

## What is Php?

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

Exampal:

```
<!DOCTYPE html>
<html>
<body>

<?php
echo "My first PHP script!";
?>

</body>
</html>
```

## What is a PHP File?

- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code are executed on the server, and the result is returned to the browser as plain HTML
- PHP files have extension ".php"

## Variable Types?

PHP has a total of eight data types which we use to construct our variables —

- **Integers** – are whole numbers, without a decimal point, like 4195.
- **Doubles** – are floating-point numbers, like 3.14159 or 49.1.
- **Booleans** – have only two possible values either true or false.
- **NULL** – is a special type that only has one value: NULL.
- **Strings** – are sequences of characters, like 'PHP supports string operations.'
- **Arrays** – are named and indexed collections of other values.
- **Objects** – are instances of programmer-defined classes, which can package up both other kinds of values and functions that are specific to the class.
- **Resources** – are special variables that hold references to resources external to PHP (such as database connections).

## What is Operator?

Simple answer can be given using expression  $4 + 5$  is equal to 9. Here 4 and 5 are called operands and + is called operator. PHP language supports following type of operators.

- Arithmetic Operators
- Comparison Operators
- Logical (or Relational) Operators
- Assignment Operators
- Conditional (or ternary) Operators

## Loop Types?

Loops in PHP are used to execute the same block of code a specified number of times. PHP supports following four loop types.

- **for** – loops through a block of code a specified number of times.
- **while** – loops through a block of code if and as long as a specified condition is true.
- **do...while** – loops through a block of code once, and then repeats the loop as long as a special condition is true.
- **foreach** – loops through a block of code for each element in an array.

## What is an Array?

An array is a data structure that stores one or more similar type of values in a single value. For example if you want to store 100 numbers then instead of defining 100 variables its easy to define an array of 100 length.

There are three different kind of arrays and each array value is accessed using an ID c which is called array index.

- **Numeric array** – An array with a numeric index. Values are stored and accessed in linear fashion.
- **Associative array** – An array with strings as index. This stores element values in association with key values rather than in a strict linear index order.
- **Multidimensional array** – An array containing one or more arrays and values are accessed using multiple indices.

## GET & POST Methods?

There are two ways the browser client can send information to the web server.

- The GET Method
- The POST Method

Before the browser sends the information, it encodes it using a scheme called URL encoding. In this scheme, name/value pairs are joined with equal signs and different pairs are separated by the ampersand.

## The GET Method?

The GET method sends the encoded user information appended to the page request. The page and the encoded information are separated .

- The GET method produces a long string that appears in your server logs, in the browser's Location: box.
- The GET method is restricted to send upto 1024 characters only.
- Never use GET method if you have password or other sensitive information to be sent to the server.
- GET can't be used to send binary data, like images or word documents, to the server.
- The data sent by GET method can be accessed using QUERY\_STRING environment variable.
- The PHP provides **\$\_GET** associative array to access all the sent information using GET method.

## The POST Method?

The POST method transfers information via HTTP headers. The information is encoded as described in case of GET method and put into a header called QUERY\_STRING.

- The POST method does not have any restriction on data size to be sent.
- The POST method can be used to send ASCII as well as binary data.
- The data sent by POST method goes through HTTP header so security depends on HTTP protocol. By using Secure HTTP you can make sure that your information is secure.
- The PHP provides **\$\_POST** associative array to access all the sent information using POST method.

## What is Cookies?

A cookie is often used to identify a user. A cookie is a small file that the server embeds on the user's computer. Each time the same computer requests a page with a browser, it will send the cookie too. With PHP, you can both create and retrieve cookie values.

A cookie is created with the `setcookie()` function.

To delete a cookie, use the `setcookie()` function with an expiration date in the past

## What is Session?

When you work with an application, you open it, do some changes, and then you close it. This is much like a Session. The computer knows who you are. It knows when you start the application and when you end. But on the internet there is one problem: the web server does not know who you are or what you do, because the HTTP address doesn't maintain state.

A session is started with the `session_start()` function.

Session variables are set with the PHP global variable: `$_SESSION`.

To remove all global session variables and destroy the session, use `session_unset()` and `session_destroy()`

