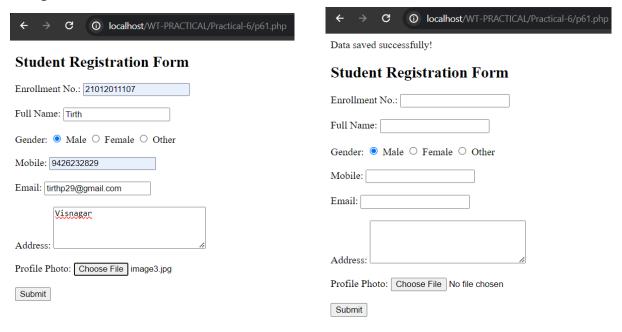
Write a PHP program to create a student registration form with validation for fields including Enrollment No., Full Name, Gender, Mobile, Email, Address, and Profile Photo. Implement validation for Full Name, Mobile, Email, and Profile Photo inputs. Store all submitted data in a CSV file.

Code:

```
<?php
function validateFullName($name) {
  return preg match("/^[a-zA-Z]*$/", $name);
function validateMobile($mobile) {
  return preg match("/^\d{10}$/", $mobile);
function validateEmail($email) {
  return filter var($email, FILTER VALIDATE EMAIL);
function validateProfilePhoto($file) {
  $allowedExtensions = array("jpg", "jpeg", "png", "gif");
  $fileExtension = strtolower(pathinfo($file['name'], PATHINFO EXTENSION));
  return in array($fileExtension, $allowedExtensions) && getimagesize($file['tmp name']);
function saveToCSV($data) {
  $file = fopen("students.csv", "a");
  fputcsv($file, $data);
  fclose($file);
if ($ SERVER["REQUEST METHOD"] == "POST") {
  errors = []:
  $enrollmentNo = $ POST['enrollmentNo'];
  $fullName = $ POST['fullName'];
  $gender = $ POST['gender'];
  $mobile = $ POST['mobile'];
  $email = $ POST['email'];
  $address = $ POST['address'];
  $profilePhoto = $ FILES['profilePhoto'];
```

```
if (!validateFullName($fullName)) {
    $errors[] = "Invalid full name";
  if (!validateMobile($mobile)) {
    $errors[] = "Invalid mobile number";
  if (!validateEmail($email)) {
    $errors[] = "Invalid email address";
  if (!validateProfilePhoto($profilePhoto)) {
    \[ \$\ext{errors}[] = \[ \text{Invalid profile photo. Please upload a valid image file (jpg, jpeg, png, gif)";} \]
  if (empty($errors)) {
    $data = array($enrollmentNo, $fullName, $gender, $mobile, $email, $address);
    saveToCSV($data);
    echo "Data saved successfully!";
  } else {
    foreach ($errors as $error) {
      echo $error . "<br>";
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Student Registration Form</title>
</head>
<body>
  <h2>Student Registration Form</h2>
  <form method="post" enctype="multipart/form-data">
    Full Name: <input type="text" name="fullName" required><br><br>
    Gender: <input type="radio" name="gender" value="male" checked> Male
        <input type="radio" name="gender" value="female"> Female
        <input type="radio" name="gender" value="other"> Other<br><br>
    Mobile: <input type="text" name="mobile" required><br><br>
    Address: <textarea name="address" rows="4" cols="30"></textarea><br><br>
    Profile Photo: <input type="file" name="profilePhoto" accept="image/*"
required><br><br>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Output:



Exercise-2:

Create a form with a file input field to allow users to upload files.Implement server-side PHP code to handle the uploaded file:

- a. Validate the file type and size to prevent malicious uploads and ensure server resource management.
- b. Move the uploaded file to a secure location on the server.
- c. Provide feedback to the user on the success or failure of the upload process.

Code:

```
<?php
function generateUniqueFileName($originalName, $uploadDirectory) {
    $extension = pathinfo($originalName, PATHINFO_EXTENSION);
    $basename = basename($originalName, '.' . $extension);
    $basename = preg_replace('/[^a-zA-Z0-9]/', '_', $basename);
    $basename = preg_replace('/_{2,}/', '_', $basename);
    $basename = trim($basename, "_");
    $uniqueName = $basename . '_' . uniqid() . '.' . $extension;
    $filePath = $uploadDirectory . '/' . $uniqueName;
    return $filePath;}</pre>
```

```
function validateFile($file) {
  $allowedTypes = array('jpg', 'jpeg', 'png', 'gif');
  \text{smaxFileSize} = 5 * 1024 * 1024; // 5MB
  $\fileExtension = \text{strtolower(pathinfo(\file['name'], PATHINFO EXTENSION))};}
  $fileSize = $file['size'];
  if (!in array($fileExtension, $allowedTypes)) {
    return "Invalid file type. Allowed types: jpg, jpeg, png, gif";
  if ($fileSize > $maxFileSize) {
    return "File size exceeds the maximum limit of 5MB";
  return true;
if ($ SERVER["REQUEST METHOD"] == "POST") {
  if (isset($ FILES['file']) && $ FILES['file']['error'] === UPLOAD ERR OK) {
     $uploadDirectory = 'uploads';
    $filePath = generateUniqueFileName($ FILES['file']['name'], $uploadDirectory);
    $validationResult = validateFile($ FILES['file']);
    if ($validationResult === true) {
       if (!file exists($uploadDirectory)) {
         mkdir($uploadDirectory, 0777, true);
       if (move uploaded file($ FILES['file']['tmp name'], $filePath)) {
         echo "File uploaded successfully.";
       } else {
         echo "Error occurred while uploading the file.";
     } else {
       echo $validationResult;
  } else {
    echo "Error occurred during file upload.";
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>File Upload</title>
</head>
<body>
  <h2>Upload a File</h2>
  <form method="post" enctype="multipart/form-data">
    Select file: <input type="file" name="file" required><br><br>
     <input type="submit" value="Upload">
  </form>
</body>
</html>
```

Output:



Exercise-3:

Develop functionality to manage uploaded files:

a. List uploaded files with options for viewing, downloading, or deleting them.

Code:

```
<?php
function listUploadedFiles($uploadDirectory) {
  files = [];
  if (is dir($uploadDirectory)) {
     if ($handle = opendir($uploadDirectory)) {
       while (($file = readdir($handle)) !== false) {
          if ($file != "." && $file != "..") {
            files[] = file;
       closedir($handle);
  return $files;
function deleteFile($fileName, $uploadDirectory) {
  $filePath = $uploadDirectory . '/' . $fileName;
  if (file exists($filePath)) {
     if (unlink($filePath)) {
       return true;
     } else {
       return false;
  } else {
     return false;
if ($_SERVER["REQUEST_METHOD"] == "POST" && isset($_POST['delete']) &&
isset($ POST['filename'])) {
  $fileName = $ POST['filename'];
  $uploadDirectory = 'uploads';
  if (deleteFile($fileName, $uploadDirectory)) {
     echo "File '$fileName' deleted successfully.";
```

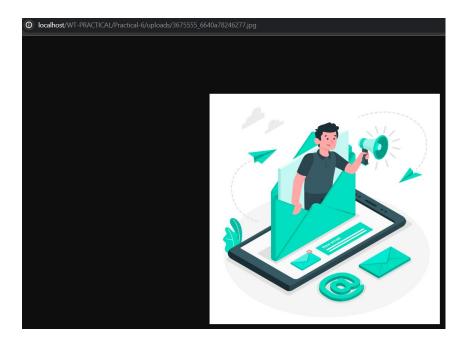
```
} else {
    echo "Failed to delete file '$fileName'.";
$uploadDirectory = 'uploads';
$files = listUploadedFiles($uploadDirectory);
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Manage Uploaded Files</title>
</head>
<body>
  <h2>Uploaded Files</h2>
  <?php if (count($files) > 0): ?>
    <u1>
       <?php foreach ($files as $file): ?>
         <|i>
           <?php echo $file; ?>
           [<a href="<?php echo $uploadDirectory . '/' . urlencode($file); ?>"
target=" blank">View</a>|
           <a href="<?php echo $uploadDirectory . '/' . urlencode($file); ?>"
download>Download</a> |
           <form method="post" style="display:inline;">
              <input type="hidden" name="filename" value="<?php echo $file; ?>">
              <input type="submit" name="delete" value="Delete" onclick="return
confirm('Are you sure you want to delete this file?')">
            </form>]
         <?php endforeach; ?>
    <?php else: ?>
    No files uploaded yet.
  <?php endif; ?>
</body>
</html>
```

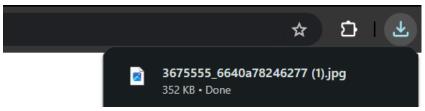
Output:

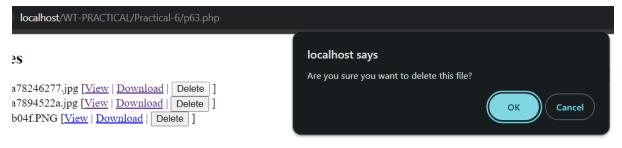


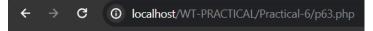
Uploaded Files

```
    3675555_6640a78246277.jpg [<u>View | Download | Delete | ]</u>
    4957139_6640a7894522a.jpg [<u>View | Download | Delete | ]</u>
    C1 6640ae158b04f.PNG [<u>View | Download | Delete | ]</u>
```









File '3675555_6640a78246277.jpg' deleted successfully.

Uploaded Files

- 4957139_6640a7894522a.jpg [<u>View | Download | Delete]</u>
- C1_6640ae158b04f.PNG [View | Download | Delete]