

PENGEMBANGAN APLIKASI WEB MANAJEMEN INFORMATIKA

MODUL PRAKTIKUM 1 REVIEW SINTAKS PEMROGRAMAN DASAR PHP

PHP merupakan salah satu script code yang dapat kita gunakan untuk membuat dinamisasi (memprogram) pada sebuah halaman web. Ketika kita menggunakan php sebagai bahasa pemrograman halaman web, maka sebuah halaman web pada umumnya tersusun atas sintaks html, css, javascript, dan php. Perlu diketahui agar halaman web yang mengandung sintaks php dapat diterjemahkan (oleh server) maka simpanlah file code kita sebagai .php.

Untuk mendukung praktikum ini silahkan kita install webserver local masing-masing menggunakan xampp (download di sini ya <https://www.apachefriends.org/download.html> , pastikan download yang terbaru dan **sudah stable**).

```
<?php //tag pembuka script php  
  
//scrip code php anda ...  
  
?> //tag penutup script php
```

Berikut contoh menuliskan Hello World pada halaman web yang kita buat

```
<!DOCTYPE html>  
<html>  
<body>  
  
<?php  
echo "Hello World";  
?>  
  
</body>  
</html>
```

Selanjutnya untuk praktikum ini kita akan mengacu pada www.w3schools.com

BAGIAN A. Tipe data pada PHP (https://www.w3schools.com/php/php_datatypes.asp)

PHP supports the following data types:

- String
- Integer (non-decimal number between -2,147,483,648 and 2,147,483,647.)
- Float (floating point numbers - also called double)
- Boolean
- Array
- Object
- NULL
- Resource

An array stores multiple values in one single variable.

```
<?php
$cars = array("Volvo", "BMW", "Toyota");
var_dump($cars);
Print_r($cars)
?>
```

An object is a data type which stores data and information on how to process that data. In PHP, an object must be explicitly declared.

```
<?php
class Car {
    function Car() {
        $this->model = "VW";
    }
}

// create an object
$herbie = new Car();

// show object properties
echo $herbie->model;
?>
```

The special resource type is not an actual data type. It is the storing of a reference to functions and resources external to PHP. A common example of using the resource data type is a database call. We will not talk about the resource type here, since it is an advanced topic.

BAGIAN B. Seleksi Kondisi pada PHP (if else dengan switch case)

https://www.w3schools.com/php/php_if_else.asp

```
if (condition) {  
    code to be executed if this condition is true;  
} elseif (condition) {  
    code to be executed if first condition is false and this condition is  
true;  
} else {  
    code to be executed if all conditions are false;  
}
```

```
<?php  
$t = date("H");  
  
if ($t < "10") {  
    echo "Have a good morning!";  
} elseif ($t < "20") {  
    echo "Have a good day!";  
} else {  
    echo "Have a good night!";  
}  
?>
```

https://www.w3schools.com/php/php_switch.asp

```
switch (n) {  
    case label1:  
        code to be executed if n=label1;  
        break;  
    case label2:  
        code to be executed if n=label2;  
        break;  
    case label3:  
        code to be executed if n=label3;  
        break;  
    ...  
    default:  
        code to be executed if n is different from all labels;  
}
```

```
<?php  
$favcolor = "red";  
  
switch ($favcolor) {  
    case "red":  
        echo "Your favorite color is red!";  
        break;
```

```
case "blue":  
    echo "Your favorite color is blue!";  
    break;  
case "green":  
    echo "Your favorite color is green!";  
    break;  
default:  
    echo "Your favorite color is neither red, blue, nor green!";  
}  
?>
```

BAGIAN C. Perulangan Kondisi (looping) pada PHP

https://www.w3schools.com/php/php_looping.asp

In PHP, we have the following loop types:

while - loops through a block of code as long as the specified condition is true

do...while - loops through a block of code once, and then repeats the loop as long as the specified condition is true

for - loops through a block of code a specified number of times

foreach - loops through a block of code for each element in an array

```
while (condition is true) {  
    code to be executed;  
}
```

```
<?php  
$x = 1;  
  
while($x <= 5) {  
    echo "The number is: $x <br>";  
    $x++;  
}  
?>
```

\$x = 1; - Initialize the loop counter (\$x), and set the start value to 1

\$x <= 5 - Continue the loop as long as \$x is less than or equal to 5

\$x++; - Increase the loop counter value by 1 for each iteration

```
do {  
    code to be executed;  
} while (condition is true);
```

```
<?php  
$x = 1;  
  
do {  
    echo "The number is: $x <br>";  
    $x++;  
} while ($x <= 5);  
?>
```

```
for (init counter; test counter; increment counter) {  
    code to be executed for each iteration;  
}
```

```
<?php
for ($x = 0; $x <= 10; $x++) {
    echo "The number is: $x <br>";
}
?>
```

```
foreach ($array as $value) {
    code to be executed;
}
```

contoh 1 (foreach)

```
<?php
$colors = array("red", "green", "blue", "yellow");

foreach ($colors as $value) {
    echo "$value <br>";
}
?>
```

contoh 2 (foreach)

```
<?php
$page = array("Peter"=>"35", "Ben"=>"37", "Joe"=>"43");

foreach($page as $x => $val) {
    echo "$x = $val<br>";
}
?>
```

Break dan Continue

The break statement can also be used to jump out of a loop.

```
<?php
for ($x = 0; $x < 10; $x++) {
    if ($x == 4) {
        break;
    }
    echo "The number is: $x <br>";
}
?>
```

The continue statement breaks one iteration (in the loop), if a specified condition occurs, and continues with the next iteration in the loop.

```
<?php
$x = 0;

while($x < 10) {
    if ($x == 4) {
```

```
    $x++;  
    continue;  
}  
echo "The number is: $x <br>";  
$x++;  
}  
?>
```

BAGIAN D. Fungsi pada PHP

https://www.w3schools.com/php/php_functions.asp

PHP has over 1000 built-in functions that can be called directly, from within a script, to perform a specific task. Please check out our PHP reference for a complete overview of the PHP built-in functions.

Besides the built-in PHP functions, it is possible to create your own functions.

A function is a block of statements that can be used repeatedly in a program.

A function will not execute automatically when a page loads.

A function will be executed by a call to the function.

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

```
<?php  
function writeMsg() {  
    echo "Hello world!";  
}
```

```
writeMsg(); // call the function  
?>
```

Fungsi dapat dideklarasikan pada file kode yang sama ataupun secara terpisah, gunakan sintaks include ataupun require.

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.

[https://www.w3schools.com/php/php_includes.asp#:~:text=PHP%20Include%20Files&text=The%20include%20\(or%20require%20\)%20statement,multiple%20pages%20of%20a%20website.](https://www.w3schools.com/php/php_includes.asp#:~:text=PHP%20Include%20Files&text=The%20include%20(or%20require%20)%20statement,multiple%20pages%20of%20a%20website.)

It is possible to insert the content of one PHP file into another PHP file (before the server executes it), with the include or require statement.

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

So, if you want the execution to go on and show users the output, even if the include file is missing, use the include statement. Otherwise, in case of Framework, CMS, or a complex PHP application coding, always use the require statement to include a key file to the flow of execution. This will help avoid compromising your application's security and integrity, just in-case one key file is accidentally missing.

Including files saves a lot of work. This means that you can create a standard header, footer, or menu file for all your web pages. Then, when the header needs to be updated, you can only update the header include file.

```
include 'filename';
```

or

```
require 'filename';
```

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

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

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

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

Adapun ini contoh untuk yang require

```
</html>  
  
<html>  
<body>  
  
<h1>Welcome to my home page!</h1>  
<?php require 'noFileExists.php';  
echo "I have a $color $car.";  
?>  
  
</body>  
</html>
```

- selesai untuk pertemuan pertama.