HTML/PHP - Lecture 5

COEN 10

PHP

★PHP -- Hypertext Preprocessor

- ◎An open source software
  - ✧Free to download and use
- ◎Server-side scripting language
  - ✧Scripts are executed on the server

PHP

★PHP files

- ◎Contain text, HTML tags, and code
- ◎Returned to the browser as HTML
- ◎Have file extension of
  - ✧".php", ".php3", or ".phtml"
- ◎Must not have a ".html" extension

PHP Syntax

★A PHP scripting block

- ◎Can be anywhere in the document
  - ✧Starts with <?php
  - ✧Ends with ?>
- ◎Contains
  - ✧HTML tags and PHP code.
- ◎The output is placed in the page

PHP Syntax

★Each basic statement in PHP ends with a semicolon

- ◎The semicolon is a separator
  - ✧Used to distinguish one set of instructions from another.

★Output

- ◎Two statements
  - ✧echo and print

PHP Syntax

★Example

```
<html>
<body>

<?php
  echo "COEN 10";
?>

</body>
</html>
```

PHP Syntax

★Comments

- ◎// for a single-line comment
- ◎/* and */ for a comment block

PHP Syntax

```
<html>
<body>

<?php
   // This is a short comment

   /*
    This is
    a
    long comment
   */
?>

</body>
</html>
```

PHP Variables

★Variables are used for storing values
- ◎text strings, numbers, arrays

★After a variable is created/declared
- ◎It can be used again and again

★Variables in PHP start with a $

★Declaring a variable in PHP

```
$var_name = value;
```

PHP Variables

★Example

```
<?php
  $txt="this is a string";
  $x=5;
?>
```

PHP Variables

★A variable name
- ◎can only contain alpha-numeric characters and underscores (a-z, A-Z, 0-9, and _)
- ◎must start with a letter or an underscore "_"
- ◎cannot contain spaces

$ABC≠$abc
$1abc is not ok(can't be the combination of number and alpha)

PHP Numerical Values

★Integer
- ◎Example:

```
$x = 3;
```

★Real
- ◎Example:

```
$y = 4.5;
```

PHP Numerical Operators

★Arithmetic Operators

+	addition
-	subtraction
*	multiplication
/	division
%	modulus
++	increment
--	decrement

PHP Numerical Operators

★Assignment Operator

=	x = y		
+=	x += y	same as	x = x + y
-=	x -= y	same as	x = x - y
*=	x *= y	same as	x = x * y
/=	x /= y	same as	x = x / y
%=	x %= y	same as	x = x % y

PHP Numerical Operators

★Conditional Operators

==	<equal to>
!=	<not equal to>
>	<greater than>
>=	<greater than or equal to>
<	<less than>
<=	<less than or equal to>
<>	<not equal to>

PHP Logical Operators

★Logical Operators

◎To combine conditions

&& and

true if both conditions are true

|| or

true if at least one condition is true

! not

true if the condition is false

PHP Logical Operators

★Precedence Order

```
!       ➔  Highest Precedence
* / %
+ -
< <= > >=
&&
||
=       ➔  Lowest Precedence
```

PHP Strings

★String variables are used for values that contains characters.

PHP Strings

Example

```
<?php
  $txt="this is a string";
  echo $txt;
?>
```

★The output of the code above will be:

this is a string

PHP Strings

★String Operators

- ◎The assignment operator (=)
  - ✧to assign one string or string variable to a variable
- ◎The concatenation operator (.)
  - ✧to concatenate two string values

PHP Strings

★The Concatenation Operator

Example

```
<?php
  $txt1="COEN 10";
  $txt2="Intro to Programming";
  echo $txt1 . " -- " . $txt2;
?>
```

★The output of the code above will be:

COEN 10 -- Intro to Programming

PHP Strings

★String Operators

◎Combining the two (.=)

✧Concatenates the string to the variable being assigned

PHP Strings

★String Operators

◎Combining the two (.=)

✧Example

```
$x = "abc";
$x .= "def"; // same as $x = $x . "def";
```

After this code, $x will have the string "abcdef"

PHP Logical Operators

★Precedence Order

```
!        ➔  Highest Precedence
* / %
+ - .
< <= > >=
&&
||
=        ➔  Lowest Precedence
```

PHP Functions

★PHP provides a set of functions to help with common tasks

★To call a function

◎which returns a value

```
$x = function_name ( );
```

◎which does not return a value

```
function_name ( );
```

PHP Functions

★Functions may receive one or more arguments

◎and return a value

```
$x = function_name (arg1, arg2, … );
```

◎or not return a value

```
function_name (arg1, arg2, …);
```

PHP Strings

★The strlen() function

◎Returns the length of a string.

◎Example

```
<?php
  $len = strlen (“COEN 10”);
  echo $len;
?>
```

◎The output of the code will be:

```
7
```

PHP Strings

★The strcmp() function

◎Returns

✧0 if the strings are the same

✧>0 if the first string is greater

✧<0 if the second string is greater

◎Example

```
<?php
  $equal = strcmp (“COEN 10”, “COEN 10”);
  echo $equal;
?>
```

◎The output of the code will be:

```
0
```

PHP Strings

★The strpos() function

◎Searches for a string within a string.

✧If a match is found

–returns the position of the first match.

✧If no match is found

–returns FALSE

PHP Strings

★The strpos() function

◎Example

```
<?php
  echo strpos ("abc def ghi", "ghi");
?>
```

◎The output of the code will be:

8

PHP Strings

★Lots of string functions!

◎http://www.w3schools.com/PHP/php_ref_string.asp