



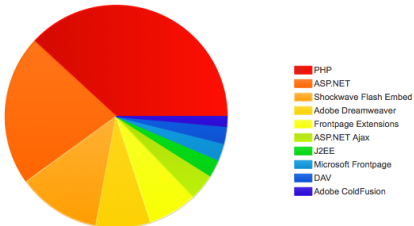
PHP

PHP

- A server-side scripting language
- Originally: "Personal Home Page Tools"
- Now: "PHP Hypertext Preprocessor", a recursive acronym.
- PHP code can be embedded in HTML code
 -

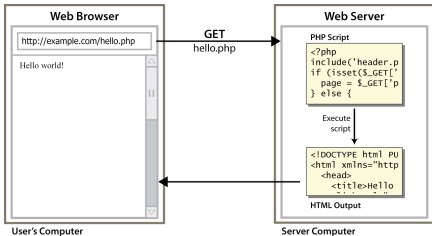
PHP Popularity (Oct 2012)

Framework Distribution in Top Million Sites



<http://trends.builtwith.com/framework>

Request Life Cycle



Variables

```
$name = expression;
```

FHP

```
$user_name = "PinkHeartLuvr78";
```

```
$age = 16;
```

```
$drinking_age = $age + 5;
```

```
$this_class_rocks = TRUE;
```

FHP

- names are case sensitive; separate multiple words with _
- names always begin with \$, on both declaration and usage
- always implicitly declared by assignment (type is not written)
- a loosely typed language (like JavaScript or Python)

Arrays

```
$name = array();           # create
$name = array(value0, value1, ..., valueN);

$name[index]              # get element value
$name[index] = value;     # set element value
$name[] = value;          # append
```

F&P

```
$a = array();             # empty array (length 0)
$a[0] = 23;               # stores 23 at index 0 (length 1)
$a2 = array("some", "strings", "in", "an", "array");
$a2[] = "Ooh!";           # add string to end (at index 5)
```

F&P

Associative Arrays

```
$name = array();  
$name["key"] = value;  
...  
$name["key"] = value;
```

PHP

```
$name = array(key => value, ..., key => value);
```

PHP

```
$blackbook = array("marty" => "206-685-2181",  
                  "stuart" => "206-685-9138",  
                  "jenny"  => "206-867-5309");
```

PHP

```
foreach ($blackbook as $key => $value) {  
    print "$key's phone number is $value\n";  
}
```

PHP

```
jenny's phone number is 206-867-5309  
stuart's phone number is 206-685-9138  
marty's phone number is 206-685-2181
```

output

CGI Super Global Arrays

- Associative arrays that contain information about HTTP request

Array	Description
<code>\$_GET</code> , <code>\$_POST</code>	parameters passed to GET and POST requests
<code>\$_REQUEST</code>	parameters passed to any type of request
<code>\$_SERVER</code> , <code>\$_ENV</code>	information about the web server
<code>\$_FILES</code>	files uploaded with the web request
<code>\$_SESSION</code> , <code>\$_COOKIE</code>	"cookies" used to identify the user (seen later)

if/elseif/else

```
if (condition) {  
    statements;  
} elseif (condition) {  
    statements;  
} else {  
    statements;  
}
```

Looping

```
for (initialization; condition; update) {  
    statements;  
}
```

PHP

```
while (condition) {  
    statements;  
}
```

PHP

```
do {  
    statements;  
} while (condition);
```

PHP

```
foreach ($array as $variableName) {  
    ...  
}
```

PHP

```
$stooges = array("Larry", "Moe", "Curly", "Shemp");  
for ($i = 0; $i < count($stooges); $i++) {  
    print "Moe slaps {$stooges[$i]}\\n";  
}  
foreach ($stooges as $stooge) {  
    print "Moe slaps $stooge\\n"; # even himself!  
}
```

PHP

Functions

```
function name(parameterName, ..., parameterName) {  
    statements;  
}
```

PHP

```
function quadratic($a, $b, $c) {  
    return -$b + sqrt($b * $b - 4 * $a * $c) / (2 * $a);  
}
```

PHP

```
$x = -2;  
$a = 3;  
$root = quadratic(1, $x, $a - 2);
```

PHP

Variable Scope

- variables declared in a function are local to that function
- variables not declared in a function are global
- if a function wants to use a global variable, it must have a global statement

```
$school = "UW";                # global
...

function downgrade() {
    global $school;
    $suffix = "Tacoma";        # local

    $school = "$school $suffix";
    print "$school\n";
}
```



Apache PHP

- Disabled by default
- http.conf
 - Uncomment
LoadModule php5_module libexec/apache2/libphp5.so