

LECTURE 2

Fundamentals of PHP

WEB DEVELOPMENT 2

Introduction

PHP is a server side scripting language that is embedded in HTML.

- It is used to manage **dynamic content, databases, session tracking**, even build entire **e-commerce sites**.
- It is integrated with a number of popular databases, including **MySQL, PostgreSQL, Oracle, Sybase, Informix**, and **Microsoft SQL Server**.

- **PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them.**
- **PHP can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.**
- **You add, delete, modify elements within your database through PHP.**
- **Access cookies variables and set cookies.**
- **Using PHP, you can restrict users to access some pages of your website.**
- **It can encrypt data.**

"Hello World" Script in PHP

```
<html>

  <head>
    <title>Hello World</title>
  </head>

  <body>
    <?php echo "Hello, World!";?>
  </body>

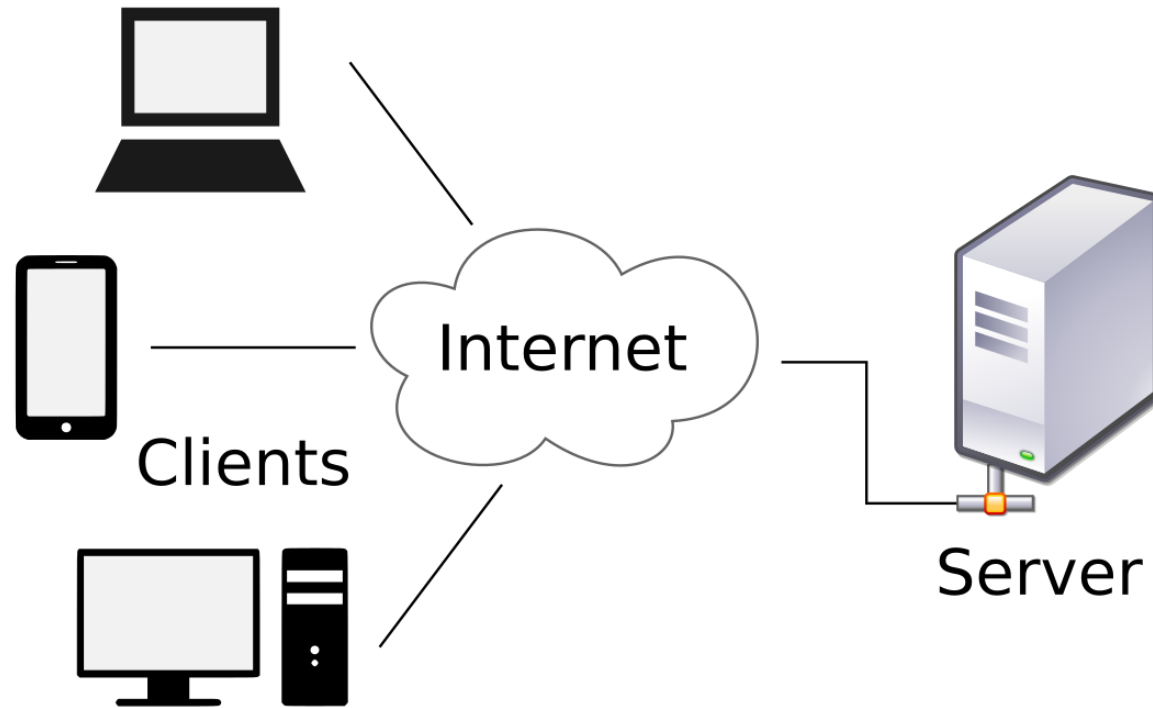
</html>
```

PHP - Environment Setup



Install php

PHP - Environment Setup



SOFTWARE REQUIREMENT
HARDWARE REQUIREMENTS

PHP - Environment Setup



SOFTWARE REQUIREMENT
HARDWARE REQUIREMENTS

Bundles



XAMPP

Easy to install Apache distribution containing MariaDB, PHP



Wamp



Laragon

Basic PHP Syntax

A PHP script can be placed anywhere in the document.

A PHP script starts with `<?php` and ends with `?>`:

```
<?php  
// PHP code goes here  
?>
```

Creating (Declaring) PHP Variables

Creating (Declaring) PHP Variables

```
$x = 5;
```

```
$y = "John"
```

- A variable starts with the \$ sign, followed by the name of the variable
- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alphanumeric characters and underscores (A-z, 0-9, and _)
- Variable names are case-sensitive (\$age and \$AGE are two different variables)

PHP echo and print Statements

The following example shows how to output text and variables with the echo statement

```
$txt1 = "Learn PHP";  
$txt2 = "Web Development";  
$x = 5;  
$y = 4;
```

```
echo "<h2>" . $txt1 . "</h2>";  
echo "Study PHP at " . $txt2 . "<br>";  
echo $x + $y;
```

```
$txt1 = "Learn PHP";  
$txt2 = "W3Schools.com";  
$x = 5;  
$y = 4;
```

```
print "<h2>" . $txt1 . "</h2>";  
print "Study PHP at " . $txt2 . "<br>";  
print $x + $y;
```

echo and print are more or less the same. They are both used to output data to the screen.

PHP Data Types

Variables can store data of different types, and different data types can do different things.

PHP supports the following data types:

- String
- Integer
- Float (floating point numbers - also called double)
- Boolean
- Array
- Object
- NULL
- Resource

Getting the Data Type

The `var_dump()` function returns the data type and the value:

```
$x = 5;
```

```
var_dump($x);
```

Note Php math and php strings & operators will be mentioned into laps

The `pi()` function returns the value of PI:

PHP `min()` and `max()` Functions

PHP `round()` Function

Random Numbers

PHP if Statements

PHP - The if Statement

```
if (5 > 3) {  
    echo "Have a good day!";  
}
```

```
$t = 14;
```

```
if ($t < 20) {  
    echo "Have a good day!";  
}
```

The PHP switch Statement

```
switch (expression) {  
  case label1:  
    //code block  
    break;  
  case label2:  
    //code block;  
    break;  
  case label3:  
    //code block  
    break;  
  default:  
    //code block  
}
```

The **break** keyword breaks out of the switch block

The **default** code block is executed if there is no match

```
$favcolor = "red";
```

```
switch ($favcolor) {  
  case "red":  
    echo "Your favorite color is red!";  
    break;  
  case "blue":  
    "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!";  
}
```

Example!!

Scientific references

1- <https://www.geeksforgeeks.org/>

*Thank
you!*