Chapter 4: Functions

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User Defined Functions

A function is a block of statements that can be used repeatedly in a program. A function will not execute immediately **when a page loads.** A function will be executed by a **call to the function.**

- Once defined, functions **can be called from anywhere**
- Once defined, functions **can't be redefined**

Syntax:

```
function functionName() {
    code to be executed;
}
```

```
<?php
        function say_hello(){
            echo "Hello world!";
        }
        // call the function
        say_hello();
?>
```

Function Arguments

You can **add many arguments**, just separate them with **,**
Functions **must be called** with the **same number of arguments** as were defined.
A variable can be passed as an argument (passing by value)

```
<?php
        function say_hello2($word){
            echo "Hello " . $word;
        }
        // call the function

        $var = "Everyone !" ;
        say_hello2($var);
?>
```

Default Argument Value

If we call the function **say_hello3()** without arguments it takes the default value (World) as argument.

```
<?php
        function say_hello3($word = "World " ){
            echo "Hello " . $word;
        }

        $var = "Everyone !" ;
        say_hello3($var); // call the function with a value
        say_hello3(); // call the function with the default value
?>
```

Functions - Returning values

To let a function return a value, use the return statement:

```
<?php
        function add($var1, $var2 ){
                $result = $var1 + $var2 ;
                return $result;
        }

        echo "5 + 10 = " . add(5, 10) . "<br/>";
?>
```

PHP - Include Files

The **include** (or **require**) statement takes all the text/code/markup that exists in the specified file and copies it into the file that uses the include statement.

Including files is **very useful** when you want **to include the same PHP**, HTML, or text on **multiple pages** of a website.

```
include 'filename';

or

require 'filename';
```

include vs. require

The include and require statements are identical, except upon failure:

- **require** will produce a fatal error **(E_COMPILE_ERROR)** and stop the script

- **include** will only produce a warning **(E_WARNING)** and the script will continue

If you want the execution to go on and show users the output, even if the include file is missing, use the include statement.

Example

Example of footer file called "**footer.php**“

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

To include the footer file in a page:

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

Questions?