



برمجة صفحات الويب PHP

المرحلة الثالثة

الفصل الدراسي الاول

مدرس المادة
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Web Programming Lectures (PHP)

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)
١٠. lec١٠: PHP File Handling & Functions (دوال وتحميل الملفات)
١١. lec١١: PHP Session & PHP Cookies (الجلسات وملفات تعريف الارتباط)
١٢. lec١٢: How to Send Email using PHP mail (كيفية ارسال الايميل)

8- PHP File() Handling & Functions

What is a File?

A file is simply a resource for storing information on a computer.

Files are usually used to store information such as:

- Configuration settings of a program
- Simple data such as contact names against the phone numbers.
- Images, Pictures, Photos, etc.

PHP File Formats Support

PHP file functions support a wide range of file formats that include:

- File.txt
- File.log
- File.custom_extension i.e. file.xyz
- File.csv
- File.gif, file.jpg etc
- Files provide a permanent cost effective data storage solution for simple data compared to databases that require other software and skills to manage DBMS systems.
- You want to store simple data such as server logs for later retrieval and analysis
- You want to store program settings i.e. program.ini

PHP file() Function

PHP provides a convenient way of working with files via its rich collection of built in functions.

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Operating systems such as Windows and MAC OS are not case sensitive while [Linux](#) or [Unix](#) operating systems are case sensitive.

Adopting a naming convention such as lower case letters only for file naming is a good practice that ensures maximum cross platform compatibility.

Let's now look at some of the most commonly used PHP file functions.

PHP file_exists() Function

This function is used to determine whether a file exists or not.

- It comes in handy when we want to know if a file exists or not before processing it.
- You can also use this function when creating a new file and you want to ensure that the file does not already exist on the server.

The file_exist function has the following syntax.

```
<?php
file_exists($filename);
?>
```

HERE,

- “file_exists()” is the PHP function that returns true if the file exists and false if it does not exist.
- “\$file_name” is the path and name of the file to be checked

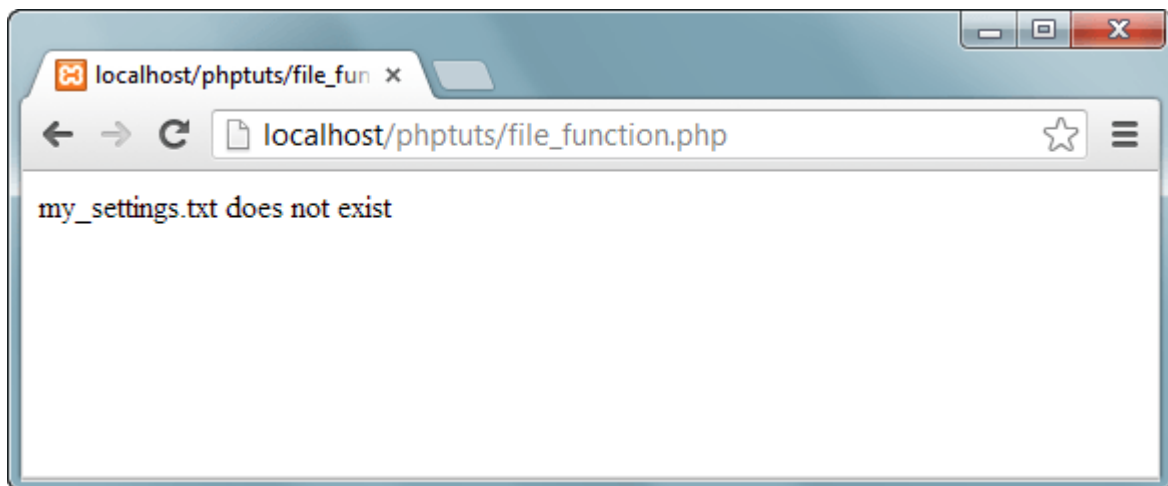
The code below uses file_exists function to determine if the file my_settings.txt exists.

```
<?php
if (file_exists('my_settings.txt'))
{
```

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```
        echo 'file found!';
    }
    else
    {
        echo 'my_settings.txt does not exist';
    }
?>
```

Save the above code in a file named file_function.php Assuming you saved the file in phptuts folder in htdocs, open the URL **http://localhost/phptuts/file_function.php** in your browser You will get the following results.



PHP fopen() Function

The fopen function is used to open files. It has the following syntax

```
<?php
fopen($file_name,$mode,$use_include_path,$context);
?>
```

HERE,

- “fopen” is the PHP open file function

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- “\$file_name” is the name of the file to be opened
- “\$mode” is the mode in which the file should be opened, the table below shows the modes

Mode	Description
r	<ul style="list-style-type: none">• Read file from beginning.• Returns false if the file doesn't exist.• Read only
r+	<ul style="list-style-type: none">• Read file from beginning• Returns false if the file doesn't exist.• Read and write
w	<ul style="list-style-type: none">• Write to file at beginning• truncate file to zero length• If the file doesn't exist attempt to create it.• Write only
w+	<ul style="list-style-type: none">• Write to file at beginning, truncate file to zero length• If the file doesn't exist attempt to create it.• Read and Write
a	<ul style="list-style-type: none">• Append to file at end• If the file doesn't exist attempt to create it.• Write only
a+	<ul style="list-style-type: none">• Php append to file at end• If the file doesn't exist attempt to create it• Read and write

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- “\$use_include_path” is optional, default is false, if set to true, the function searches in the include path too.
- “\$context” is optional, can be used to specify the context support.

PHP fwrite() Function

The fwrite function is used to write files.

It has the following syntax

```
<?php  
fwrite($handle, $string, $length);  
?>
```

HERE,

- “fwrite” is the PHP function for writing to files
- “\$handle” is the file pointer resource
- “\$string” is the data to be written in the file.
- “\$length” is optional, can be used to specify the maximum file length.

PHP fclose() Function

The fclose() function is used to close a file in php which is already open

It has the following syntax.

```
<?php  
fclose($handle);  
?>
```

HERE,

- “fclose” is the PHP function for closing an open file
- “\$handle” is the file pointer resource.

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Let's now look at an example that creates my_settings.txt.

We will use the following functions.

- Fopen
- Fwrite
- fclose

The code below “create_my_settings_file.php” implements the above example.

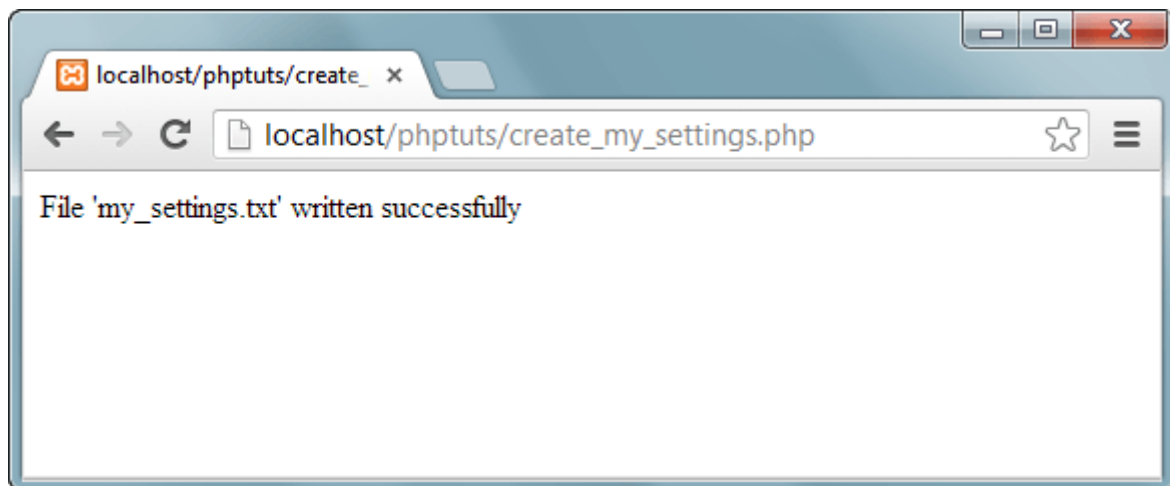
Open a file	<pre><?php \$fh = fopen("my_settings.txt", 'w') or die("Failed to create file"); ?></pre>
Closing a file	<pre><?php fclose(\$fh); ?></pre>
Create File	<pre><?php \$fh = fopen("my_settings.txt", 'w') or die("Failed to create file"); \$text = <<<_END localhost;root;pwd1234;my_database _END; fwrite(\$fh, \$text) or die("Could not write to file"); fclose(\$fh); echo "File 'my_settings.txt' written successfully"; ?></pre>

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Testing the code

Open the URL **`http://localhost/phptuts/create_my_settings.php`** in your browser.

You will get the following page



Note: if your disk is full or you do not have permission to write files, you will get an error message.

Switch back to the URL **`http://localhost/phptuts/file_function.php`** .

What results do you get?

PHP fgets() Function

The fgets function is used to read php files line by line. It has the following basic syntax. fgets(\$handle); HERE,

- “\$fgets” is the PHP function for reading file lines
- “\$handle” is the file pointer resource.

Let’s now look at an example that reads my_settings.txt file using the fopen and fgets functions.

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The code below read_my_settings.php implements the above example.

```
<?php
$fh = fopen("my_settings.txt", 'r') or die("File does not exist or
you lack permission to open it");
$line = fgets($fh);
echo $line; fclose($fh);
?>
```

HERE,

- “fopen” function returns the pointer to the file specified in the file path
- “die()” function is called if an error occurs. It displays a message and exists execution of the script

PHP copy() Function

The PHP copy function is used to copy files. It has the following basic syntax.
copy(\$file,\$copied_file); HERE,

- “\$file” specifies the file path and name of the file to be copied.
- “copied_file” specified the path and name of the copied file

The code below illustrates the implementation

```
<?php
copy('my_settings.txt',      'my_settings_backup.txt')      or
die("Could not copy file");
echo "File successfully copied to 'my_settings_backup.txt'";
?>
```

Deleting a file

The unlink function is used to delete the file. The code below illustrates the implementation.

```
<?php
if (!unlink('my_settings_backup.txt'))
{
    echo "Could not delete file";
}
else
{
    echo "File 'my_settings_backup.txt' successfully deleted";
}
?>
```

PHP file_get_contents() Function

The file_get_contents function is used to read the entire file contents.

The code below illustrates the implementation.

The difference between file_get_contents and fgets is that file_get_contents returns the file data as a string while fgets reads the file line by line.

```
<?php
echo "<pre>"; // Enables display of line feeds
echo file_get_contents("my_settings.txt");
echo "</pre>"; // Terminates pre tag
?>
```

Summary

- A file is a resource for storing data

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- PHP has a rich collection of built in functions that simplify working with files.
- Common file functions include fopen, fclose, file_get_contents
- The table below shows a summary of the functions covered

Function	Description
File_exists	Used to determine if a file exists or not
Fopen	Used to open a file. Returns a pointer to the opened file
Fwrite	Used to write to files
Fclose	Used to open closed files
Fgets	Used to read a file line by line
Copy	Used to copy an existing file
Unlink	Used to delete an existing file
file_get_contents	Used to return the contents of a file as a string