PHP Basics

Unit 27 Web Server Scripting

Extended Diploma in ICT

Road map

➡ We are in Learning outcome 1

    ➡ Understand the principles of web server scripting.

➡ We also need to learn how to program using a scripting language.

➡ Remember from last lesson that we are using PHP.

Recap

➡ What did we accomplish last lesson?

Variables

- A variable is a named location in memory that holds the value of a number, character, text string, or complex data type.

- In PHP, all variables are prefixed by a dollar sign ($).

- The syntax for declaring a variable in PHP is shown below:

  - $var_name = value;

- PHP automatically selects the correct data type for the variable according to the value assigned (loosely typed)

Variable names

▶ A variable name must start with either a letter or an underscore character

▶ It may only contain alpha-numeric characters (a-z, A-Z, and 0-9) and the underscore character.

If a variable name consists of two (or more) words, separate them by an underscore, or the first letter in each new word should be an upper case character

```
$some_variable;
$anotherVariable;
```

String variables

► Contain two or more alpha-numeric characters or other printable characters.
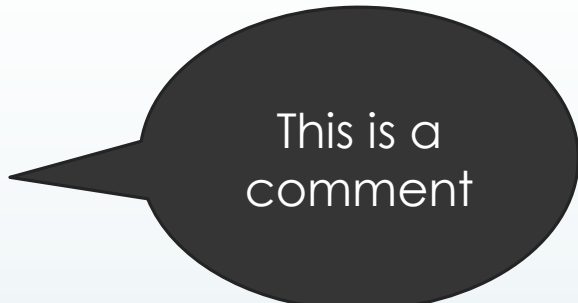
► They are mainly used to store and manipulate text.

String handling functions:

  ► strlen() - returns the length of a string passed to it as an argument.

  ► strpos() - returns the position in a string of the first occurrence of a given substring (or a value of *FALSE* if the substring is not found).

Declare, initialise and display

```php
<?php
// declare and initialise a couple of string variables
$myText1="Good Morning Campers!";
$myText2="Suits you Sir!";

// output the string values to the screen on different lines
echo "The first string is: '";
echo $myText1;
echo "'<br /><br />";
echo "The second string is: '";
echo $myText2;
echo "'<br /><br />";
?>
```

This is a comment

Output

The first string is: 'Good Morning Campers!'

The second string is: 'Suits you Sir!'

Try the code yourself.

Numeric variables

```
// declare and initialise some numeric variables
$posWorld = strpos($myText1, "Campers");
$lngMyTxt1 = strlen($myText1);
$lngMyTxt2 = strlen($myText2);

// display the values of the string-length numeric variables
echo "The number of characters in the first string is ";
echo $lngMyTxt1;
echo "<br /><br />";
echo "The number of characters in the second string is ";
echo $lngMyTxt2;
echo "<br /><br />";
```

Note the functions return numbers so the variable data type is numeric!

Output

The first string is: 'Good Morning Campers!'

The second string is: 'Suits you Sir!'

The number of characters in the first string is 21

The number of characters in the second string is 14

Try the code yourself.

Display

/* display the starting position of the word "Campers" within the first string */

echo "The word 'Campers' starts at position ";
echo $posWorld + 1;
echo " in the first string.

";

Note that PHP counts from zero!

Output

The first string is: 'Good Morning Campers!'

The second string is: 'Suits you Sir!'

The number of characters in the first string is 21

The number of characters in the second string is 14

The word 'Campers' starts at position 14 in the first string.

Extend your code.

Concatenation

▶ To join two or more strings together we use a method called concatenation.

▶ Concatenate   *(verb)*

▶ (used with object), concatenated, concatenating.

▶ 1.to link together.

Concatenation

▶ The *concatenation operator* (.) is the only PHP operator that specifically relates to string variables,

▶ It is used to join (*concatenate*) two strings together.

```
// demonstrate the use of the concatenation operator
echo "We can concatenate the strings:<br /><br />";
echo ($myText1) . " " . $myText2 . "\n";
```

▶ We have used the concatenation operator to join the first and second string variables together, with a blank space (" ") in between them.

Output

The first string is: 'Good Morning Campers!'

The second string is: 'Suits you Sir!'

The number of characters in the first string is 21

The number of characters in the second string is 14

The word 'Campers' starts at position 14 in the first string.

We can concatenate the strings:

Good Morning Campers! Suits you Sir!

Extend your code.

Strings from strings

Substr is a function in php you may have come across before?

Substr exists in most languages and quite often has the same name
e.g. in vb.net it is variablename.substr(…..

There are 3 parameters or arguments and it returns a string or False

$part = substr($......., $startpoint, $length)

This returns part of a string from the $..... Variable
Starting at $startpoint
For a length of $length

Change your code to extract the word "campers" from the main string variable and echo it to the screen.

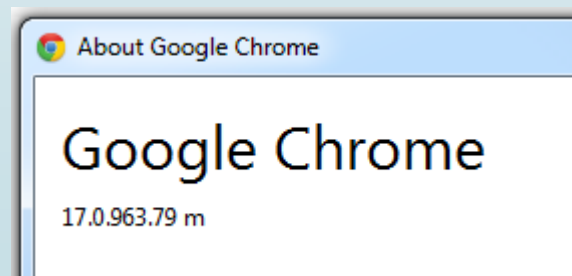# What browser are you using?

▶ Some code needs to be browser specific.

▶ PHP has super global variables which you can use. One of them captures the browser information transmitted

▶ HTTP_USER_AGENT is the variable containing the header from the current request from the browser identifying the browser

▶ It is found in $_SERVER['HTTP_USER_AGENT']

Code and output

```php
<?php
    $browser = $_SERVER['HTTP_USER_AGENT'];
    echo "Your browser is: $browser";
?>
```

Your browser is: Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/535.11 (KHTML, like Gecko) Chrome/17.0.963.79 Safari/535.11

About Google Chrome

Google Chrome

17.0.963.79 m

Exercise (part of criteria P2)

➡ Write a PHP script to format each part of the browser information into a user friendly format

➡ Add descriptions of what each part means
(eg: what is WOW64 ?)

➡ This will be assessed by witness statement in the actual assignment.

What have we learnt today.

- ➡ You tell me? (Each of you give me one thing you have learnt today)