Tutorial 10 – More PHP

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Mohamed Eldesouki

soen287@eldesouki.ca

PHP Arrays

.An array stores multiple values in one single variable.

.In PHP, the **array()** function is used to create an array

```php
<?php
$cars = array("Volvo", "BMW", "Toyota");
echo "I like " . $cars[0] . ", " . $cars[1] . " and " . $cars[2] . ".";
?>
```

.The **cou**n (the number of elements) of an array.

PHP Arrays

In PHP, there are three types of arrays:

(1)<u>Indexed arrays</u> - Arrays with a numeric index

(2)<u>Associative arrays</u> - Arrays with named keys

(3)<u>Multidimensional arrays</u> - Arrays containing one or more arrays

PHP Arrays - Indexed Arrays

There are two ways to create indexed arrays:

- The index can be assigned automatically (index always starts at 0)

- $cars = array("Volvo", "BMW", "Toyota");

- or the index can be assigned manually

- $cars[0] = "Volvo";

- $cars[1] = "BMW";

- $cars[2] = "Toyota";

PHP Arrays - Associative Arrays

- Associative arrays are similar to Indexed arrays but you define the indexes yourself.

- $cars = array(0 => "Volvo", 1 => "BMW", 2=> "Toyota");

- $cars = array("Marry" => "Volvo", "John" => "BMW", "Mike" => "Toyota");

- or the key can be assigned manually

- $cars["Marry"] = "Volvo";

- $cars["John"] = "BMW";

- $cars["Mike"] = "Toyota";

Loop Through an Associative Array

To loop through and print all the values of an associative array, you could use a foreach loop, like this:

```php
<?php
$cars = array("Marry" => "Volvo", "John" => "BMW",  "Mike" => "Toyota");

foreach($cars as $key => $value) {
  echo "Key=" . $key . ", Value=" . $value;
  echo "<br>";
}
?>
```

Practice 1

· Create a new php page that opens a session.

· If the session['views'] is not exist, create the session. If the session exists, count and show how many times the user visits this page.

· If the session has been visited more than 10 times, clear the session.

Practice 2

1)Function: MostFrequent

Parameter(s): String Array

Description: Outputs the string (element) that appears the most frequently within the array. Strings should be case insensitive.

2)Function: uppercaseFirst

Parameter(s): String

Description : For each word in the string, capitalize (uppercase) the first letter and return the modified string.

Practice 2

3)Function: splitSort

Parameter(s): String

Description: Given the string, place each word into an array index and sort it alphabetically before returning the filled array.

Usful Functions: serialize() & unserialize()

- *What if I want to share my PHP variables with others?*

- The serialize() function converts a storable representation of a value.

- To serialize data means to convert a value to a *sequence of bits*, so that it can be:

- stored in a file,

- stored in a memory buffer, or

- transmitted across a network.

Usful Functions: file_get_contents()

- The file_get_contents() reads a file into a string.

```php
<?php
echo file_get_contents("test.txt");
?>
```

- file_get_contents(path, include_path, context, start, max_length)

.path	Required. Specifies the path to the file to read
.include_path	Optional. Set this parameter to '1' if you want to search for the file in the include_path (in php.ini) as well
.context	Optional. Specifies the context of the file handle.
.start	Optional. Specifies where in the file to start reading.
.max_length	Optional. Specifies the maximum length of data read.

References

- https://www.w3schools.com/php/php_arrays.asp

- https://www.w3schools.com/php/php_sessions.asp

- https://stackoverflow.com/questions/1535697/how-do-php-sessions-work-not-how-are-they-used

- https://www.php.net/manual/en/language.types.array.php

- Other SOEN287 slides about PHP sessions