جامعة الانبار

كلية علوم الحاسوب وتكنولوجيا المعلومات

قسم أنظمة شبكات الحاسوب

برمجة صفحات الويب PHP

المرحلة الثالثة

الفصل الدراسي الاول

مدرس المادة

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Lectures:

١. lec١: PHP Fundamentals (اساسيات برمجة صفحات الانترنت)

٢. lec٢: PHP Data Types (أنواع البيانات)

٣. lec٣: PHP Arrays (المصفوفات)

٤. lec٤: PHP Logic Control Structures (عبارات السيطرة)

٥. lec٥: PHP Loops (عبارات التكرار)

٦. lec٦: PHP Strings PHP String Functions (السلاسل ودوالها)

٧. lec٧: PHP Function (الدوال)

٨. lec٨: PHP Date() & Time Function (دوال الوقت والتاريخ)

٩. lec٩: Regular Expressions (التعابير المنتظمة)

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١١.   lec١١: PHP Session & PHP Cookies (الجلسات وملفات تعريف الارتباط)

١٢.   lec١٢: How to Send Email using PHP mail (كيفية ارسال الايميل)

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3- PHP Strings: PHP String Functions

What is String in PHP?

A string is a collection of characters. String is one of the data types supported by PHP.

The string variables can contain alphanumeric characters. Strings are created when;

- You declare variable and assign string characters to it
- You can directly use PHP Strings with echo statement.
- PHP String functions are language construct, it helps capture words.
- Learning how strings work in PHP and how to manipulate them will make you a very effective and productive developer.

PHP Create Strings Using Single quotes with Example

There are four different ways of creating PHP string functions and string manipulation in PHP.

Creating PHP Strings Using Single quotes: The simplest way to create a string is to use single quotes.

```php
<?php
   var_dump ('You need to be logged in to view this page');
?>
```

Output:

```
"You need to be logged in to view this page"
```

If the single quote is part of the string value, it can be escaped using the backslash. The code below illustrates how to escape a single quote.

```php
<?php
echo 'I \'ll be back after 20 minutes';
?>
```

Output:

```
I'll be back after 20 minutes
```

PHP Create Strings Using Double quotes with Example

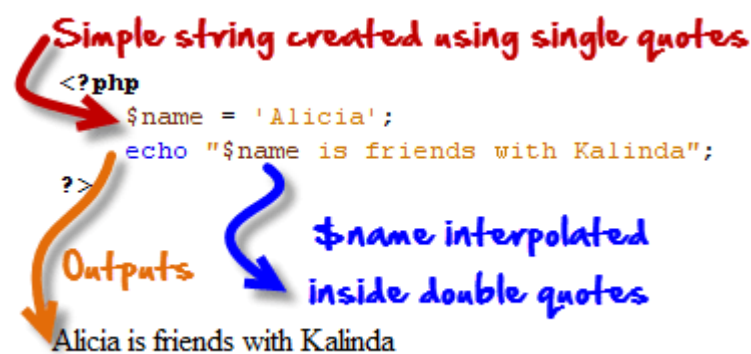The double quotes are used to create relatively complex strings compared to single quotes.

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Variable names can be used inside double quotes and their values will be displayed.

```php
<?php
$name='Alicia';
echo "$name is friends with kalinda";
?>
```

Output:

Alicia is friends with kalinda

HERE,

- The above example creates a simple string with the value of Alicia.
- The variable name is then used in the string created using double quotes and its value is interpolated at run time.

In addition to variable interpolations, the double quote string can also escape more special characters such as "\n for a linefeed, \$ dollar for the dollar sign" etc.

More examples Let's suppose that we have the following code

```php
<? php
$pwd = "pas$word";
echo $pwd;
?>
```

Output:

NOTICE : Undefined variable

pas

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executing the above codes issues a notice "Notice: Undefined variable".

This is because $word is treated as a variable.

If we want the dollar sign to be treated as a literal value, we have to escape it.

```php
<?php
$word="word";
$pwd = "pas\$word";
echo $pwd;
?>
```

Output:

pas$word

PHP Heredoc with Example

This heredoc methodology is used to create fairly complex strings as compared to double quotes.

The heredoc supports all the features of double quotes and allows creating string values with more than one line without PHP string concatenation.

Using double quotes to create strings that have multiple lines generates an error.

You can also use double quotes inside without escaping them.

The example below illustrates how the Heredoc method is used to create string values.

```php
<?php
$baby_name = "Shalon";
echo <<<EOT
    When $baby_name was a baby,
    She used to look like a "boy".
EOT;
?>
```

Output:

When Shalon was a baby, She used to look like a "boy".

HERE,

<<<EOT is the string delimiter.

EOT is the acronym for end of text.

It should be defined in its on line at the beginning of the string and at the end.

Note: you can use anything you like in place of EOT

PHP Nowdoc with Example

The Nowdoc string creation method is similar to the heredoc method but works like the way single quotes work.

No parsing takes place inside the Nowdoc.

Nowdoc is ideal when working with raw data that do not need to be parsed.

The code below shows the Nowdoc implementation

```php
<?php
$baby_name = "Shalon";
$my_variable = <<<'EOT'
    When $baby_name was a baby,
    She used to look like a "boy".
EOT;
echo $my_variable; ?>
```

Output:

When $baby_name was a baby, She used to look like a "boy".

PHP String Function Examples

String functions in PHP are used to manipulate string values.

We are now going to look at some of the commonly used string functions in PHP

Function	Description	Example	Output
strtolower	Used to convert all string characters to lower case letters	echo strtolower('Benjamin');	outputs benjamin
strtoupper	Used to convert all string characters to upper case letters	echo strtoupper('george w bush');	outputs GEORGE W BUSH
strlen	The string length function is used to count the number of character in a string. Spaces in between characters are also counted	echo strlen('united states of america');	24
explode	Used to convert strings into an array variable	$settings = explode(';', "host=localhost; db=sales; uid=root; pwd=demo"); print_r($settings);	Array ([0] => host=localhost [1] => db=sales [2] => uid=root [3] => pwd=demo)
substr	Used to return part of the string. It accepts three (3) basic parameters. The first one is the string to be shortened, the second parameter is the position of the starting point, and the third parameter is the number of characters to be returned.	$my_var = 'This is a really long sentence that I wish to cut short'; echo substr($my_var,0, 12).'…';	This is a re…
str_replace	Used to locate and replace specified string values in a given string. The function accepts three arguments. The first argument is the text to be replaced, the second argument is the replacement text and the third argument is the text that is analyzed.	echo str_replace ('the', 'that', 'the laptop is very expensive');	that laptop is very expensive

Function	Description	Example	Output
strpos	Used to locate and return the position of a character(s) within a string. This function accepts two arguments	echo strpos('PHP Programing','Pro');	4
sha1	Used to calculate the SHA-1 hash of a string value	echo sha1('password');	5baa61e4c 9b93f3f0 682250b6cf833 1b 7ee68fd8
md5	Used to calculate the md5 hash of a string value	echo md5('password');	9f961034ee 4de758 baf4de09ceeb1 a75
str_word_count	Used to count the number of words in a string.	echo str_word_count ('This is a really long sentence that I wish to cut short');	12
ucfirst	Make the first character of a string value upper case	echo ucfirst('respect');	Outputs Respect
lcfirst	Make the first character of a string value lower case	echo lcfirst('RESPECT');	Outputs rESPECT

Summary

- Define string in PHP: A string function in PHP is a set of characters
- Explain string function in PHP: Strings are created when you declare a variable and assign string characters to it.
- Single quotes are used to specify simple strings in PHP
- Double quotes are used to create fairly complex strings in PHP
- heredoc is used to create complex strings
- Nowdoc is used to create strings that cannot be parsed.

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