

PHP

Introduction:

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

What Can PHP Do?

- PHP can generate dynamic page content
- PHP can create, open, read, write, delete, and close files on the server
- PHP can collect form data
- PHP can send and receive cookies
- PHP can add, delete, modify data in your database
- PHP can encrypt data

Basic Syntax:

```
<?php
```

```
// PHP code goes here
```

```
?>
```

To print the statements we use,

echo, ECHO, Echo, print with or without parenthesis but mostly you will use echo.

```
$x = "World";
```

```
echo 'Hello $x';
```

```
// In the above print statements, the statement will be print as it is
```

```
$x = "World";
```

```
echo "Hello $x";
```

All PHP statements end with a semicolon (;).

Comments:

```
// This is a single-line comment
```

```
# This is also a single-line comment
```

```
/* This is a  
multi-line comment */
```

Variables:

Variables are used as container for storing information.

In PHP, a variable starts with the \$ sign, followed by the name of the variable

Rules for PHP variables:

- A variable starts with the \$ sign, followed by the name of the variable
- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
- Variable names are case-sensitive (\$age and \$AGE are two different variables)

Remember that PHP variable names are case-sensitive!

E.g.

```
<?php
```

```
$txt = "Hello World";
```

```
echo "$txt!";
```

```
?>
```

To get the data type of a variable, use the `var_dump()` function.

PHP supports the following data types:

- String - A string is a sequence of characters, like "Hello world!".
- Integer - An integer data type is a non-decimal number
- Float - A float (floating point number) is a number with a decimal point
- Boolean - A Boolean represents two possible states: TRUE or FALSE.
- Array - An array stores multiple values in one single variable.
- Object

A class is a template for objects, and an object is an instance of a class.

When the individual objects are created, they inherit all the properties and behaviors from the class, but each object will have different values for the properties.

String Methods:

The PHP `strlen()` function returns the length of a string.

The PHP `str_word_count()` function counts the number of words in a string.

The PHP `strpos()` function searches for a specific text within a string.

The `strtoupper()` function returns the string in upper case:

The `strtolower()` function returns the string in lower case:

You can return a range of characters by using the `substr()` function.

```
$x = "Hello World!";  
echo substr($x, 6, 5);
```

The first character has index 0.

Math Functions:

The `pi()` function returns the value of PI

The `min()` and `max()` functions can be used to find the lowest or highest value in a list of arguments

The `abs()` function returns the absolute (positive) value of a number

The `sqrt()` function returns the square root of a number

The `round()` function rounds a floating-point number to its nearest integer

The `rand()` function generates a random number