

Web Programming

Chapter 5: Php

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Chapter Description

- Expected Outcome
 - Able to create a dynamic Php web page.
- References
 - www.php.net
 - www.w3schools.com



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What is PHP?

- PHP is an acronym for "PHP Hypertext Preprocessor"
- It is a widely-used, open source scripting language.
- Its scripts are executed on the server.
- It costs nothing, it is free to download and use.
- It runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- It is compatible with almost all servers used today (Apache, IIS, etc.)
- It supports a wide range of databases.
- It is free. Download it from the official PHP resource: www.php.net
- It is easy to learn and runs efficiently on the server side



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Php Basic Syntax

```
<!DOCTYPE html>
<html>
<body>
<h1>My first PHP page</h1>
<?php
// This is a single line comment
# This is also a single line comment
/*
This is a multiple lines comment block
that spans over more than
one line
*/
echo "Hello World!";
ECHO "Hello World!";
?>
</body>
</html>
```

output



Hello World!Hello World!



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Php Basic Syntax Explained

- A PHP script can be placed anywhere in the document and starts with `<?php` and ends with `?>`
- A PHP file normally contains HTML tags, and some PHP scripting code.
- Always end a PHP statements with a semicolon (;)
- The "echo" command is a built-in PHP function used to output the text.
- All user-defined functions, classes, and keywords (are case-insensitive), e.g "ECHO" or "echo"
- All variables are case-sensitive.



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Php Variables

Global scope

```
<?php  
$x=5;
```

Function declaration

Local scope

```
function myTest() {  
    $y=10;  
    echo "<p>Test variables inside the function:<p>";  
    echo "Variable x is: $x";  
    echo "<br>";  
    echo "Variable y is: $y";  
}  
myTest();  
echo "<p>Test variables outside the function:<p>";  
echo "Variable x is: $x";  
echo "<br>";  
echo "Variable y is: $y";  
?>
```

output

Test variables inside the function:

Variable x is:

Variable y is: 10

Test variables outside the function:

Variable x is: 5

Variable y is:



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PHP Variables Explained

- 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 (\$y and \$Y are two different variables)



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PHP Variables Explained

- Variables can be declared anywhere in the script.
- The scope of a variable is the part of the script where the variable can be referenced/used.
- PHP has three different variable scopes:
 - local
 - global
 - static



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PHP Variables Explained

- A variable declared outside a function has a GLOBAL SCOPE and can only be accessed outside a function.
- A variable declared within a function has a LOCAL SCOPE and can only be accessed within that function.



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Global Keyword

Global keyword



```
<?php
$x=10;
$y=5;
function myTest()
{
$GLOBALS['y']=$GLOBALS['x']+$GLOBALS['y'];
}
myTest();
echo $y; // outputs 15
?>
```

Global keyword



```
<?php
$x=5;
$y=10;
function myTest()
{
global $x,$y;
$y=$x+$y;
}
myTest();
echo $y; // outputs 15
?>
```



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Global Keyword Explained

- The global keyword is used to access a global variable from within a function.
- PHP also stores all global variables in an array called `$GLOBALS[index]`. The index holds the name of the variable.
- This array is also accessible from within functions and can be used to update global variables directly
- The previous slides shows the implementation of global keywords.



Static Keyword

Static keyword



```
<?php
function myTest()
{
    static $x=0;
    echo $x;
    $x++;
}
myTest();
myTest();
myTest();
?>
```

output



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Static Keyword Explained

- In the previous slide, the static keyword is used to declare a variable in a function.
- The last value of \$x is retained every time the function is executed.



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Activities

- Please refer to Tutorial 7 for step by step on how to start PHP programming.
- The lesson continue with Php Part 2.



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