

# 08

CHAPTER

## Forms and Files



### LEARNING OBJECTIVES

- To understand the importance of HTML Form in Web Application
- To know the File handling technique in PHP
- To know the Basics of Web based file management system

### 8.1 HTML Forms

Main objective of PHP and HTML form controls are to collect data from users. In the web development, user access website or web pages from remote client machine and feed the data to server. These data are collected via HTML form controls like textbox, dropdown box and radio button etc., and sent to server using server side programming like PHP.

### Basic HTML Form Controls

The following control are available in HTML forms:

- Text inputs
- Buttons
- Checkbox
- Radio box
- File Select
- Form Tag

Text inputs contain textbox and text area controls. Buttons may contain Submit button, Reset button and Cancel Button. Checkbox is a important feature which

Pizza Shop 2.0	
Name	<input type="text"/>
Pizza Topping	<input type="radio"/> Supreme <input type="radio"/> Vegetarian <input type="radio"/> Hawaiian
Pizza Sauce	<input type="text" value="Tomato"/>
Optional Extras	<input type="checkbox"/> Extra Cheese <input type="checkbox"/> Gluten Free Base
Delivery Instructions:	
<input type="text"/>	
<input type="button" value="Send my order"/>	

Figure 8.1 Example of HTML form Page



selects more than one value from the HTML form. Radio box is similar to checkbox but one value can be chosen at a time. File select is the best feature to select one file from the local machine to server machine at a time. Form tag is used to mention a method (POST or GET) and control the entire form controls in the HTML document. Refer Figure 8.1 and 8.2

### 8.1.1 PHP Basic Form Handling

When the user keys in the input data in HTML controls and clicks the submit button the request will be generated and reaches a PHP file which is mentioned in the FORM tag under the Action attribute. All the input values are synchronized and sent to the server via POST method or GET method. Method is an attribute of form tag in HTML. Once the data reaches the server, two PHP variables such as `$_POST` and `$_GET` collects the data and prepares the response accordingly.

**Post Method:** The input data sent to the server with POST method is stored in the request body of the client's HTTP request.

**Get Method:** The input data sent to the server with POST method via URL address is known as query string. All input data are visible by user after they click the submit button.

**Example:**

**Test.html:**

```
<html>
<body>

<form action="welcome.php" method="post">

Name: <input type="text" name="name"><br>
E-mail: <input type="text" name="email"><br>
<input type="submit">
</form>
```

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

**Welcome.php:**

```
<html>
<body>
Welcome <?php echo $_POST["name"]; ?><br>
Your email address is: <?php echo $_POST["email"]; ?>
</body>
</html>
```



**Output**

Name:

E-mail:

Output

Welcome sethuraman

Your email address is: srssethuraman@gamil.com

**Figure 8.2 Login module**

- In the above example the HTML File contains two Text Box (Name and Email), One Button and one form tag. The remote server PHP file (welcome.php) is mentioned in form tag under the Action Attribute.
- In “Welcome.Php” file, PHP variables such as \$\_POST and \$\_GET collects the data and prepares the response accordingly.
- Eventually the user will receive the output response in the client machine’s browser screen.

### 8.1.2 Basic PHP Form Validation

Validation is a process of checking the input data submitted by the user from client machine. There are two types of



validation available in PHP. They are as follows,

**Client-Side Validation:** The input data validations are performed on the client machine’s web browsers using client side scripts like Java script or adding “required” attribute in HTML input tags.

**Server Side Validation:** After the submission of data, validations are performed on the server side using the programming like PHP, ASP or JSP etc. available in the server machine.



A HTML form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed data based on defined business logic inside the application.

#### Validation rules for HTML input field

Name (Text Input)	:	Must contain letters and white-spaces
Email (Text Input)	:	Must contain @ and .strings
Website (Text Input)	:	Must contain a valid URL
Radio	:	Must be selectable minimum one value
Check Box	:	Must be checkable minimum one value
Drop Down menu	:	Must be selectable minimum one value



### Client Side Validation:

Before sending the data to server side program (PHP) the programmer can write few validations from browser in the client machine. For this validation, we have to add additional “required” attribute in HTML input tag. Refer Figure 8.3.

#### Example:

```
<input> required Attribute in HTML
<form action="welcome.php">
  Username: <input type="text"
name="name" required>
  <input type="submit">
</form>
```

Figure 8.3 Client Validation

## 8.2 Files

File handling is an important activity of all web application development process. Files are processed for different tasks using the following events:

- PHP Open a File,
- PHP Read a File,
- PHP Close a File,
- PHP Write a File,
- PHP Appending a File and
- PHP uploading a File.

### PHP Open a File

fopen() is a system function available in PHP. This function helps to open a file in the server. It contains two parameters one for the file and the other one specifies in which mode the file should be opened (Read/Write).

#### Syntax:

```
$file_Object= fopen("FileName", "Read/WriteMode") or die("Error Message!");
```

#### Example:

```
<?php
$myfile = fopen("Student.txt", "r") or die("Unable to open file!");
?>
```

### PHP Read a File:

The fread() function reads from an open file. The file object comes from fopen function.

#### Syntax:

```
fread($file_Object,filesize("FileName"));
```

**Example:**

```
<?php
fread($myfile,filesize("Student.txt"));
?>
```

**PHP Close a File:**

The fclose() function is used to close an opened file. The file object comes from fopen function.

**Syntax:**

```
fclose($file_Object);
```

**Example:**

```
<?php
$myfile = fopen("student.txt", "r");
// some code to be executed....
```

```
fclose($myfile);
?>
```

**PHP write a File:**

The fwrite() function is used to write to a file.

**Syntax:**

```
fwrite($myfile, $txt);
```

**POINTS TO REMEMBER**

- Form Attribute action Backend script ready to process your passed data.
- Method to be used to upload data. The most frequently used are GET and POST methods.
- Target Specify the target window or frame where the result of the script will be displayed. It takes values like \_blank, \_self, \_parent etc.
- You can use the enctype attribute to specify how the browser encodes the data before it sends it to the server.

A-Z  
**GLOSSARY**

<b>HTML</b>	Hypertext Markup Language is the standard markup language for creating web pages and web applications.
<b>FORM Validation</b>	Validation of HTML form data is important to protect your form from hackers and spammers!
<b>Files handling</b>	File handling is an important part of any web application. You often need to open and process a file for different tasks.
<b>File upload</b>	A PHP script can be used with a HTML form to allow users to upload files to the server.



Where? Write When? How? Explain Where? What? When? How? What? Write When? When?

## EVALUATION



### Part - I

#### Choose the correct answer

- When you use the \$\_GET variable to collect data, the data is visible to..  
a) none  
b) only user  
c) everyone  
d) selected few
- \_\_\_\_\_ method stores the input data in the request body of the clients HTTP request.  
a) POST  
b) GET  
c) form  
d) HTML
- In which input field only one option can be selected??  
a) Text box  
b) Check box  
c) radio button  
d) Drop Down Menu
- In HTML form <input type="text"> is used to  
a) process text  
b) input text  
c) Validate text  
d) Output text
- Which attribute of form tag helps in client side validation?  
a) Submit  
b) Check  
c) Validate  
d) Required
- The no. of parameters used by fclose() function.  
a) 1  
b) 2  
c) 3  
d) 4
- PHP is a \_\_\_\_\_ programming language.  
a) Client side  
b) Server side  
c) Object side  
d) file side
- What does fopen() function do in PHP?  
a) It used to open files in PHP  
b) It used to open Remote Server  
c) It used to open folders in PHP  
d) It used to open Remote Computer
- How PHP files can be accessed?  
a) Through Web Browser  
b) Through HTML files  
c) Through Web Server  
d) All of Above
- Identify which is not a server side application language  
a) PHP  
b) HTML  
c) ASP  
d) JSP

### Part - II

#### Short Answers

- Define HTML form controls.
- Define for Form Handling method in PHP.





3. What is Form Validation in PHP?
4. List out HTML control to support PHP language.
5. Write Syntax of Text box in HTML.
6. Define File handling in PHP.
7. What is a HTML form?
8. Write any Two rules for input HTML.
9. Differentiate check box and .
10. Write syntax of File open function.

### Part - III

#### Explain in Brief Answer

1. Write the features Form Handling.
2. Write the purpose Get method and Post method.
3. Differentiate Get and Post Method.

4. Write short notes on File handling.
5. Write short notes on File handling functions.

### Part - IV

#### Explain in detail

1. Explain Form Handling methods.
2. Discuss in detail about HTML form controls.
3. Explain the process File handling.
4. Explain concepts of HTTP Uploading process.
5. Explain in detail of File handling functions .



#### STUDENT ACTIVITY

- Create simple student Login Form to validate username and password using java script (client side validation)
- Create simple student registration form to insert students details like Student Name, username and password etc. using java script (client side validation)