PRAKTIKUM PEMROGRAMAN WEB 1

PHP

By. Masbahah, S.Pd., M.Pd.

D3 TEKNIK INFORMATIKA MADIUN
SEKOLAH VOKASI UNS

Kemampuan Akhir

Mahasiswa mampu menggunakan PHP dasar

Materi

- Variabel PHP
- Operator PHP
- Struktur kontrol PHP
- Array PHP

PHP

Hypertext Presprocessor merupakan bahasa script yang biasa digunakan untuk web development yang dapat diselipkan dalam HTML.

SERVER SIDE

PHP dieksekusi di lingkungan server, client hanya menerima hasil dari script yang telah dieksekusi, tanpa bisa mengetahui kode yang digunakan.

MENGAPA PHP?

BERJALAN DI PLATFORM YANG BERBEDA

Windows, Linux, Unix, dll.

FREE TO DOWNLOAD FROM THE OFFICIAL PHP

https://www.php.net/downloads.php

KOMPATIBEL DENGAN HAMPIR SEMUA SERVER

Apache, IIS, dll.

MUDAH DIPELAJARI

berjalan efisien di server side

CARA MENGGUNAKAN PHP-MYSQL

MENYIMPAN WEBPAGE
Disimpan pada "c:\xampp\htdocs\" dengan extensi file ".php"

MELIHAT FILE WEBPAGE YANG TELAH DIBUAT
Drive C -> XAMPP -> htdocs -> folder tempat menyimpan webpage

MENGAKSES WEBPAGE DI BROWSER
¡ketik url "localhost/<direktori>/<file.php>"

CARA MENGGUNAKAN PHP-MYSQL

MENGAKSES DATABASE PADA BROWSER

ketik url "localhost/phpmyadmin"

MELIHAT FILE DATABASE YANG TELAH DIBUAT

Drive C -> XAMPP -> mysql -> data -> folder tempat menyimpan database

SINTAKS DASAR PHP

Blok script PHP bisa diletakkan dibagian manapun pada dokumen. Script PHP ditandai dengan sintaks

```php
<?php

?>
```

File PHP normalnya berisi tag HTML, seperti file HTML, dan beberapakode script PHP. Contoh :

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

SINTAKS DASAR PHP

Setiap baris kode PHP diakhiri dengan semicolon (;) yang berfungsi sebagai pemisah dan untuk membedakan satu instruksi dengan lainnya.

Dua statemen dasar untuk menampilkan output PHP : echo dan print

```
<html>
    <body>
        <?php    echo "Hello World";
                 print "<h2>PHP is Fun!</h2>";    ?>
    </body>
</html>
```

KOMENTAR

SINGLE-LINE

// single-line comment

SINGLE-LINE

single-line comment

MULTIPLE-LINE

/*
This is a multiple-lines
comment block
*/

VARIABEL PHP

- Variabel php dimulai dengan simbol $
- Variabel php bisa berupa string, number, atau array

Aturan penamaan variabel :

- Karakter pertama harus huruf atau underscore "_"
- Variabel hanya bisa mengandung karakter alpha, numeric dan underscore (a-Z, 0-9, dan _)
- Variabel yang mengandung lebih dari satu kata sebaiknya dipisahkan dengan underscore ($my_string), atau dengan huruf besar ($myString)

Contoh script PHP yang menugaskan string "Hello World" ke variabel $txt :

```php
<html>
    <body>
        <?php  $txt = "Hello World";
                echo $txt;   ?>
    </body>
</html>
```

Contoh penggabungan dua/lebih variabel menggunakan operator dot (.)

```php
<html>
    <body>
        <?php     $txt1 = "Hello World";
                  $txt2 = "1234";
                   echo $txt1." ".$txt2;       ?>
    </body>
</html>
```

PHP OPERATORS

Arithmetic Operators

Operator	Name	Example	Result
+	Addition	$x + $y	Sum of $x and $y
-	Subtraction	$x - $y	Difference of $x and $y
*	Multiplication	$x * $y	Product of $x and $y
/	Division	$x / $y	Quotient of $x and $y
%	Modulus	$x % $y	Remainder of $x divided by $y
**	Exponentiation	$x ** $y	Result of raising $x to the $y'th power

PHP OPERATORS

Assignment Operators

Assignment	Same as...	Description
x = y	x = y	The left operand gets set to the value of the expression on the right
x += y	x = x + y	Addition
x -= y	x = x - y	Subtraction
x *= y	x = x * y	Multiplication
x /= y	x = x / y	Division
x %= y	x = x % y	Modulus

PHP OPERATORS

Comparison Operators

Operator	Name	Example	Result
==	Equal	$x == $y	Returns true if $x is equal to $y
===	Identical	$x === $y	Returns true if $x is equal to $y, and they are of the same type
!=	Not equal	$x != $y	Returns true if $x is not equal to $y
<>	Not equal	$x <> $y	Returns true if $x is not equal to $y
!==	Not identical	$x !== $y	Returns true if $x is not equal to $y, or they are not of the same type
>	Greater than	$x > $y	Returns true if $x is greater than $y
<	Less than	$x < $y	Returns true if $x is less than $y
>=	Greater than or equal to	$x >= $y	Returns true if $x is greater than or equal to $y
<=	Less than or equal to	$x <= $y	Returns true if $x is less than or equal to $y
<=>	Spaceship	$x <=> $y	Returns an integer less than, equal to, or greater than zero, depending on if $x is less than, equal to, or greater than $y. Introduced in PHP 7.

PHP OPERATORS

Increment / Decrement Operators

Operator	Name	Description
++$x	Pre-increment	Increments $x by one, then returns $x
$x++	Post-increment	Returns $x, then increments $x by one
--$x	Pre-decrement	Decrements $x by one, then returns $x
$x--	Post-decrement	Returns $x, then decrements $x by one

PHP OPERATORS

Logical Operators

Operator	Name	Example	Result
and	And	$x and $y	True if both $x and $y are true
or	Or	$x or $y	True if either $x or $y is true
xor	Xor	$x xor $y	True if either $x or $y is true, but not both
&&	And	$x && $y	True if both $x and $y are true
||	Or	$x || $y	True if either $x or $y is true
!	Not	!$x	True if $x is not true

PHP OPERATORS

String Operators

Operator	Name	Example	Result
.	Concatenation	$txt1 . $txt2	Concatenation of $txt1 and $txt2
.=	Concatenation assignment	$txt1 .= $txt2	Appends $txt2 to $txt1

PHP OPERATORS

Array Operators

Operator	Name	Example	Result
+	Union	$x + $y	Union of $x and $y
==	Equality	$x == $y	Returns true if $x and $y have the same key/value pairs
===	Identity	$x === $y	Returns true if $x and $y have the same key/value pairs in the same order and of the same types
!=	Inequality	$x != $y	Returns true if $x is not equal to $y
<>	Inequality	$x <> $y	Returns true if $x is not equal to $y
!==	Non-identity	$x !== $y	Returns true if $x is not identical to $y

PHP OPERATORS

Conditional Assignment Operators

Operator	Name	Example	Result
?:	Ternary	$x = expr1 ? expr2 : expr3	Returns the value of $x. The value of $x is expr2 if expr1 = TRUE. The value of $x is expr3 if expr1 = FALSE
??	Null coalescing	$x = expr1 ?? expr2	Returns the value of $x. The value of $x is expr1 if expr1 exists, and is not NULL. If expr1 does not exist, or is NULL, the value of $x is expr2. Introduced in PHP 7

Statemen Kondisional

if...elseif...else Statemen

```
<html>
    <body>
        <?php
            $d=date("D");
            if ($d=="Fri") {
                echo "Have a nice weekend!";
            } else  {
                echo "Have a nice day!";
            }
        ?>
    </body>
</html>
```

```
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;
}
```

```
<html>
    <body>
        <?php
        switch ($x) {
            case 1:
                echo "Number 1";
                break;
            case 2:
                echo "Number 2";
                break;
            case 3:
                echo "Number 3";
                break;
            default:
                echo "No number between 1 and
                3";
        }
        ?>
    </body>
</html>
```

Statemen Kondisional

switch Statement

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

PHP LOOPS

WHILE LOOP

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

FOR LOOP

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

DO...WHILE LOOP

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

FOREACH LOOP

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

ARRAY

- Array dapat menyimpan satu atau lebih nilai pada satu nama variabel.
- Terdapat tiga tipe array yaitu :
  - Numeric array – array dengan indeks numerik
  - Associative array – array dengan indeks yang berasosiasi dg nilai
  - Multidimensional array – array yang mengandung lebih dari 1 array

Array Numerik

Menyimpan elemen dengan indeks berupa angka/numerik.

```
$name = array("Putri","Cici","Yusuf");
```

```
$name[0] = "Putri";
$name[1] = "Cici";
$name[2] = "Yusuf";
```

Array Numerik

```php
<html>
    <body>
        <?php
            $name[0] = "Putri";
            $name[1] = "Cici";
            $name[2] = "Yusuf";
            echo $name[0] . " & " . $name[1] . " adalahteman kerja ".
            $name[2];
        ?>
    </body>
</html>
```

Array Asosiatif

```php
$age = array( "Putri" => 32, "Cici" => 30, "Yusuf" => 34 );
```

```php
$age['Putri'] = "32";
$age['Cici'] = "30";
$age['Yusuf'] = "34";
```

Array Asosiatif

```php
<html>
    <body>
        <?php
            $age['Putri'] = "32";
            $age['Cici'] = "30";
            $age['Yusuf'] = "34";
            echo "UmurPutri, Cici, dan Yusuf adalah "
            . $age['Putri'] . " , ". $age['Cici'] . ", dan " . $age['Yusuf'];
        ?>
    </body>
</html>
```

Array Multidimensi

```
$families = array(
    "Griffin"=>array(
        "Peter",
        "Lois",
        "Megan",
        "Chris"
    ),
    "Quagmire"=>array(
        "Glenn"
    ),
    "Brown"=>array(
        "Cleveland",
        "Loretta",
        "Junior"
    )  );
```

TERIMA KASIH