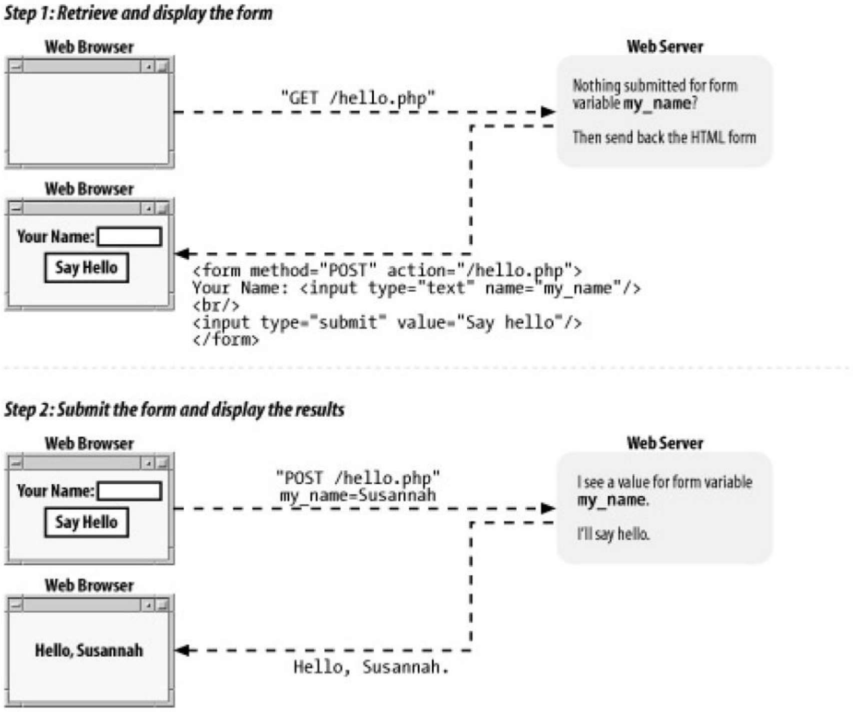
# Making Web Forms

Form processing is an essential component of almost any web application. Forms are how users communicate with your server: signing up for a new account, searching a forum for all the posts about a particular subject, retrieving a lost password, finding a nearby restaurant or shoemaker, or buying a book.

Using a form in a PHP program is a two-step activity. Step one is to display the form. This involves constructing HTML that has tags for the appropriate user interface elements in it, such as text boxes, checkboxes, and buttons.

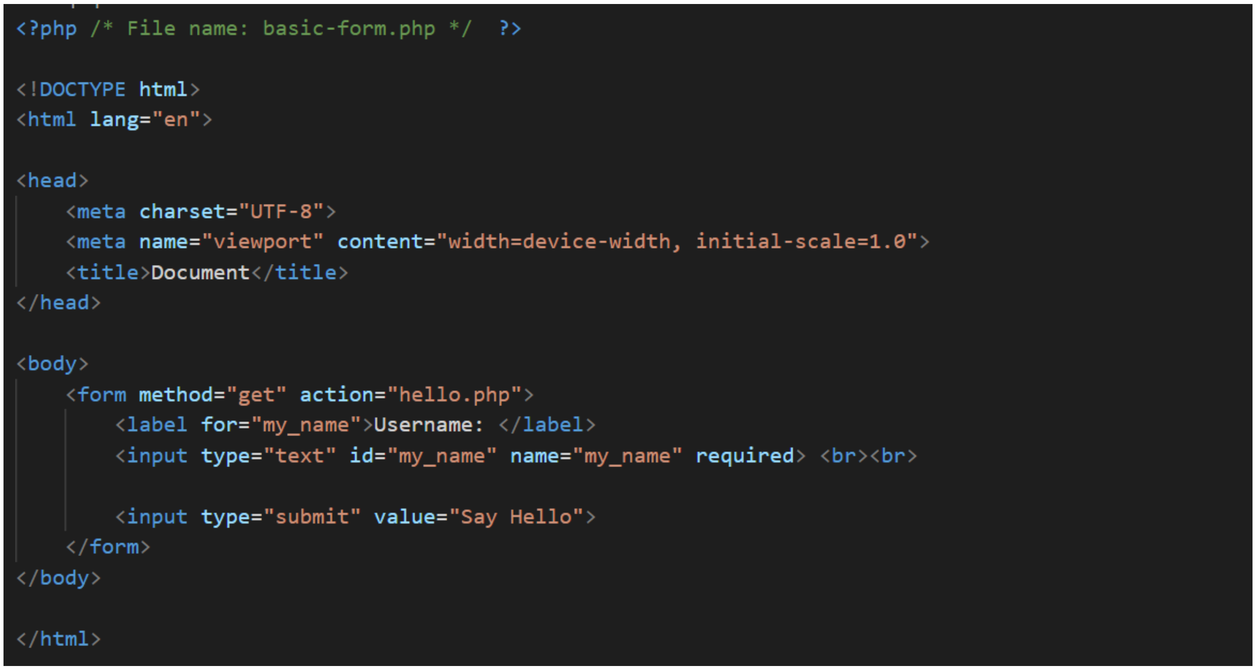
When a user sees a page with a form in it, she inputs the information into the form and then clicks a button or hits Enter to send the form information back to your server. Processing that submitted form information is step two of the operation.



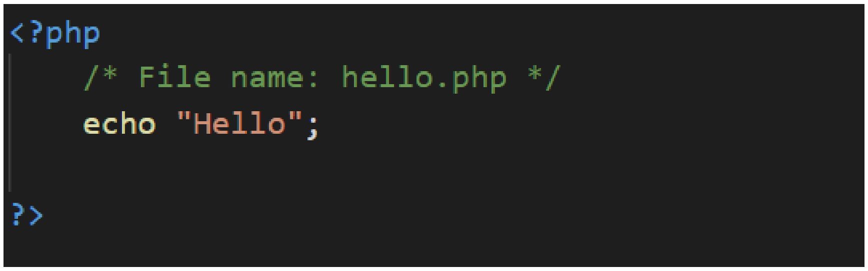
```
<form method="POST" action="/hello.php">
Your Name: <input type="text" name="my_name"/>
<br/>
<input type="submit" value="Say hello"/>
</form>
```

**Figure: Displaying and processing a simple form**

**Example:**



```
<?php /* File name: basic-form.php */  ?>

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>

<body>
    <form method="get" action="hello.php">
        <label for="my_name">Username: </label>
        <input type="text" id="my_name" name="my_name" required> <br><br>

        <input type="submit" value="Say Hello">
    </form>
</body>

</html>
```



```
<?php
    /* File name: hello.php */
    echo "Hello";

?>
```

## Useful Server Variables

The server variables come under **super global variables**. So, some of super global variables frequently used in PHP other than server variables are:

a. $_GET
b. $_POST
c. $_REQUEST

**Note: All super global variables are of associative array types.**

Aside from PHP_SELF, the $_SERVER auto-global array contains a number of useful elements that provide information on the web server and the current request. $_SERVER is an array containing information such as headers, paths, and script locations.

**Table Entries in $_SERVER**

| Element | Example | Description |
|---|---|---|
| QUERY_STRING | category=kitchen&price=5 | The part of the URL after the question mark where the URL parameters live. The example query string shown is for the URL. http://www.example.com/catalog/store.php?Category=kitchen&price=5. |
| PATH_INFO | /browse | Extra path information tracked onto the end of the URL after a slash. This is a way to pass information to a script without using the query string. The example of PATH_INFO shown is for the URL http://www.example.com/catalog/store.php/browse. |
| SERVER_NAME | www.example.com | The name of the web site on which the PHP interpreter is running. If the web server hosts many different virtual domains, this is the name of the particular virtual domain that is being accessed. |
| DOCUMENT_ROOT | /usr/local/htdocs | The directory on the web server computer that holds the documents available on the web site. If the document root is /usr/local/htdocs for the web site http://www.example.com, then a request for http://www.example.com/catalog/store php corresponds to the file /usr/local/htdocs/catalog/store.php. |
| REMOTE_ADDR | 175.56.28.23 | The IP address of the user making the request to your web server. |
| REMOTE_HOST | Pool0560.cvx.dialup.verizon.net | If your web server is configured to translate user IP addresses into hostnames, this is the hostname of the<br>user making the request to your web server. Because this address-to-name translation is relatively expensive<br>(in terms of computational time), most web servers do not do it. |
| HTTP_REFERRER | http://directory.google.com/Top/Shopping/Clothing | If someone clicked on a link to reach the current URL, HTTP_REFERRER contains the URL of the page that |

| | | |
|---|---|---|
| | | Contained the link. This value can be faked, so don’t use it as your sole criterion for giving access to private Web pages. It can however, be useful for finding out who’s linking to you. |
| HTTP_USER_AGENT | Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/85.0.4183.121 Safari/537.36 | The web browser that retrieved the page. The example value is the signature of Google chrome version 85.0.4183.121 running on Windows 10 64 bit. Like HTTP_REFERER, this value can be faked, but is useful for analysis. |

## Accessing Form Parameters

At the beginning of every request, the PHP interpreter sets up some auto global arrays that contain the values of any parameters submitted in a form or passed in the URL. URL and form parameters from GET method forms are put into $_GET. Form parameters from POST method forms are put into $_POST.

Example: The URL http://localhost:8081/bim-4/chapter-six/day-two/server variables.php?name=dimaria&address=argentina:

$_GET[‘name’] is set to dimaria and $_GET[‘address’] is set to argentina. Also Submitting the form causes the same values to be put into $_POST, assuming dimaria is entered in the text box and argentina is selected from the menu.

**Note: For examples refer to code**