

Date 14/12/18
Page

⇒ PHP stands for Personal home Page
or PHP ; hypertext Preprocessor.

⇒ PHP is server side, HTML embedded, open source scripting language,

⇒ PHP file Components

i] HTML Tags.

ii] simple Text

iii] PHP Scripts

⇒ PHP file extensions

- .php
- .PHTML
- .PHP3.

⇒ Benefits of Using PHP :-

- It is open source, one can download PHP source from official website WWW.php.NET
- It is compatible with different operating like :- Windows, linux, unix.
- It is compatible with different web servers like :- IIS, Apache etc.
- Great backend support of different RDBMS like :- MySQL, oracle etc.
- It is easy to learn.

PHP Versions:

- (i) PHP 4.2.0 → Parser Problem (for form interpreter)
- (ii) PHP 3 → Object oriented programming / Dynamic
- (iii) PHP 4
- (iv) PHP 5 → full support object oriented programming

⇒ To start a PHP

Ubuntu
Desh home

netbeans 7.0 → file → new proj → choose proj

⇒ Datatypes in PHP

Integer, Double, String, Array, Object,
Boolean.

Note:- (Character datatype is not in php).

⇒ Form Variables

Variables names must start with \$

Eg \$Var1 = 20;

\$Var2 = 40;

echo "Hello students.
";

echo "aa";

⇒ For separating or next line

 and

echo nl2br ("Hello, stud 1\\n");
echo "aa";

Operations

Eg
`$var1 = 20;
$var2 = 40;
echo "Sum is", $var1 + $var2;
echo gettype($var1); // for showing
datatype`

Arrays in PHP

Three Types of Arrays:

- Numeric Array
- Associative Array
- Multidimensional Array.

1) Numeric Array

Syntax :- `$arr_var = array();`
or

`$testarr = array();`

Eg :- `$testarr[] = 10;`

" " = 20;

" " = 30;

`for ($i=0; $i<3; $i++)`

`echo $testarr[$i]. "
";`

`}`
`print_r($testarr);`

- iii) Print `var_dump` return internal structure of an array.
- iv) `Var dump` \Rightarrow return internal structure with datatype of value and size.

iii) Associative Array

Give index in the form of string.

Eg `$ testarr = array();`

`$ testarr ['a'] = 10;`

`['b'] = 20;`

`['c'] = 30;`

```
for ($i= 'a' ; $i<= 'c' ; $i++)
{
    echo $testarr[$i]. "<br>";
```

Foreach loop

This loop is to access array only for string.

`$ testarr('cici') = 10;`

`Foreach ($testarr as value)`

```
{ echo $value. "<br>"; }
```

Definition of an array

of setlets of an elements with interrelated datatypes

Multidimensional Array

```

$mulan = array (1 => array ("aaa", "bbb"),
                2 => array ("ccc", "ddd"));
for ($i=1; $i<2; $i++)
{
    for ($j=0; $j<2; $j++)
        {
            echo $mulan[$i][$j];
        }
}
Print_r($mulan);
or
Var_dump($mulan);

```

W3) Scope of Variables

- Local Variable:
- Global Variable.

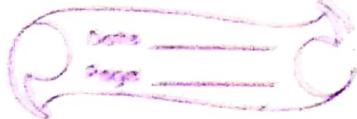
→ How to define Constant Variable in PHP.

Syntax :- define ("Var", "Val");

e.g. define ('rollno', '1618104');
echo rollno;

Note :- There is no prefix \$ sign.

, define (V1, 30)
 , define (V2, 50)



echo constant ("V1") + constant ("V2");

⇒ To check datatypes of Value.

```
$val1 = 25;  
if ($is_integer($val1))  
{  
    echo "integer";  
}  
else  
{  
    echo "unknown value";  
}
```

⇒ if (is_double , string , bool , array , object (\$val1))

iii) Communication of two pages.

Creating a form.

<body>

<form name = "form1" action = "Pg2.php">

<h1> Data Entry form </h1>

Rollno: <input type = "text" name = "t1" autoComplete = "off" />

Name: <input type = "text" name = "t2" />

<input type = "Submit" value = "display" />

<input type = "reset" value = "Cancel" />

Pg. 2. PHP

Q. PHP

```
$mo = $_REQUEST['name'];
$name = $_REQUEST['name'];
echo $mo. "<br>";
echo $nm. "<br>";
```

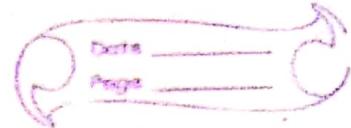
Jh

Get & Post Method

GET

POST

- It is a default method.
- It is not secure method for communication.
- Input Values appears in url querystring.
- It is not suitable for secure applications.
- There is a limit on size of data values in communication.
- It is not default one.
- It is most appropriate for secure communication.
- Input Values never appears with url querystring.
- It is suitable for secure applications as well as in secure communications.
- It allows few KB more in communication.



- Eg \$GET[...]

\$POST[...].

Conditional Statements in PHP

⇒ Simple if statement

\$a=20, \$b=40;

if(\$a < \$b):

 print "a is smaller than b";
endif;

⇒ if...else

if (\$a < \$b):

 print ("a is smaller than b");

else:

 echo "b is smaller than a";

endif;

⇒ elseif ladder

if (\$a < \$b):

 print(...);

elseif(...):

 else:

endif;

⇒ Switch Statement

\$a=11;

switch (\$temp)

Date _____
Page _____
Name _____

Case 11 :-

```
echo $a;  
break;
```

Case 12 :-

```
echo $a;  
break;
```

default :-

```
echo "Invalid choice";  
break;
```

}

```
$ a2 "abcde";  
switch ($a2)  
{
```

Case 11:

```
echo $a;
```

Case 11.30:

```
echo $a;
```

Case: "abcde";

w) Looping Statements

⇒ Syntax :- for (initialization ; Test-condition ;
increment / decrement)
{ //body
}

Def of for :- where you required finite
sets then it is used.

⇒ While () :- It is an entry control loop

```
$ i=1;  
while ($i<=10)  
{ echo $i."<br>";  
$i++;}
```

```
while ($i<=10):  
echo $i."<br>";  
$i++;  
end while;
```

do while () :- Exit Control Loop

```
$i = 2;  
do {  
    echo $i . "<br>";  
    $i++;  
} while ($i <= 10);
```

File handling in PHP

```
<Form Name = "form" action = "  
        insert.php" method = "post">  
    <h1> Enter Employee details </h1>  
    Employee No: <input type = "text" name = "txtempno" > <br>  
    Employee Name: <input type = "text" name = "txtempnm" > <br>  
    <input type = "submit" name = "btnsub" value = "Insert" >  
    <input type = "reset" value = "Cancel" >
```

Insert.php

```
<?php.  
$eno = $_POST['txtempno'];  
$enm = $_POST['txtempnm'];
```

Syntax textfile

\$fh = fopen("filename", "Op mode")

\$fh = fopen("text.dat", "w") q = read
 // write mode W, replace it

\$fh = fopen("text.dat", "a")

fwrite (\$fh, \$eno, \$str) read & write Wt,

fwrite (\$fh, \$eno, \$str, "n") read >

at

applied at

Syntax fwrite (fh, inputString)

fwrite (\$fh, \$eno, "I", \$emm);
fclose (\$fh);

file end of file
EOF

\$fh = fopen ("text.dat", "r");
while (!feof(\$fh))
{

 echo fgets(\$fh); // read char by char.

 fgets(\$fh); // read line by line

 fclose (\$fh);

Open file one time don't close
there & operation.

Put whole part of html.

& modify in form action "dele.php"

Enter read number! <input type="text"
name="texteno">

<input type = "submit" value = "delete"/>
<input type = "reset" value = "reset"/>

delete.php

<?php

\$reorno = \$_POST['xtreorno'];

\$arrvar = file('test.dat');

~~\$numrows~~

\$numrows = sizeof(\$arrvar);

\$fh = fopen("test.dat", "w");

for (\$i=0; \$i<\$numrows; \$i++)

{

if (\$i != \$reorno - 1)

{

} } fwrite(\$fh, \$arrvar[\$i]);

fclose(\$fh);

}

Operations in PHP

Def :- It is a kind of symbol it is tell to compiler to what can perform.

<?php.

1 Arithmetic :- +, -, *, /, %

2 Assignment :- =

3 Comparison / Relational :- <, <=, >, >=, ==, !=

Eg of Comparison

!=
==
↓
Identical
operator

\$a = 10; int
\$b = "10"; string
if (\$a == \$b) by using == gives datatype checking.
{ echo "Both are equal";
} else { echo "Both are not equal";
}

If (\$a != \$b)
{ Both are not equal
} else { Both are equal. }

4 Combine operator :- +=, -=, /=, *=, .=

+= . = concatenation operator.
sum = sum + 1
sum += 1.

Eg \$str1 = 'abc';
\$str2 = 'def';
\$str1 .= \$str2;
echo \$str1;

Ques. diff types of operators?
Ans. diff betw echo & die

Q
die

USA Concatenation operators :- ., , , ,

11. Increment/Decrement operators

++Var pre inc

--Var pre dec

Var++ post inc

Var-- post dec

12. Logical operators :- && (And)

|| (Or)
!

Database Connectivity with mysqli

Syntax :- \$con = mysqli_connect("server", "username", "password");

\$con = mysqli_connect("localhost", "root", "gaurav");
or die("unable to connect");

echo "Connection established successfully";
gives mysqli error

or die ("mysql error());

Creating a database // mysql_query("Create database emp2912",
\$con);

also referred as creating
mysql_select_db("emp2912", \$con) or
die("unable to select");

Create table // mysql_query("Create table
empdata (empno numeric(4) primary key,

die :-

somewhere if we fail, it should give enormous error
it should be terminated.

Date _____
Page _____

(so → create DB)

empno VARCHAR(25) " & con) OR
die (mysql_error());

14/1/19

db_conn → ~~2021~~

<?php

\$conn = mysqli_connect("localhost", "mca", "mca")
mysqli_query ("Create database a1", \$conn);
mysqli_select_db ("a1", \$conn);

index.php

<form name="frm" action="pg2.php"
method="post">
<h1> Entry form </h1>

Employee no : <input type="text" name= "txtempo" />

Employee name : <input type="text" name= "txtempn" />
 or email

Employee email : <input type="text" name= "txtemail" />

<input type="submit" Value="Submit" />

<input type="reset" Value="Cancel" />

<?php Pg2.php

\$eno = \$_POST['txtempo'];

2M

Distinguish between include & require



```
$femn = $POST['txtemm'];
$email = $POST['txtemail'];
```

Statement
also known as
function echo not require

```
include("db conn.php");
mysql_query("create table empreg(
    emn numeric(5), emm varchar(25), email
    varchar(30)");
```

```
mysql_query($conn, "insert into empreg
    Values ($.femn, '$.femn', '$.email',
    '$')");
```

```
$res = mysql_query($conn, "select * from
    empreg");
```

//echo \$res; // only for testing

```
while ($rows = mysql_fetch_array($res))
{
```

```
    echo $rows['emn']. " ". $rows['emm']
```

```
. " ". $rows['email']. "<br>";
```

(or)

```
    echo $rows[0]. " ". $rows[1]. " ". $rows[2].
    "  
";
```

~~Labwork~~ → a. design masterpage insert, upd, del, view, align value & put in textbox and textarea display for deleting using checkbox checked once it should be deleted.

Users Authentication & Authorization.

dbConnection

```
$conn = mysqli_connect("localhost", "mca", "mca");
mysqli_query($conn, "Create database a2");
mysqli_select_db($conn, "a2");
mysqli_query($conn, "Create table user(
    unm VARCHAR(10), password VARCHAR(70))");
```

index.php

```
<form name="f1" action="login-succ.php"
method="post">
<h1> Login here. </h1>
User Name : <input type="text"
name="txtunm" autocomplete="off">
Password : <input type="password" name=
"txtpwd" autocomplete="off"/>
<input type="submit" value="Submit"/>
<input type="reset" value="Cancel"/>
```

login-succ.php

```
$unm = $_POST['txtunm'];
$pwd = sha1($_POST['txtpwd']);
include "dbconn.php";
mysql_query($conn, "insert into
users(unm, pwd) values('$unm', '$pwd')");
```

~~\$encpwd = md5(\$userpwd);
md5
(message digests)~~



~~terminal~~

User Values ('", \$username . "', '\$userpwd,
");

~~log~~

\$r = mysqli_query (\$conn, "select * from
user where umm = '". \$username . "' and
Upwd = '". \$userpwd . "');

\$count = mysqli_num_rows (\$r);

/echo \$count; → if (\$count == 1)
add header ("location:home.php");
else echo "login failed";
home.php

echo "welcome";

Stateless Protocol HTTP:

- Stateless means there is no record of previous txns or interaction, each interaction request has to be handled based entirely on information that comes with it
- Each request from an user from a webpage or url results in the requested pages being served.
- Following are different state management techniques:
 - (i) Hidden fields
 - (ii) sessions (Server side)
 - (iii) Cookies (Client side)

- Error Handling
- PHP extension and application reporting (PEAR)

It Contains reusable code written by others that enables developers to create powerful scripts using just a few simple commands.

It contains

- (i) PECL (PHP extension Code library)
- (ii) PHP code

- Blogs and forums

Blogs

Posting of the content is the main purpose, not the commenting.

Forums

Creates a discussion on a particular topic by allowing commenting on post

Mainly design for
a single user
input.

Forums are
created for
discussions between
several people

Centralized
approach

Decentralized
approach.

Message length
is longer than
in forums

Message length
is short.

Registration and
login not
required

Registration &
login required

Introduction to Javascript

- Javascript is a client side scripting language
- It works with html pages
- Execution is done on client side
- It is easy to learn because many syntaxes in javascript known because they are already present in programming languages like C, C++ as well as Java including PHP script

There are 2 ways working javascript

- (i) Internal javascript : within scope of file
 - (ii) External javascript : we add it source attributes.
- ```

<script type = "text/javascript">
</script>
<body>
<form name = "form" onsubmit = "test_func()>
<input type = "submit" value = "Hello world.">
</form>

```

Submit input type = "submit"

htm

java is work  
on  
document  
object model  
(dom)

### 6M Pop-up boxes in Javascript

list the types of  
pop-up boxes with  
eg

There are 3 types boxes.

- ① alert
- ② Confirm
- ③ prompt

this prot obj  
this prot dom



one by one

window.alert("----");

Confirm

Eq

Var userip = confirm("----");

Prompt

living  
expenses  
2 hrns

Var userip = prompt ("Enter ur Institute  
name ");

if (userip != null)

or "abc"

{ alert (userip);

static input value

else

{

    alert ("Cancelled");

var uiip = document.getElementById.Value ("uiip")  
document.write(uiip)

# String functions

## 1. str\_repeat()

Eg echo str\_repeat("\*-", 20);

## 2. str\_replace()

Eg \$temp = str\_replace("o", "i", "we are learning PHP");

echo \$temp;

## 3 str\_split()

Eg

\$str = "Howe r you";  
 \$Split1 = str\_split(\$str);  
 print\_r(\$Split1); (\$str, 3) → split in ③

Total length including white space -

## 4. str\_word\_count()

Eg

\$str = "Hello Students"; (\$str, 2)

\$temp = str\_word\_count(\$str);

"echo "\$temp";

print\_r(\$temp);

## 5. strcasecmp()

Compare 2 strings

eg

`$s1 = "Hello world..";`

`$s2 = "Hello Students";`

`if (strcasecmp($s2, $s2) == 0)`

`{`

`echo "Both are equal";`

`else`

`echo "Both are different";`

`}`

= with this there no comparison  
of case it is a string comparison

## 6. strcmp()

This can compare case and strings

above eg

## 7. strlen()

`$tent = "AAAA";`

`echo "strlen($tent)";`

8. Substr\_Count()

for  
search

print substr\_count ("aab ---", "aa")  
1 4

## → User defined Function in PHP

### Syntax

function funnm()

{

}

funnm()

function or name & function call  
not to declare

function disp\_msg()

{

echo "Hello";

}

disp\_msg();

## Call by Value

function test2(\$num)

{ \$num = \$num + 10;

echo "\$Hello";

}

..test2();

for reference.

`$var1 = 40;  
test2 ($var1);` → \$ref = &\$var1  
↓ test2(\$ref)

address operator

## Call by reference



## Object Oriented oriented programming with PHP

Class test1

{

public function f1()

{

echo "Hello world. -";

{

\$obj1 = new test1;

\$obj1->f1() // calling class properties.

## Regular Expression function

```
if (!preg_match ("/^ *[a-zA-Z]*$/",
{ "aaa" }))
```

echo "invalid ip";

{

there is warning  
it gave warning gave fatal error  
⇒ include vs require

⇒ Upload file

of form enctype = "multipart/form-data"  
action = "Pg2.php" method = "post">  
<input type = "hidden" name = "MAX\_FILE\_SIZE" value = "2000000" />  
<input type = "file" name = "uploadfile" id = "uploadfile" />  
<submit button>

Add Pg Pg2.php

```
$target_path = "/var/www/directory-1";
$target_path = $target_path.basename(
 $_FILES['Uploadfile']['name']);
echo $target_path;

if (move_uploaded_file($_FILES['Uploadfile']['tmp_name'],
 $target_path))
```

```
} echo "uploaded."
else
{
 echo "failed";
}
```

## ⇒ Sessions in PHP

This is ~~statement~~ state management technique.

<form name="formtest" action="pg2"  
method="Post">  
(submit button)

// Start session

session\_start();

// Register session variable

\$\_SESSION['testusr'] = "gdcst";  
\$\_SESSION['testpwd'] = "gdcst123";

Pg2

session\_start();

// access session variable  
if echo \$\_SESSION['testuser'];  
print\_r(\$\_SESSION)

~~\$inip~~ // Timeout  
\$inactive = 30; → seconds.

\$inactive = 30;

// echo time()



returns values in seconds.

No +  
1 Jan 1970 it is uniq time stamp

if (isset(\$\_SESSION['timeout']))

{

\$\_SESSION['life'] = time() - \$\_SESSION['timeout'];

if (\$\_SESSION['life'] > \$inactive)

{

unset(\$\_SESSION['textusr']);  
unset(\$\_SESSION['textpwd']);  
header("Location: index.php");

destroy the  
Session  
Value?  
(unset)

}

\$\_SESSION['timeout'] = time();



## Cookies in PHP

This is also a State management technique.

// Start cookie

→ var name

setcookie("testvar1", "abc", time() + 30)

To destroy  
cookie  
unset

echo \$\_COOKIE['testvar1'];

// unset(\$\_COOKIE['testvar1']);

// print\_r(\$\_COOKIE);

// how to expire. time out

setcookie("testvar2", "", time() - 10);

Check out time duration for 1<sup>st</sup> stmt.

diff to for unset.

# E-mail Id Validation using PHP

it works  
with logical  
operator

```
$var1 = "abc@gmail.com";
if (!filter_var($var1, FILTER_VALIDATE_EMAIL))
{
 echo "Enter valid email id.";
}
```

Javascript

```
<script language="JavaScript">
function validateForm()
{
 var form = document.form;
 if (form.fname.value == "")
 {
 alert("First Name is required");
 form.fname.focus();
 return false;
 }
 if (form.lname.value == "")
 {
 alert("Last Name is required");
 form.lname.focus();
 return false;
 }
 if (form.email.value == "")
 {
 alert("Email is required");
 form.email.focus();
 return false;
 }
 if (form.password.value == "")
 {
 alert("Password is required");
 form.password.focus();
 return false;
 }
 if (form.confirmpassword.value == "")
 {
 alert("Confirm Password is required");
 form.confirmpassword.focus();
 return false;
 }
 if (form.password.value != form.confirmpassword.value)
 {
 alert("Passwords do not match");
 form.confirmpassword.focus();
 return false;
 }
 return true;
}</script>
```

## Form Validation:

```
<form name="form" onsubmit="return validateForm()">
 <h1> Enter Form </h1>
 Enter first name: <input type="text" name="fname" />
 Enter last name: <input type="text" name="lname" />

 <input type="submit" value="SubmitBtn" />
```

## Input Validation

→ onsubmit = "ipval()"

```
<form>
 <input type="text" name="validate2" />
</form>
<input type="button" value="Submit" />
```

<Script language="JavaScript">

```
function ipval()
{
```

```
var ipvar = document.getElementById('ipval').value
```

Var filter = regular expression for  
emailid.

```
if (!filter.test(ipvar.value))
{
 alert("Enter valid emailid.");
 return false;
}
```

```
document.getElementById('di').innerHTML =
"Enter a name";
form2.txtval2.focus();
```

## Introduction To Javascript

- designed to add interactivity to HTML pg
- it is embedded in html.

## Javascript DOM (Document Object Model)

- ~~not object~~
- 
- Window
- Document
  - Form
  - link
  - anchor
  - Images
- history
- location