

PHP

- Server-side technologies
 - ASP
 - PHP

- Active Server Pages (ASP)
 - Stands for **A**ctive **S**erver **P**ages, a Microsoft technology
 - ASP allows you to use several different scripting languages for creating server-side “programs”
 - ASP supports JavaScript (Jscript in Microsoft terminology) and VBScript
 - ASP applications in files have an extension of .asp
 - ASP files are created as text files and can contain embedded client-side JavaScript

- Active Server Pages (ASP)

- ASP uses the script delimiters `<%` and `%>` to designate server-side scripting code (and so separate it from ‘real’ HTML)

- { *A delimiter* is a character or a sequence of characters used to mark the beginning and end of a code segment }

- ```
<% Response.Write("Hello World") %>
```

- Mixing HTML and Server-Side scripts
  - Before a Microsoft Web server delivers an ASP document containing server-side scripts to a client, it executes the contents of any script delimiters
  - If users view the source document after they receive the (output of) the ASP document, they would not see any `<%...%>` script delimiters, or the script code they contain
  - Instead, the client gets and renders only the results returned by the code (and any HTML not in delimiters)

```
<html>
<body>
<%
dim name
name="Donald Duck"
response.write("My name is: " & name)
%>
</body>
</html>
```

My name is: Donald Duck

```
<html>
<body>
<%
dim i
for i=1 to 6
 response.write("<h" & i & ">Header " & i &
"</h" & i & ">")
next
%>
</body>
</html>
```

Header 1

Header 2

Header 3

Header 4

Header 5

Header 6

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```
<%@ language="javascript" %>
```

```
<html>
```

```
<body>
```

```
<%
```

```
var d=new Date()
```

```
var h=d.getHours()
```

Thu Sep 23 03:21:41 UTC+0200 2015  
(Australian Time)

Good Morning!

```
Response.Write("<p>")
```

```
Response.Write(d + " (Australian Time)")
```

```
Response.Write("</p>")
```

```
if (h<12)
```

```
{
```

```
 Response.Write("Good Morning!")
```

```
}
```

```
else
```

```
{
```

```
 Response.Write("Good Day!")
```

```
}
```

```
%>
```

```
</body>
```

```
</html>
```

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```
<%@ language="javascript" %>
<html>
<head>
<%
function jsproc(num1,num2){
 Response.Write(num1*num2)
}
%>
</head>

<body>
<p>
Result: <% jsproc(15,20) %>
</p>
</body>

</html>
```

Result: 300



- PHP
  - Originally stood for **P**retty **H**ome **P**ages
  - Stands (now) for **H**ypertext **P**reprocessor
  - A server-side scripting language, like ASP, so scripts are executed on the server
  - Supports many databases (MySQL, Informix, Oracle, Sybase, Solid, PostgreSQL, Generic ODBC, etc.)
  - Open source software (OSS), so server extensions are free to download and use
  - File extension .php, .php3 or .phtml

- PHP

- A PHP file normally contains HTML tags, just like an HTML file, and some PHP scripting code
- Starts with `<?php` and ends with `?>`. A PHP scripting block can be placed anywhere in the document
- Each code line in PHP must end with a semicolon

- PHP

–Two basic statements to output text with PHP: **echo** and **print**

```
<html>
```

```
<body>
```

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

```
</body>
```

```
</html>
```

- PHP

- All variables in PHP start with a \$ sign symbol. Variables may contain strings, numbers, or arrays.

```
$txt="Hello World";
```

- To concatenate two or more variables together, use the dot (.) operator

```
<?
```

```
php$txt1="Hello World";
```

```
$txt2="1234";
```

```
echo $txt1 . " " . $txt2 ;
```

```
?>
```

- // for a single-line comment, /\* and \*/ for a large comment block.

- PHP operators

- Arithmetic Operators

+ - \* / % ++ --

- Assignment Operators

= += -= \*= /= %=

- Comparison Operators

== != > < >= <=

- Logical Operators

&& || !

- PHP conditional statements

- Two conditional statements

- **if (...else)** - use if you want to execute a set of code when a condition is true (and another if the condition is not true)
    - **switch** - use if you want to select one of many sets of lines to execute

- PHP looping statements

—Four looping statements:

- **while** - loops through a block of code as long as a specified condition is true
- **do...while** - loops through a block of code once, and then repeats the loop as long as a special condition is true
- **for** - loops through a block of code a specified number of times
- **foreach** - loops through a block of code for each element in an array

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- PHP functions

- header() function

- Used to send raw HTTP headers over the HTTP protocol
    - Must be called before anything is written to the page!

```
<?php
```

```
//Redirect browser
```

```
header("Location: http://www.deakin.edu.au/");
```

```
?>
```

```
<html>
```

```
<body>.....</body>
```

```
</html>
```



- PHP functions
  - The fopen() function is used to open files in PHP
  - First parameter is the name of the file to be opened
  - Second parameter specifies in which mode the file should be opened: r, r+, w, w+, a, a+, x, x+

- PHP functions

```
<html>
```

```
<body>
```

```
<?php
```

```
 $f=fopen("welcome.txt", "r");
```

```
?>
```

```
</body>
```

```
</html>
```

- PHP form handling

- Any form element in an HTML page will **automatically** be available to your PHP scripts.

```
<html>
<head>
<title>Login Script</title>
</head>
<body>
You entered this login information:
Login : <?php print $login ?>

Password : <?php print $password ?>

</body>
</html>
```

Results in

```
You entered this login information:
Login: (whatever you typed)
Password : (whatever you typed)
```

- ASP and PHP

- Both technologies allow webmasters to increase the features and functionalities of their website.
- Both technologies also require that a program is installed on the web server.
- Both technologies also enable a web server to interact with a Database Management System (DBMS). Eg. PHP to MySQL, and ASP to MS Access or SQL Server.
- Both languages return standard HTML code to the user's web browser.

- ASP vs. PHP
  - PHP is generally faster to interpret
  - Better management of memory
    - PHP only loads include files that are actually required
  - Better coding structure
    - PHP has C or Java style loops and script symbols
  - Wide platform range
    - PHP can run on Linux, Solaris, Windows, and so many other operating systems as well

- Summary
  - PHP coding is cleaner and faster than ASP. This is because PHP is very similar to more efficient languages like C++.
  - PHP is open source. You can even make modification to the source code to make the PHP processor run exactly the way you want.

- Summary
  - ASP is automatically supported only on Microsoft's IIS server for Windows
  - Other servers require commercial or freeware extensions to be installed
  - PHP will run on just about any OS/web server combination.
  - PHP has been optimized to run with Linux/Apache/MySQL combination.

- Summary
  - PHP runs generally faster than ASP
  - PHP does not require you to use a specific Web Server or operating system
  - This makes it flexible to choose what environment you wish to have for your script.