Data Access using PHP

Course Code: **CSC 3222**   Course Title: WEB TECHNOLOGIES

Dept. of Computer Science
Faculty of Science and Technology

Lab No:	4	Week No:	4	Semester:	
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Lecture Outline

1. **Learning outcome**
2. **Data Access using PHP**

   I. **Data Read / Write in text file**

   II. **PHP SimpleXML - Read /write in xml File**
3. **PHP Include Files**
4. **Upload File in PHP**
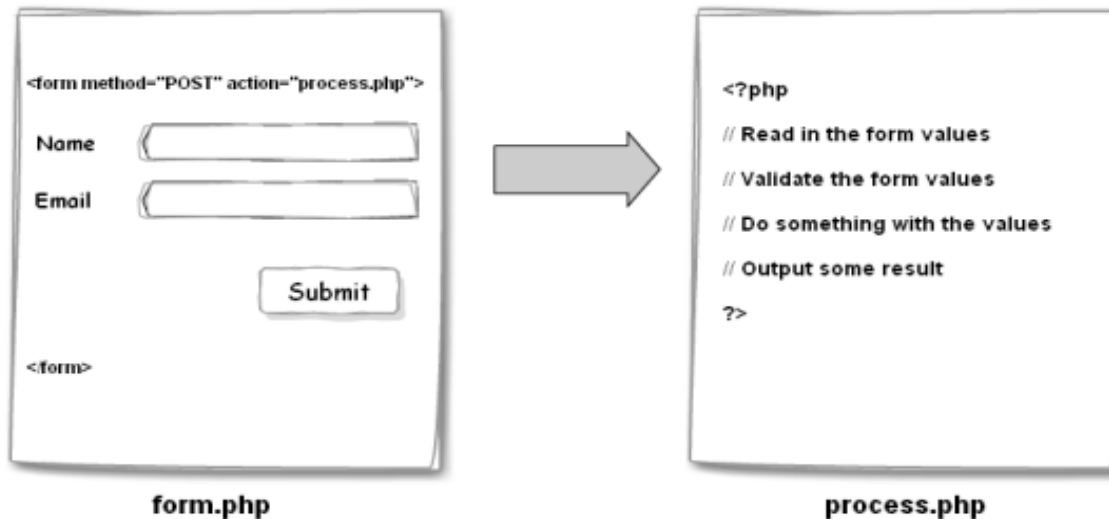5. **Books and References**

Learning outcome

- In this lecture, we will learn read/write data using PHP.
- Discussing the techniques to read and write text files, XML and JSON using PHP script.
- We will also learn, PHP "**include function**" to add script to the other PHP script and file upload techniques in server.

Data Access using PHP

- Read the form data and write to the files.
- In between, we will assign data to the class variable(object) or Array.


```
<form method="POST" action="process.php">

Name  (                              )

Email (                              )

                        [ Submit ]

</form>
```

form.php

```
<?php

// Read in the form values

// Validate the form values

// Do something with the values

// Output some result

?>
```

process.php

Data Read from text file

- The readfile() function reads a file and writes it to the output buffer.
- ```php
  <?php
  echo readfile("webdictionary.txt");
  ?>
  ```
- In the webdictionary.txt file have the following content:
  ```
  I love programming.
  ```

- A better method to open files is with the fopen() function.
  ```php
  <?php
  $myfile = fopen("webdictionary.txt", "r") or die("Unable to open file!");
  echo fread($myfile,filesize("webdictionary.txt"));
  fclose($myfile);
  ?>
  ```

Data write to text file- fwrite()

- The fwrite() function is used to write to a file.
- The first parameter of fwrite() contains the name of the file to write to and the second parameter is the string to be written.

```php
<?php
$myfile =
fopen("newfile.txt", "w") or die("Unable to
open file!");
$txt = "John Doe\n";
fwrite($myfile, $txt);
$txt = "Jane Doe\n";
fwrite($myfile, $txt);
fclose($myfile);
?>
```

PHP SimpleXML - Read xml File

- Assume we have an XML file called "note.xml", that looks like this:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<note>
  <to>Tove</to>
  <from>Jani</from>
  <heading>Reminder</heading>
  <body>Don't forget me this weekend!</body>
</note>
```

- simplexml_load_file() function to read XML data from file:

```php
<?php
$xml=simplexml_load_file("note.xml") or die("Error: Cannot create object");
print_r($xml);
?>
```

Creating a XML Document

- The following code above is great and generates XML.
- The file_put_contents() function create a separate XML file called **books.xml**.

```php
<?php
$simplexml= new SimpleXMLElement('<?xml
version="1.0"?><books/>');
$book1= $simplexml->addChild('book');
$book1->addChild("Booktitle", "The Wandering Oz");
$book1->addChild("PublicationDate", 2007);

$book2= $simplexml->addChild('book');
$book2->addChild("Booktitle", "The Roaming Fox");
$book2->addChild("PublicationDate", 2009);

file_put_contents('books.xml', $simplexml->asXML());
?>
```

Excercise

- You have the following HTML form. Whenever the form is submitted write the form data into user.txt and user.xml. Before write the file, assign form data into user object.(Define User Class)

PHP Include Files

- Assume we have a standard footer file called "footer.php", that looks like this:

```php
<?php
echo "<p>Copyright &copy; 1999-" . date("Y") . " W3Schools.com</p>";
?>
```

- To include the footer file in a page, use the include statement:

```php
<html>
<body>
<h1>Welcome to my home page!</h1>
<p>Some text.</p>
<p>Some more text.</p>
<?php include 'footer.php';?>
</body>
</html>
```

Upload File in PHP

- Suppose we want to upload profile picture or any kind of file.


```
<form action="upload.php" method="post" enctype="multipart/form-
data">
    Select image to upload:
    <input type="file" name="myfile">
    <input type="submit" value="Upload Image" name="submit">
</form>
```

Upload script

- There is one global PHP variable called **$_FILES**. This variable is an associate double dimension array and keeps all the information related to uploaded file.
- **$_FILES['myfile']['tmp_name']** – the uploaded file in the temporary directory on the web server.
- **$_FILES['myfile']['name']** – the actual name of the uploaded file.
- **$_FILES['myfile']['size']** – the size in bytes of the uploaded file.
- **$_FILES['myfile']['type']** – the MIME type of the uploaded file.
- **$_FILES['myfile']['error']** – the error code associated with this file upload.
- The following code upload file.
- move_uploaded_file($_FILES["myfile"]["tmp_name"], "images/". $_FILES["myfile"]["name"])

Books

- **W3Schools Online Web Tutorials; URL: http://www.w3schools.com**
- **PHP Documentation; URL: http://www.php.net/docs.php**
- **Sams Teach Yourself Ajax JavaScript and PHP All in One; Phil Ballard and Michael Moncur; Sams Publishing; 2010**
- **JavaScript Phrasebook; Christian Wenz; Sams Publishing; 2007**
- **PHP and MySQL Web Development, 4/E; Luke Welling and Laura Thomson; Addison-Wesley Professional; 2009**
- **JavaScript for Programmers Paul J. Deitel and Harvey M. Deitel; Prentice Hall; 2009**
- **Beginning PHP5, Apache, and MySQL Web Development; Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Jeremy Stolz and Michael K. Glass; Wiley Publishing; 2005**
- **XML in a Nutshell, 3/E; Elliotte Rusty Harold and W. Scott Means; O'Reilly Media; 2004**

References

1. http://www.kodecrash.com/javascript/read-write-json-file-using-php/
2. https://gist.github.com/recked/7329961
3. https://www.kodingmadesimple.com/2016/05/how-to-write-json-to-file-in-php.html
4. https://code.tutsplus.com/tutorials/how-to-upload-a-file-in-php-with-example--cms-31763
5. https://www.tutorialrepublic.com/php-tutorial/php-file-upload.php