

Internet Web Site Design

Introduction to PHP 7

What is PHP?

- PHP is originally an abbreviation of (Personal Home Pages), now (PHP Hypertext Preprocessor)
- PHP is an amazing and popular language!
- PHP is an open source scripting language.
- PHP scripts are executed on the server.
- PHP is free to download and use.
- It is powerful enough to be at the core of the biggest blogging system on the web (WordPress)!
- It is deep enough to run the largest social network (Facebook)!
- It is also easy enough to be a beginner's first server side language!

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" .

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 be used to control user-access.
- PHP can encrypt data.
- With PHP you are not limited to output HTML. You can output images, PDF files, and even Flash movies. You can also output any text, such as XHTML and XML.

Internet Web Site Design

Why PHP?

- PHP runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.).
- PHP is compatible with almost all servers used today (Apache, IIS, etc.).
- PHP supports a wide range of databases.
- PHP is free. Download it from the official PHP resource: www.php.net.
- PHP is easy to learn.
- PHP runs efficiently on the server side.

What's new in PHP 7

- PHP 7 is much faster than the previous popular stable release (PHP 5.6)
- PHP 7 has improved Error Handling
- PHP 7 supports stricter Type Declarations for function arguments
- PHP 7 supports new operators (like the spaceship operator: `<=>`)

What Do I Need for PHP 7 Installation?

To start using PHP, you can:

- Install a web server on your own PC, and then install PHP and MySQL
- If your server has activated support for PHP you do not need to do anything.
- Just create some .php files, place them in your web directory, and the server will automatically parse them for you.
- You do not need to compile anything or install any extra tools.
- Because PHP is free, most web hosts offer PHP support.

Set Up PHP on Your Own PC

However, if your server does not support PHP, you must:

- install a web server
- install PHP
- install a database, such as MySQL

The official PHP website (PHP.net) has installation instructions for PHP:

<http://php.net/manual/en/install.php>

Internet Web Site Design

PHP 7 Syntax

- A PHP script is executed on the server, and the plain HTML result is sent back to the browser.
- A PHP script can be placed anywhere in the document.
- A PHP script starts with `<?php` and ends with `?>`:

```
<?php
// PHP code goes here
?>
```

- The default file extension for PHP files is ".php".
- A PHP file normally contains HTML tags, and some PHP scripting code.
- Below, we have an example of a simple PHP file, with a PHP script that uses a built-in PHP function "echo" to output the text "Hello World!" on a web page:

PHP Code	Result
<pre><!DOCTYPE html> <html> <body> <h1>My first PHP page</h1> <?php echo "Hello World!"; ?> </body> </html></pre>	<p>My first PHP page</p> <p>Hello World!</p>

Note: PHP statements end with a semicolon (;).

Comments in PHP

- A comment in PHP code is a line that is not read/executed as part of the program. Its only purpose is to be read by someone who is looking at the code.
- Comments can be used to:
 - Let others understand what you are doing.
 - Remind yourself of what you did – Most programmers have experienced coming back to their own work a year or two later and having to re-figure out what they did. Comments can remind you of what you were thinking when you wrote the code.

Internet Web Site Design

- PHP supports several ways of commenting:

PHP Code	Result
<pre> <!DOCTYPE html> <html> <body> <?php // This is a single-line comment # This is also a single-line comment /* This is a multiple-lines comment block that spans over multiple lines */ // You can also use comments to // leave out parts of a code line \$x = 5 /* + 15 */ + 5; echo \$x; ?> </body> </html> </pre>	10

PHP Case Sensitivity

- In PHP, all keywords (e.g. if, else, while, echo, etc.), classes, functions, and user-defined functions are NOT case-sensitive.
- In the example below, all three echo statements below are legal (and equal):

PHP Code	Result
<pre> <!DOCTYPE html> <html> <body> <?php ECHO "Hello World!
"; echo "Hello World!
"; EcHo "Hello World!
"; ?> </body> </html> </pre>	<p>Hello World! Hello World! Hello World!</p>

Internet Web Site Design

- However; all variable names are case-sensitive.
- In the example below, only the first statement will display the value of the \$color variable (this is because \$color, \$COLOR, and \$coLOR are treated as three different variables):

PHP Code	Result
<pre><!DOCTYPE html> <html> <body> <?php \$color = "red"; echo "My car is " . \$color . "
"; echo "My house is " . \$COLOR . "
"; echo "My boat is " . \$coLOR . "
"; ?> </body> </html></pre>	<p>My car is red My house is My boat is</p>