

Server Side (PHP5)

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Sejarah PHP

- Rasmus Lerdorf (1995)
- PHP (Personal Homepage)
- PHP3 (1998)
- Zeev Suraski and Andi Gutmans (Zend)
- PHP4 (2000) Menjadi sangat populer di web
- Berkembang ke OOP (Java, C#, VB.NET)
- Maka munculah PHP5 yang support OOP

Apa yang baru pada PHP5 ?

- New and improved MySQL extension
- PHP 5 bundles SQLite
- SimpleXML extension (XML)
- Iterators and SPL
- Error Handling and Debugging
- Streams, Filters, and Wrappers

Apa yang perlu diinstall ?

- Web Server (Apache, IIS)
- PHP5 Module
- Database Server (MySQL, PostgreSQL)
- Apache2Triad
- Sokkit v4.0
- Editor (Edit Plus / Zend Studio)

Deklarasi Konstanta

```
<?  
    define("USERNAME","Erick");  
    echo "User Name :".USERNAME;  
?>
```

Deklarasi Variabel

<?

```
$testing = 5; //integer  
echo gettype($testing);  
$testing = "five"; //string  
echo gettype($testing);  
$testing = 5.0; //double  
echo gettype($testing);  
$testing = true; //boolean  
echo gettype($testing);
```

?>

Casting

<?

```
$varumum = 3.14;
```

```
$vardouble = (double)$varumum;
```

```
echo gettype($vardouble); //double
```

```
$varstring = (string)$varumum;
```

```
echo gettype($varstring); //string
```

?>

Operator

- Arithmetic (+, -, *, /)
- Concatenation (.)
- Assignment (+=, -=, /=, *=, %=, .=)
- Comparison (==, !=, >, <, >=, <=)
- Logical (||, &&, !)

If Statement

```
<?
$mood = "sad";
if ($mood == "happy"){
    echo "Anda dalam keadaan senang !";
}elseif($mood == "sad"){
    echo "Wah anda susah ya !";
}else{
    echo "Tdk senang jg tdk susah tapi $mood";
}
?>
```

Switch Statement

```
<?
$mood = "sad";
  switch($mood) {
    case "happy":
      echo "Mood anda bagus !";
      break;
    case "sad":
      echo "Mood anda sedang jelek...";
      break;
    default:
      echo "Mood anda $mood";
  } ?>
```

While Statement

```
<?
$counter = 1;
while($counter<=12){
echo "$counter kali 2 adalah "
    .("$counter*2")."<br>";
    $counter++;
}
?>
```

Do Statement

```
<?  
$num=201;  
do{  
    echo ("Execution number: $num<br>\n");  
    $num++;  
}while($num>200 && $num<400);  
?>
```

For Statement

```
<?
  for($counter=1;$counter<=12;$counter++){
    echo "$counter kali 2 adalah : "
    .($counter*2)."<br>";
  }
?>
```

Break Statement

```
<?
$counter=1;
while($counter<10){
  if($counter==5){
    echo "berhenti jika counter bernilai 5
    <br>";
    break;
  }
  echo $counter."<br>";
  $counter++;
}
?>
```

Continue Statement

```
<?  
  for($counter=1;$counter<=10;$counter++){  
    if($counter==5) continue;  
    echo "counter bernilai:  
$counter<br>";  
?  
>
```

Penggunaan Function

```
<? //functionbyvalue.php
function tax($salary){ //definisi
    $salary = $salary-((($salary/100)*20);
    return $salary;
}
$salary = 2000;
echo tax($salary); //hasil 1600
echo $salary; //hasil 2000
?>
```

Function Passing by Reference

```
<? //functionbyreference.php
function tax(&$salary){ //definisi
    $salary = $salary-(($salary/100)*20);
    return $salary;
}
$salary = 2000;
echo tax($salary); //hasil 1600
echo $salary; //hasil 1600
?>
```

Setting default parameter function

```
<?  
function tax($salary=2000){ //definisi  
    $salary = $salary-(($salary/100)*20);  
    return $salary;  
}  
echo tax(); ?>
```

Scope Variable

```
<?
$welcomemessage = "Hello World"; //global
function translate(){
    $welcomemessage = "Halo Dunia"; //local
    echo $welcomemessage;
}
translate();
echo $welcomemessage;
?>
```

Scope Variable

```
<? //scopevariable.php
$welcomemessage = "Hello World"; //global
function translate(){
    global $welcomemessage; //global
    $indmessage = "Halo Dunia";
    echo $welcomemessage;
    $welcomemessage = $indmessage;
}
translate();
echo $welcomemessage;
?>
```

Nesting Function

```
<? //nestingfunction.php
function pension($total){
    function tax($salary){
        return $salary - (($salary/100)*20);
    }
    $posttax = tax($total);
    return tax(tax($total)-($posttax/100)*3);
}
$total = 2000;
echo pension($total);
?>
```

Array

- Mendefinisikan array dengan array() function
`$users = array("tom", "sharon", "jhon", "hary");`

- Dengan array identifier

```
$user[] = "tom"; $user[] = "sharon";  
$user[] = "jhon"; $user[] = "hary";
```

- Contoh penggunaan array

```
<? //foreach.php  
$user= array("tom", "bert", "sharon", "jhon");  
foreach ($user as $key=>$value){  
    echo "Array Ke-".$key." isinya:  
    ".$value."<br>"; }  
?>
```

Statement While List

```
<? //whilelist.php
$user=
    array(nama=>"bob",occupation=>"programmer",
    age=>30,hobby=>"swimming");
while(list($index,$value) = each($user)){
    echo $index." : ".$value."<br>";
}
?>
```

Fungsi Dalam Array

- implode -> menggabungkan array menjadi string
- explode -> memecah string menjadi array
- sort() -> mengurutkan array scr asc
- rsort() -> mengurutkan array scr desc
- ksort() -> mengurutkan index string array scr asc
- array_pop() -> menghapus array dr urutan terakhir
- array_push() -> menambah array

Contoh Penggunaan Array

```
<? //explodeimplode.php
$city[0]="Jogja";
$city[1]="Bandung";
$city[3]="Surabaya";
$strgabung = implode("-", $city);
echo "Stlh digabung: ".$strgabung."<br>";
$cityarray = explode("-", $strgabung);
foreach ($cityarray as $key=>$value){
    echo "Array ke-".$key." = ".$value."<br>";
}
?>
```

Mengambil data dari Form (HTML)

```
//formuser.php
```

```
<html><body>
```

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

```
Nama: <input type="text" name="nama"><br>
```

```
Alamat: <input type="text" name="alamat"><br>
```

```
Password: <input type="password"  
name="password"><br>
```

```
Jenis Kelamin Anda adalah :
```

```
<input name="gender" type="radio"  
value="Laki-laki">Laki-laki
```

```
<input name="gender" type="radio"  
value="Perempuan">Perempuan<br>
```

Mengambil data dari Form (HTML)

Hobi Anda Adalah :


```
<input name="hobi[]" type="checkbox" value="membaca">Membaca<br>
```

```
<input name="hobi[]" type="checkbox" value="berenang">Berenang<br>
```

```
<input name="hobi[]" type="checkbox" value="tennis">Tennis<br>
```

Presiden Pilihan Anda :

```
<select name="pilihan" >
```

```
<option value="SBY-Kalla">No 1</option>
```

```
<option value="Mega-Hasyim">No 2</option>
```

```
</select><br>
```

Mengambil data dari Form (HTML)

```
Keterangan :<br><textarea  
  name="keterangan"></textarea><br>  
<input type="submit"> <input type="reset">  
</form>  
</body></html>
```

Mengambil data dari Form (PHP)

```
<? //lihat.php
echo "<html></body>"; //file lihat.php
if (empty($_POST["nama"])) $ket.="nama masih
    kosong,";
if (empty($_POST["password"])) $ket.="password
    masih kosong,";
if (empty($_POST["hobi"])) $ket.="hobi masih
    kosong,";
if (empty($_POST["alamat"])) $ket.="alamat
    masih kosong,";
if (empty($_POST["gender"])) $ket.="gender
    masih kosong,";
if (empty($_POST["pilihan"])) $ket.="pilihan
    masih kosong";
```

Mengambil data dari Form (PHP)

```
if (empty($_POST["keterangan"]))
    $ket.="keterangan masih kosong";
if (isset($ket)){
    echo "Error :".$ket;
    exit;
}
echo "Jadi nama anda:
    ".$_POST["nama"]."<br>";
echo "Alamat anda: ".$_POST["alamat"]."<br>";
echo "Password anda:
    ".$_POST["password"]."<br>";
echo "Jenis Kelamin anda:
    ".$_POST["gender"]."<br>";
echo "Hobi anda adalah: <br>";
```

Mengambil data dari Form (PHP)

```
foreach($_POST["hobi"] as $key=>$value){
    echo "Hobi ke-" . $key . " = " . $value . "<br>";
}
echo "Presiden pilihan anda:
    " . $_POST["pilihan"] . "<br>";
echo "Keterangan : " . $_POST["keterangan"];
echo "</body></html>";
?>
```

Jika register global ditutup ?

- Maka kita tidak bisa melewati variabel secara langsung
- `$_GET["varname"]`
- `$_POST["varname"]`
- `$_SESSION["varname"]`
- `$_COOKIE["varname"]`
- `$_REQUEST["varname"]`
- `$_FILES["varname"]`

Penggunaan Session (HTML)

```
<html><body>  
<form action="prosesession.php"  
  method="POST">  
User Name :<input type="text"  
  name="username"><br>  
Password :<input type="password"  
  name="password"><br>  
<input type="submit">  
</form>  
</body></html>
```

Penggunaan Session (PHP)

```
<? //prosessession.php
session_start();
$username = $_POST["username"];
$password = $_POST["password"];
if ($username=="erick" &&
    $password=="webdb") {
    $_SESSION["user"] = $username;
    header("Location: berhasillogin.php");
}else {
    echo "Maaf anda gagal melakukan login";
}
?>
```

Penggunaan Session (PHP)

```
<? //berhasillogin.php
session_start();
if (isset($_SESSION["user"])){
    echo "Selamat datang ".$SESSION["user"]."
    anda berhasil login<br>";
    echo "<a href='logout.php'>logout</a>";
}else {
    echo "Maaf anda tidak berhak mengakses
    halaman ini !";
}
?>
```

Penggunaan Session (PHP)

```
<? //logout.php  
session_start();  
session_unset();  
session_destroy();  
header("Location: formsession.html");  
?>
```

Cookies

```
<? //setcookie.php
setcookie("username[one]","erick",time()+60);
setcookie("username[two]","jhon",time()+60);
setcookie("username[three]","bart",time()+60);
echo "Cookie telah diset... <a
    href='lihatcookie.php'>cookie</a>";
?>
```

Cookies

```
<? //lihatcookie.php
echo "Cookie yang telah dikirimkan: <br>";
if (isset($_COOKIE["username"])){
    while(list($index,$value) =
        each($_COOKIE["username"])){
        echo "Nama Ke-".$index." =
        ".$value."<br>";
    }
}
?>
```

Penggunaan Header Authentication

```
<? //headerauth.php
if(!isset($PHP_AUTH_USER)){
    header("WWW-Authenticate: Basic realm=\"My
    Realm\"");
    header("HTTP/1.0 401 Unauthorized");
    echo("Text to send if user hits Cancel
    button\n");
    exit;
}else {
    echo "<p>Hello $PHP_AUTH_USER</p>";
    echo "<p>You entered $PHP_AUTH_PW as
    pwd</p>";
} ?>
```

Penggunaan Regular Expression

```
<? //mengecek apakah ada kata php
    (regex1.php)
if (preg_match ("/php/i", "PHP is the web
    scripting language")) {
    print "A match was found."."<br>";
} else {
    print "A match was not found.";
}
?>
```

Penggunaan preg_match

```
<?
//menghasilkan matches was not found (regex2.php)
if (preg_match ("/\bweb\b/i", "PHP is the website
    scripting language of choice.)) {
    print "A match was found.<br>";
} else {
    print "A match was not found.<br>";
}
//menghasilkan match was found (regex3.php)
if (preg_match ("/\bweb\b/i", "PHP is the web
    scripting language of choice.)) {
    print "A match was found.";
} else {
    print "A match was not found.";
} ?>
```

Penggunaan preg_grep

```
<? //contoh penggunaan preg_grep
    (pregrep.php)
$array = array(1.2,1.3,1.4,1.5);
$f1_array = preg_grep ("/^(\d+)?\.\d+$/",
    $array);
foreach($f1_array as $key=>$value){
    echo "Array ke-".$key." ".$value."<br>";
}
?>
```

Penggunaan preg_split

```
<? //pregsplit.php
$kata = "Erick Kurniawan S.Kom";
$arrkata = preg_split("/[\s( )]+/", $kata);
foreach($arrkata as $key=>$val){
    echo $val."<br>";
}
?>
```

Bekerja Dengan Files

```
<? //file.php
function outputFileTestInfo($f){
    if (!file_exists($f)){
        echo "$f doesn't exist<br>";
        exit();
    }
    echo "$f is ".(is_file($f)?"":"not ")."a
    file<br>";
    echo "$f is ".(is_dir($f)?"":"not ")."a
    directory<br>";
    echo "$f is ".(is_readable($f)?"":"not
    ")."readable<br>";
```

Bekerja Dengan Files

```
echo "$f is ".(is_writable($f)?"":"not  
  ")."writable<br>";  
echo "$f is ".(is_executable($f)?"":"not  
  ")."executable<br>";  
echo "$f is ".(filesize($f))." bytes<br>";  
echo "$f was accessed on ".date("D d M y g:i  
  A",fileatime($f))."<br>";  
echo "$f was modified on ".date("D d M y g:i  
  A",filemtime($f))."<br>";  
echo "$f was changed on ".date("D d M y g:i  
  A",filectime($f));  
}  
$file="test.txt";  
outputFileTestInfo($file); ?>
```

Membaca Data Dari Files

```
<? //bacafile.php
$filename="test.txt";
$fp = fopen($filename,"r")or die("Couldn't
    open $filename");
while(! feof($fp)){
    $line = fgets($fp,1024);
    echo "$line<br>";
}
?>
```

Menulis Data Ke Files

```
<? //tulisfile.php
$filename="test.txt";
print "Writing to $filename<br>";
$fp = fopen($filename,w) or die("Couldn't
    open $filename");
fwrite($fp,"Hello World \n");
fclose($fp);
print "Appending to $filename<br>";
$fp = fopen($filename,"a") or die("Couldn't
    open $filename");
fputs($fp,"And another thing\n");
fclose($fp);
?>
```

Upload Files

```
<? //upload.php
$archive_dir="./docs";
function UploadFile(){
    global $archive_dir;
    $userfile=$_FILES["userfile"];
    $filename = basename($userfile["name"]);
    if ($userfile["size"]<=0) die("$filename is
empty");
    if
    (!@copy($userfile["tmp name"],"$archive dir
/$filename"))
    die("Can't copy ".$userfile["name"]." to
$filename");
```

Upload Files

```
@chmod($archive_dir/$filename,0755);
  echo "$filename has been successfully
  uploaded<br>";
  echo "Filesize :
  ".number_format($userfile["size"])."<br>";
  echo "Filetype :
  ".$userfile["type"]."<br>";
}
if ($_POST["action"]=="upload"){
  UploadFile();
}else {
?>
```

Upload Files

```
<html><body>
<form method="POST" ENCTYPE="MULTIPART/FORM-
  DATA" action="<?=$PHP_SELF?>">
Upload File : <input type="file"
  name="userfile">
<input type="submit" name="action"
  value="upload">
</form>
<body></html>
<?
}
?>
```