

## Input handling in PHP

In any programming language input means to feed some data into program. This can be given in the form of file or from command line. PHP programming language provides a set of built-in super global variables to read given input and feed it to the program as per requirement.

Several predefined variables in PHP are "Super-Global", which means they are available in all scopes throughout a script. Super-Global are associative arrays, which are array whose elements are referred to with an alphanumeric key instead of an index number. Super-Global are known as Auto-Global also.

### Some Common Super-Global Arrays/Variables:

Super-Global	Purpose
<code>\$_POST</code>	An Array of values from a form submitted with post method.
<code>\$_GET</code>	An Array of values from a form submitted with get method.
<code>\$_REQUEST</code>	An array of all elements in the <code>\$_GET</code> , <code>\$_POST</code> , <code>\$_COOKIE</code> and they are value send by URL.
<code>\$_FILES</code>	An Array information about upload files.
<code>\$_SERVER</code>	An Array of information about the Web server that served the current script.

### `$_POST [ ]` Super Global array

`$_POST` is widely used to collect form data after submitting an HTML form with method="post". `$_POST` is also widely used to pass variables to server or other page.

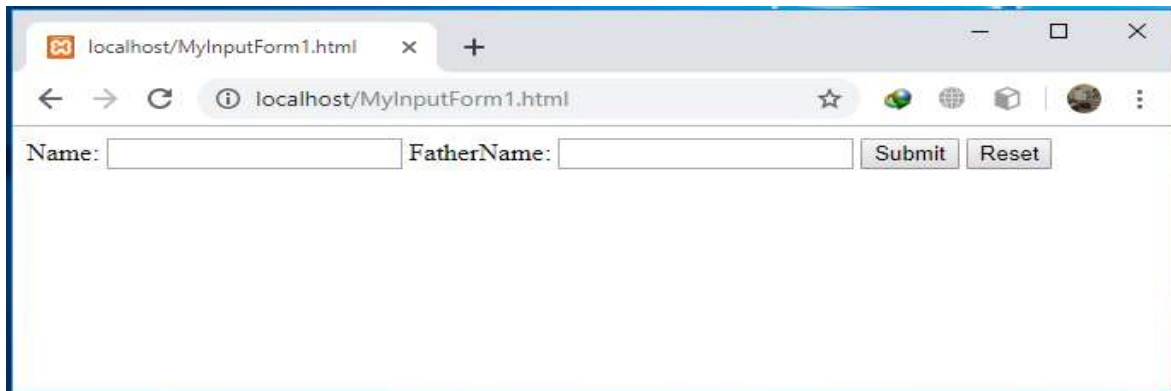
The example below shows a form file name is "MyInputForm1.html" with an input field and a submit button. When a user submits the data by clicking on "Submit", the form data is sent to the file specified in the action attribute of the <form> tag. In this example, we point to the file "SendData1.php" for processing form data. Then, we can use the super global variable `$_POST [ ]` to collect the value of the input field:

Create a new document file in your text editor. Type the below script and save the document MyInputForm1.html file in the **htdocs** folder.

**Example-1*****MyInputForm1.html***

```
<html>
<body>
    <form method="post" action="SendData1.php">
        Name: <input type="text" name="txtname">
        Father Name: <input type="text" name="txtfname">
        <input type="submit" > <input type="reset" >
    </form>
```

After the save file we open MyInputForm1.html in web browser by entering the URL: -  
<http://localhost/MyInputForm1.html>

**Retrieving Submitted Data by post method:**

After the user fills out field in the MyInputForm1.html Web form and click the submit button using the post method, the your fields name (txtname, txtfname and submit) that were assigned to the controls in the “MyInputForm1.html” form automatically become keys in the \$ POST[ ] auto-global array Also , the values the user enters in the Your name Father name input boxes (“Nadeem” and “Saleem”) in the following example and the value assigned to the submit button SendData1.php” become the values in the \$\_POST array that can be accessed by the processing script. Create a new document file in your text editor. Type the below script and save the document ***SendData1.php*** in the ***htdocs*** folder.

**<?php**

```
$name = $_POST['txtname'];
$fname = $_POST['txtfname'];
echo " <h1>My name is $name </h1> ";
echo "<h1> and Father name is $fname </h1>";
```

**?>**

Then open the MyInputForm1.html file in the Web browser by entering the following URL <http://localhost/MyInputForm1.html> and input the your name and father name and click the submit button then we will see output on the browser, bellow



### **`$_GET [ ]` Super-Global array**

`$_GET` is a super global variable used to collect data from the HTML form after submitting it. When form uses method get to transfer data, the data is visible in the query string, therefore the values are not hidden.

The example below shows a form file name is “MyInputForm2.html” with an input field and a submit button. When a user submits the data by clicking on “Submit”, the form data is sent to the file specified in the action attribute of the `<form>` tag. In this example, we point to the file “SendData2.php” for processing form data. Then, we can use the super global variable `$_GET [ ]` to collect the value of the input field:

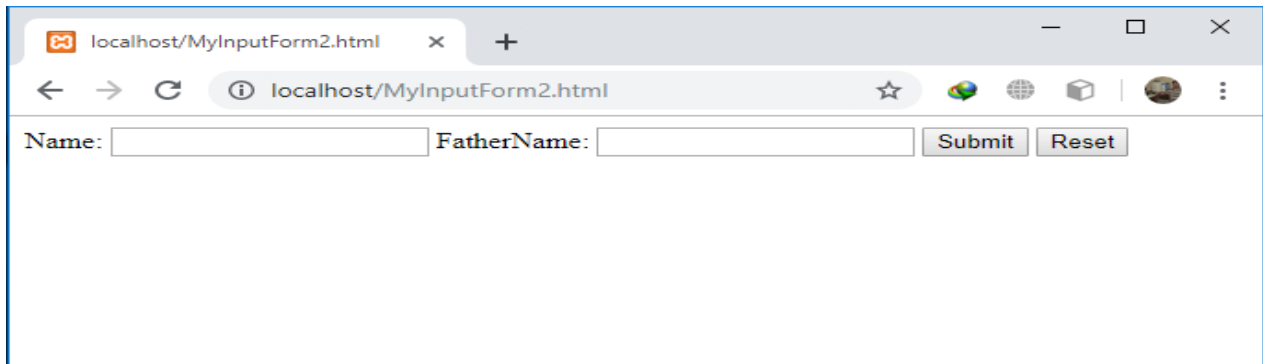
Create a new document file in your text editor. Type the below script and save the document MyInputForm2.html file in the **htdocs** folder.

#### **Example-2**

##### ***MyInputForm2.html***

```
<html>
<body>
  <form method="get" action="SendData2.php">
    Name: <input type="text" name="txtname">
    FatherName: <input type="text" name="txtfname">
    <input type="submit" > <input type="reset" >
  </form>
```

After the save file we open MyInputForm2.html in web browser by entering the URL: - <http://localhost/MyInputForm2.html> .



\$\_GET super global array variable stores the values that come and show in the URL.

### Retrieving Submitted Data by get method:

After the user fill out field in the MyInputForm2.html Web form and click the submit button using the post method, the your fields name (txtname, txtfname and submit) that were assigned to the controls in the "MyInputForm2.html" form automatically become keys in the \$GET[ ] autoglobal array Also , the values the user enters in the Your name Father name input boxes ("Mr. Asif Khan" and "Mr. Farhan Khan") in the following example and the value assigned to the submit button SendData2.php" become the values in the \$\_GET array that can be accessed by the processing script. Create a new document file in your text editor. Type the below script and save the document **SendData2.php** in the **htdocs** folder.

```
<?php
```

```
$name = $_GET['txtname'];
```

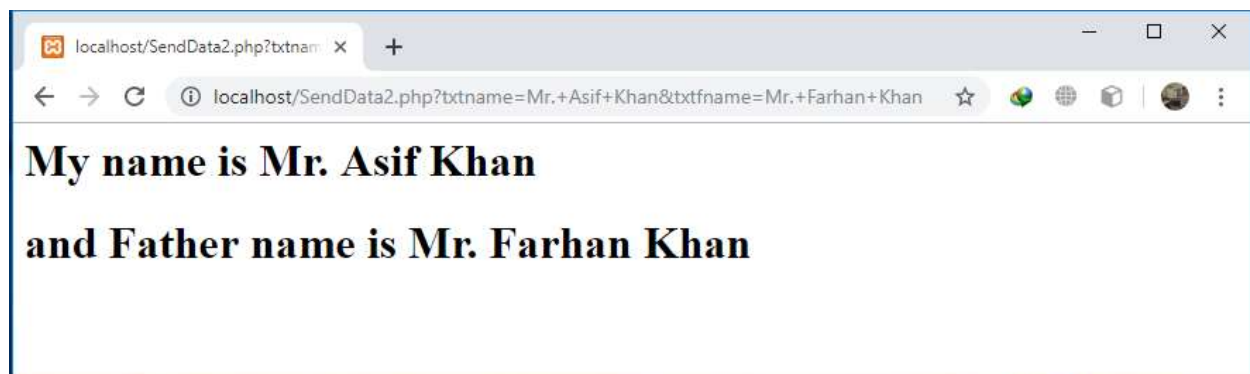
```
$fname = $_GET['txtfname'];
```

```
echo "<h1>My name is $name </h1> ";
```

```
echo "<h1> and Father name is $fname </h1>";
```

```
?>
```

Then open the MyInputForm2.html file in the Web browser by entering the following URL <http://localhost/MyInputForm2.html> and input the your name and father name and click the submit button then we will see output on the browser, bellow



\$\_GET super global array variable stores the values that come and show in the URL.

### Example-3

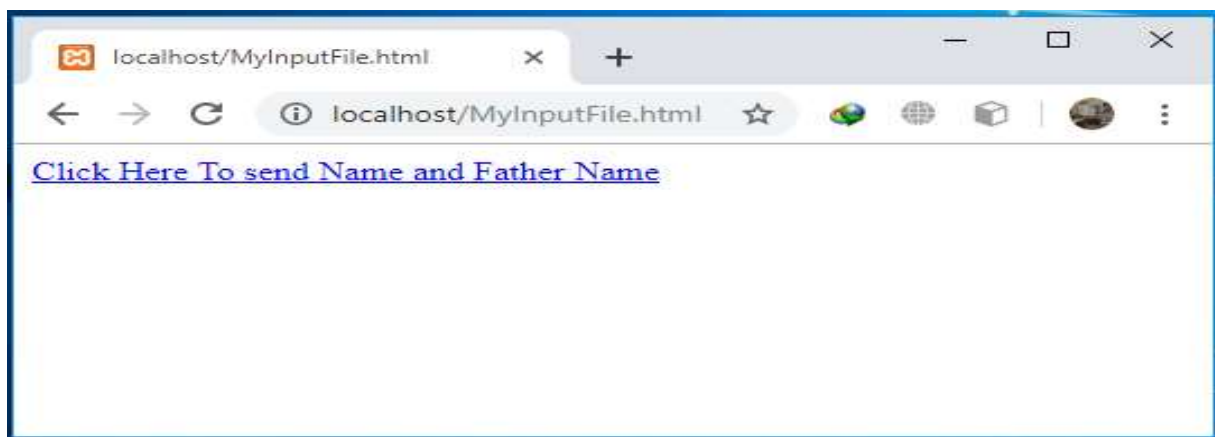
Create a new document file in your text editor. Type the below script and save the document MyInputFile.html file in the **htdocs** folder. Assume we have an HTML page that contains a hyperlink with parameters:

```
<html>
<body>
<a href="Second.php?name=Asif&fname=Farhan">Click Here To send Name and Father Name
</a>
</body>
</html>
```

Create a new document file in your text editor. Type the below script and save the document Second.php file in the **htdocs** folder.

```
<?php
$name = $_GET['name'];
$fname = $_GET['fname'];
echo "<h1>My name is $name </h1> ";
echo "<h1> and Father name is $fname </h1>";
?>
```

Then open the MyInputFile.html file in the Web browser by entering the following URL <http://localhost/MyInputfile.html> now we will see following output on the browser screen.



After Click then result show on the browser and that come and show in the URL see below.



**Note:** The limitation is about 2000 characters. However, because the variables are displayed in the URL, it is possible to bookmark the page. This can be useful in some cases. GET may be used for sending non-sensitive data.

### **`$_REQUEST [ ]` Super-Global array**

`$_REQUEST` is widely used to collect form data after submitting an HTML form with post and get method or Cookie and work same as `$_GET` and `$_POST`. It is also widely used to pass variables to server or other page.

### **`$_SERVER [ ]` Super Global array**

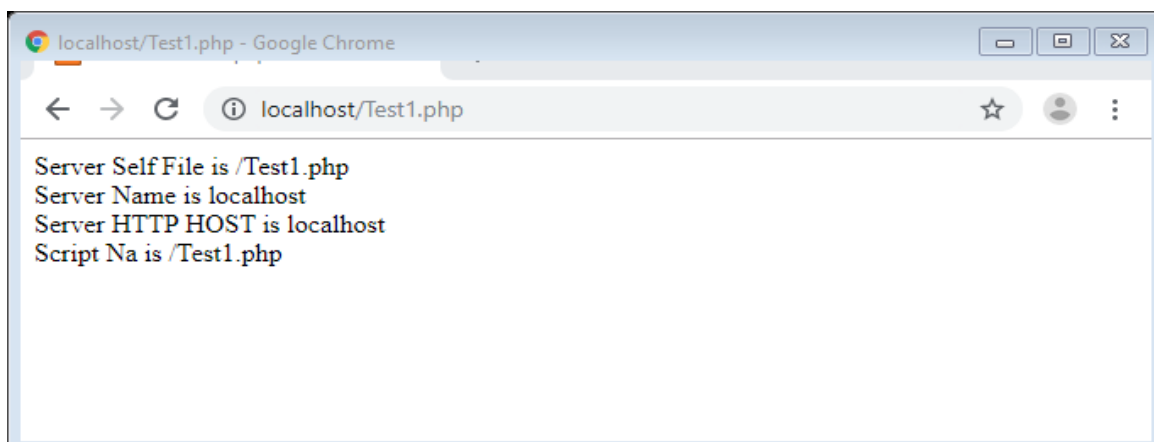
`$_SERVER` is a PHP super global variable which holds information about headers, paths, and script locations.

#### **Example-4**

`<?php`

```
echo "Server Self File is " . $_SERVER['PHP_SELF'] . "<br>";  
echo "Server Name is " . $_SERVER['SERVER_NAME'] . "<br>";  
echo "Server HTTP HOST is " . $_SERVER['HTTP_HOST'] . "<br>";  
echo "Script Na is " . $_SERVER['SCRIPT_NAME'] . "<br>";
```

`?>`



Element/Code	Description
<code>\$_SERVER['PHP_SELF']</code>	Returns the filename of the currently executing script
<code>\$_SERVER['SERVER_NAME']</code>	Returns the name of the host server (such as Apache )
<code>\$_SERVER['HTTP_HOST']</code>	Returns the Host header from the current request
<code>\$_SERVER['SCRIPT_NAME']</code>	Returns the file name of the current script

### Exercise

#### Theory Questions

1. Describe the Auto-Global or Super-Global.
2. Describe the limitations of using the get method to submit form data.
3. Which element of the \$\_SERVER auto-global is used to refer to the current script?
4. Which Auto-Global for use uploaded files and writes their element names.
5. What difference between get and post method when form submitted.

#### Practical Questions

1. Write a simple program of following using post method:

Enter Student Name:

Enter Student G.R #:

Enter Class:

Enter Section:

// Output should be display on new tab of browser.

2. Input your Gr.No and Course Name and then print using get and post method.
3. Write make a simple form where input your Gr No. and Name with submit and reset button after submit form display Gr No. and name to other web page.
4. You send Roll number and Name by using hyperlinks from one page to other page.
5. Write syntax of the **action** and **method** attributes in the opening <form> tag.

#### Objective MCQ's

1. Which of the following auto-global can you use to access submitted form values?
  - a) \$\_SERVER
  - b) \$\_REQUEST
  - c) \$\_POST
  - d) Nothing all
2. Which of the following separates the URL from the form data in a get request
  - a) ?
  - b) &
  - c) =
  - d) +
3. Which of the following separates multiple name/values pair from each other in a get request?
  - a) =
  - b) +
  - c) ?
  - d) &



4. What is the maximum length of a value in a get request?
  - a) 800
  - b) 512
  - c) 1000
  - d) 2000
  
5. Which auto-global ,Returns the filename of the currently executing script
  - a) \$\_SERVER['PHP\_SELF']
  - b) \$\_SERVER['SERVER\_NAME']
  - c) \$\_SERVER['HTTP\_HOST']
  - d) \$\_SERVER['SCRIPT\_NAME']
  
6. Which Auto-Global array get information about upload files.
  - a) \$\_GET
  - b) \$\_POST
  - c) \$\_FILES
  - d) \$\_SERVER