

Winter School



LEARNING `<?php ?>` BASICS

By

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A little Background...

- PHP first appeared in 19 years ago, in 1995
- It was written by Rasmus Lerdorf
- PHP follows a dynamic/weak programming paradigm
- PHP occupies the largest percentage in Internet's server side language with an astonishing of 81%

Where is PHP used ?



YAHOO!

WIKIPEDIA
The Free Encyclopedia



Pre-Requisites

- We need a LAMP/WAMP Architecture to start development on PHP
- LAMP is the acronym for “Linux Apache MySQL PHP”

Where do we begin ?

```
<?php echo "Hello World" ?>
```

Concepts to Cover

- Variables
- Arrays
- Functions
- Defines
- Objects

Variables

- The best place to start in PHP is with variables. Other languages like Java, C++, Objective-C you will likely be use to defining a variable by giving it a type, name and a value. Examples:
 - `int anumber = 1;`
 - `boolean opened = true;`
 - `String[] mystrings = new String[15];`
- In PHP it is a little simpler. All have to do is assign a value to a variable. Variables start with the dollar(\$) sign and are case sensitive. After the dollarsign, variables can either start with a letter or underscore, followed by any combination of letters, underscore or numbers. The equal sign sets the value of the variables.
 - `$first_var = "Hello World";`

Defines

- Defines are variables that are made global. This means that the variable can be accessed anywhere in the code, including functions and in objects.
- Following PHP coding standards, when setting a define, they should always be capitalized.
- Once a define is set, it cannot be changed.
 - Name of the Define.
 - Value assigned to the define
- Example : `define('GLOBAL_VAR',1234);`
 -
 -
 -

Arrays

- Arrays are a collection of variables. Here are a few ways of defining arrays in PHP.
 - `$array_new['value1'] = "Name";`
 - `$array_new['value2'] = "Last Name";`
 - `$array_new = array(1,2,3,4);`
 - `$array_new =
array("Name"=>"Henry","age"=>'25');`

Functions

- We all know functions.... here's how you do them in PHP

```
function add($val1, $val2){  
    $result = $val1+ $val2;  
  
    return $result  
}
```

Objects

- Objects are defined by a 'class'. When a function is inside an class, it is then referred to as a method. Inside an class, the attributes can have three states:public, private and protected.

Contd.

```
<?php
class MyObject {
    public $class_var ;
    public function __construct(){
        $this->class_var = 5;
    }
    function multiple($var2)
    {
        return $this->class_var * $var2;
    }
}

$object = new MyObject();
echo $object->multiple(2);
?>
```

Common Operations

- Basic arithmetic operations are same as many other languages such as Java/C++
- In PHP, we use ' . ' to concatenate two variables. Example:
 - `$combined = "Hello " . "Mr";`
- Please refer to the function cheatsheet provided to you for the following method :
 - `Strlen()`, `strpos()`, `count()`,

Important Global Variables

- By default, PHP provides you some global variables which are populated automatically.
- For example:
 - `$_GET` : This array contains all the data sent to in the request via GET
 - `$_POST` : This array contains all the data sent to the request via POST body.
 - `$_SERVER` : Stores information related to the environment on which PHP scripts are being executed

Working with Forms

- Lets do some practical work..
- Create a HTML form and display its value via GET / POST method on form submission through PHP.
- Create “index.php” file in <C:/wamp/www/phpiba/> folder

Exercise

Please submit your message

Submit Message

Exercise (Contd.)

Please submit your message

Your message was Nothing

Exercise (Contd.)

Please submit your message

Submit Message

Message was empty

Data Storage

- PHP can be used with several data storage solutions to e.g.
 - Files
 - Embedded Databases (SQLite)
 - MySQL
 - MSSQL
- In the following exercise we will use MySQL to persist our data and retrieve it back.

MySQL

- MySQL is a commonly used database with PHP.
- PHP has natively built-in libraries for working with MySQL.
- MySQL Queries
 - `USE DATABASE {DBNAME}`
 - `CREATE DATABASE {DBNAME}`
 - `Create TABLE {tblname} (column1 TYPE INT)`
 - `SELECT * FROM {tblname}`
 - `DELETE FROM {tblname}`

MySQL (contd.)

- INSERT INTO {tblname} (column1) VALUES (1)
- DROP TABLE {tblname}
- DROP DATABASE {tblname}
- TRUNCATE TABLE {tblname}
- Learn more here [LINK](#)

PHP & MySQL

- MySQL is automatically installed with the installation of WAMP on windows.
- PHP used `mysql_connect(host,username,password)` to establish a connection with database.
- `mysql_select_db($dbname)`
- Executing a query
 - `$result = mysql_query($sql_query);`

PHP & MySQL (contd.)

- Iterating over a MySQL resultset
 - `mysql_fetch_row`
 - `mysql_fetch_array`
 - `mysql_fetch_assoc`
 - `mysql_fetch_object`
- We can use any of these above to iterate over a result set of MySQL data.

Exercise

- Connect to your Local MySQL instance (localhost)
- Create a database via PhpMyAdmin
- Select DB in PHP

Connect Database

Please submit your message

Submit Message

Connected successfully

Display Error On Empty

Please submit your message

Submit Message

Connected successfully

Message was empty

Post ID Message Timestamp

INSERT Query MySQL

Please submit your message

SELECT Query MySQL

Please submit your message

Submit Message

Connected successfully Your post was successfully added.

Post ID Message

Timestamp

1	Hello World. My First Message Posted	Timestamp : 2014-01-24 21:25:03
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Why Learn PHP ?

- An interesting question on Quora asks “Is PHP dying ? “
- Go ahead and read the answers some of the people gave
<http://www.quora.com/PHP/Is-PHP-dying-with-time>

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Questions & Answers ?