



# An Introduction to PHP

By Daniel Kushner – New York PHP

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## Outline

- What is [PHP](#)?
- Some [PHP](#) numbers
- Who is using [PHP](#)
- Lets [PHP](#)
- The future of [PHP](#)
- Two words on [NYPHP](#)
- Questions (about [PHP](#))

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## Outline

- What is PHP?
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- Two words on NYPHP
- Questions

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# What is PHP?

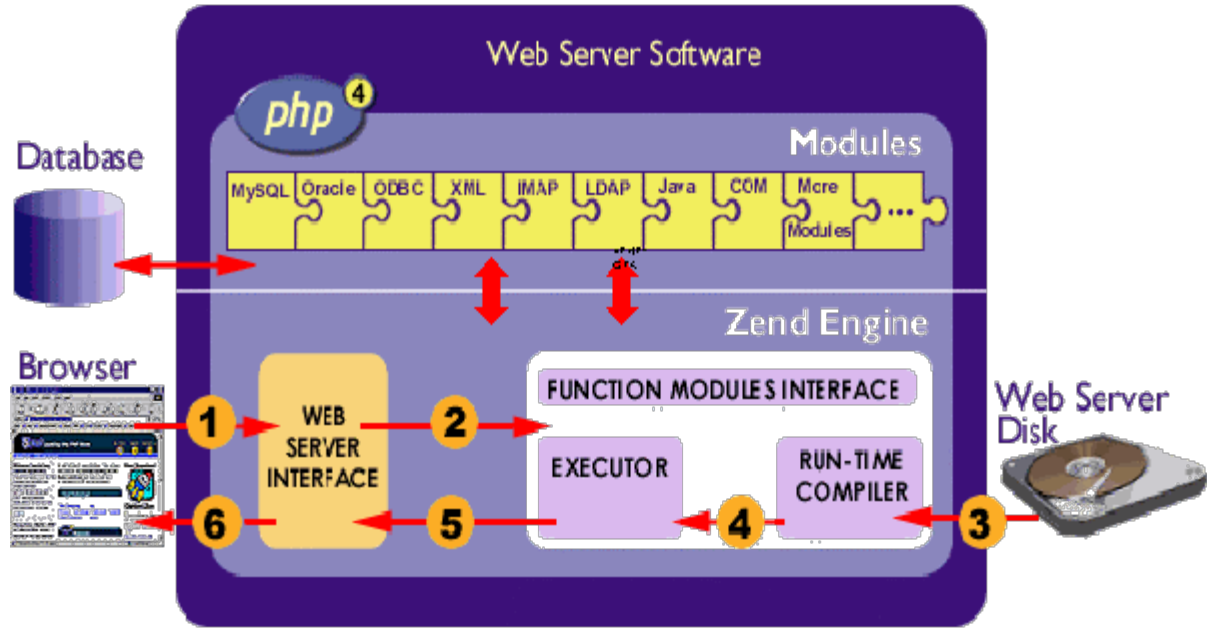
- PHP Hypertext Preprocessing
- History
  - 1994/1995 Rasmus Lerdorf
  - 1995 PHP/FI Version 2
  - 1997 Zeev Suraski & Andi Gutmans
  - 2001 PHP4
  - 2004 ?

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# What is PHP?



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# What is PHP?

```
<html>
  <head>
    <title>PHP Test</title>
  </head>
  <body>
    <?php
      echo "<p>Hello World</p>";
    ?>
  </body>
</html>
```

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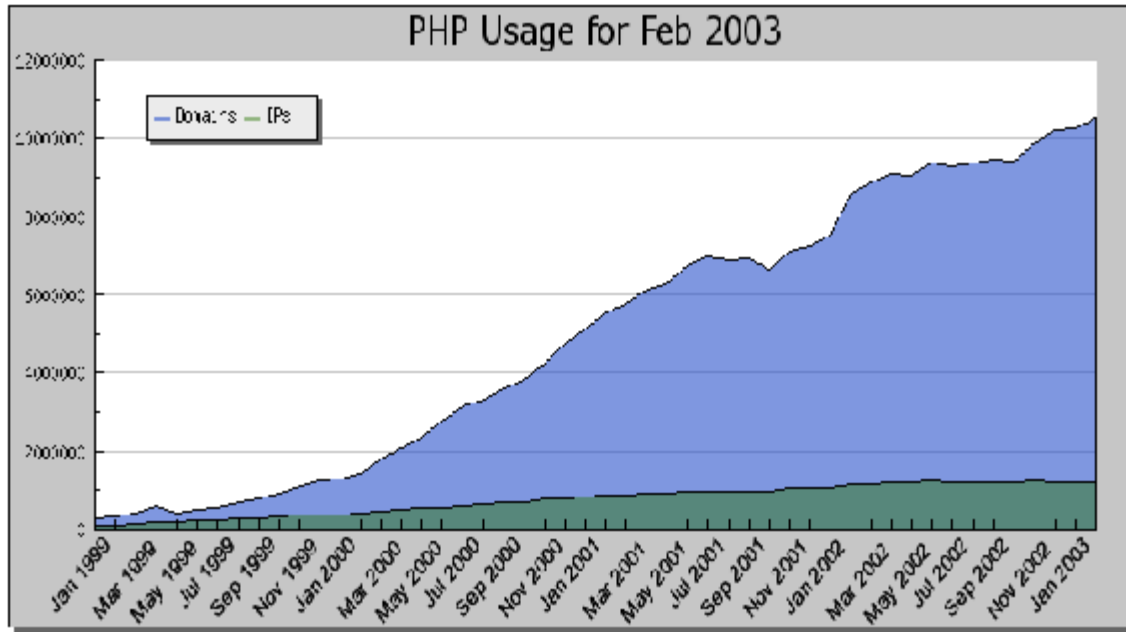
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# Some Numbers

PHP: 10,519,623 Domains, 1,220,927 IP Addresses



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Source: Netcraft





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# Who is Using PHP?

Alice

Bob

Charles

and...

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# Who is Using PHP?



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## Lets PHP

- HTTP and Web pages
- What is HTTP?
- HTML
- Protocols (FTP, SMTP)
- Static vs. Dynamic
- Data

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# Client Server



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# Client Server

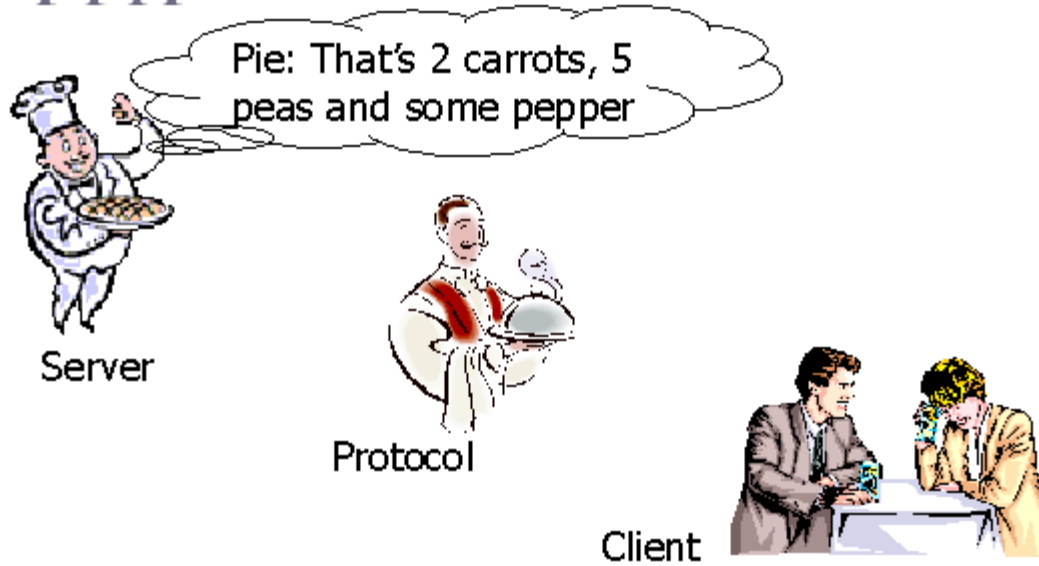


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# Client Server



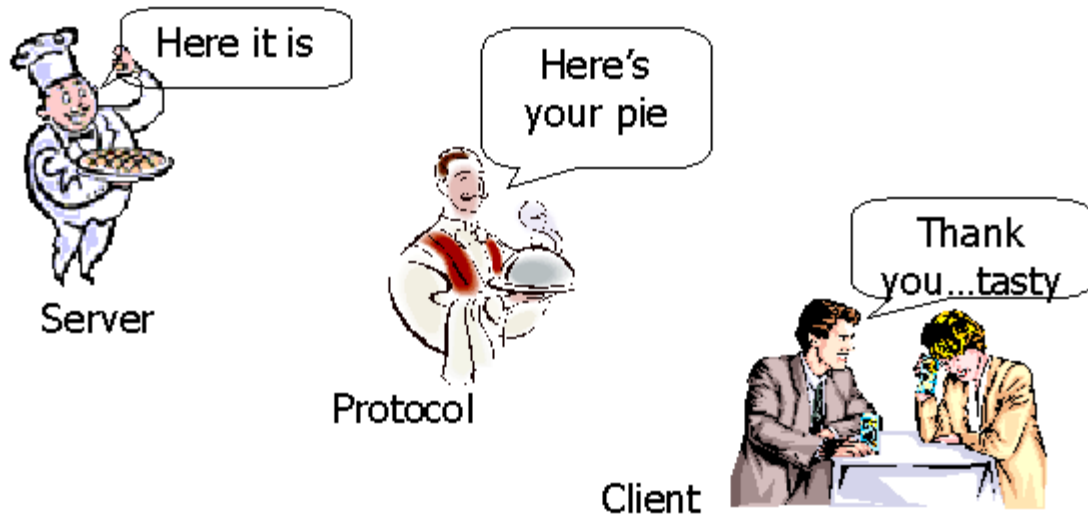
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# Client Server



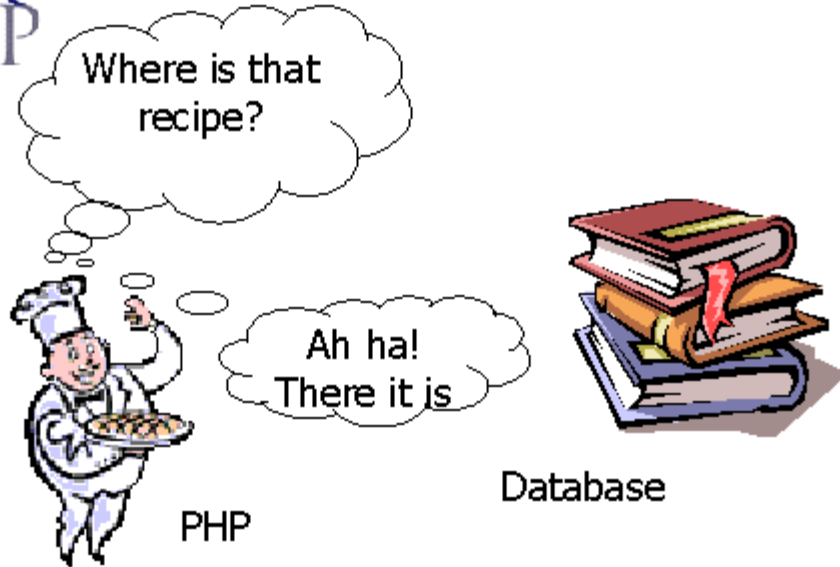
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NEW  
YORK  
PHP

Data



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# Client Side vs. Server Side

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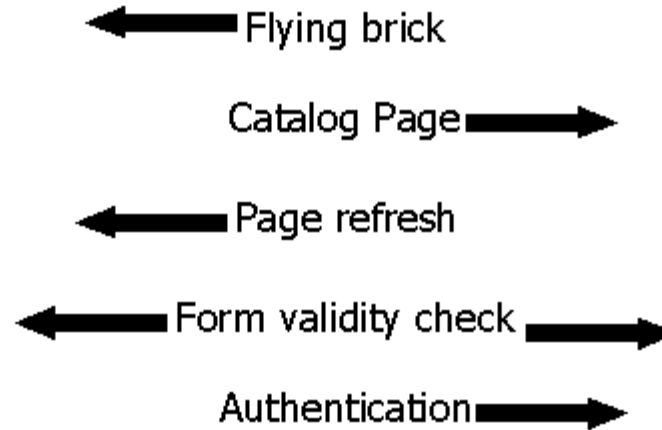
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# Client Side vs. Server Side

**Client**

**Server**



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## Language Reference

- Basic syntax
- Types
- Variables
- Constants
- Expressions
- ◆ Operators
- ◆ Control Structures
- ◆ Functions
- ◆ Classes and Objects

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# Language Reference

## Basic syntax

- `<? echo ("this is the simplest, an SGML processing instruction\n"); ?>`  
`<?= expression ?>` This is a shortcut for "`<? echo expression ?>`"
- `<?php echo("if you want to serve XHTML or XML documents, do like this\n"); ?>`
- `<script language="php">`  
    `echo ("some editors (like FrontPage) don't like processing instructions");`  
`</script>`
- `<% echo (" You may optionally use ASP-style tags"); %>` `<%= $variable; # This`  
is a shortcut for "`<% echo . . . " %>`"

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# Language Reference

## Basic syntax

### Comments

```
<?php
  echo "This is a test"; // This is a one-line c++ style comment
  /* This is a multi line comment
  yet another line of comment */
  echo "This is yet another test";
  echo "One Final Test"; # This is shell-style style comment
?>
```

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# Language Reference Types

## Primitive Types

### Scalar Types

- Boolean
- Integer
- Float
- String

### Compound Types

- Array
- Object

### Special Types

- Resource
- NULL

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# Language Reference Types

- A **boolean** expresses a truth value. It can be either **TRUE** or **FALSE**.
- An **integer** is a number of the set  $Z = \{\dots, -2, -1, 0, 1, 2, \dots\}$ .
- Floating point numbers (AKA "floats", "doubles" or "real numbers")
- A **string** is a series of characters. In PHP, a character is the same as a byte, that is, there are exactly 256 different characters possible. This also implies that PHP has no native support of Unicode.
- An **array** in PHP is actually an ordered map. A map is a type that maps *values* to *keys*.
- The special **NULL** value represents that a variable has no value. **NULL** is the only possible value of type NULL.

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# Language Reference Variables

- Variables in PHP are represented by a dollar sign followed by the name of the variable.
- The variable name is case-sensitive.

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## Language Reference Variables (cont.)

- `$var = "Bob";`
- `$Var = "Joe";`
- `echo "$var, $Var";`
- `$4site = 'not yet';`
- `$_4site = 'not yet';`
- `$täyte = 'mansikka';`

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# Language Reference Variables (cont.)

## PHP Superglobals

- \$GLOBALS
- \$\_SERVER
- \$\_GET
- \$\_POST
- \$\_COOKIE
- \$\_FILES
- \$\_REQUEST
- \$\_SESSION

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# Language Reference

## Constants

You can define a constant by using the **define()** function. Once a constant is defined, it can never be changed or undefined.

```
define("CONSTANT", "Hello world."); echo  
CONSTANT; // outputs "Hello world."
```

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# Language Reference Expressions

An expression is "anything that has a value".

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# Language Reference Operators

- Arithmetic Operators
- Assignment Operators
- Bitwise Operators
- Comparison Operators
- Error Control Operators
- Execution Operators
- Incrementing/  
Decrementing Operators
- Logical Operators
- Operator Precedence
- String Operators

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# Language Reference Operators (cont.)

## Arithmetic Operators

Example	Name	Result
$\$a + \$b$	Addition	Sum of $\$a$ and $\$b$ .
$\$a - \$b$	Subtraction	Difference of $\$a$ and $\$b$ .
$\$a * \$b$	Multiplication	Product of $\$a$ and $\$b$ .
$\$a / \$b$	Division	Quotient of $\$a$ and $\$b$ .
$\$a \% \$b$	Modulus	Remainder of $\$a$ divided by $\$b$ .

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# Language Reference Operators (cont.)

## Assignment Operators



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# Language Reference Operators (cont.)

## Bitwise Operators

$\$a \& \$b$	And
$\$a   \$b$	Or
$\$a \wedge \$b$	Xor
$\sim \$a$	Not
$\$a \ll \$b$	Shift left
$\$a \gg \$b$	Shift right

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# Language Reference

## Operators (cont.)

### Comparison Operators

<code>\$a == \$b</code>	Equal
<code>\$a === \$b</code>	Identical
<code>\$a != \$b</code>	Not equal
<code>\$a &gt; \$b</code>	Greater than
<code>\$a &lt; \$b</code>	Less than
<code>\$a &gt;= \$b</code>	Greater than or equal to
<code>\$a &lt;= \$b</code>	Less than or equal to

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# Language Reference

## Operators (cont.)

### **Incrementing / Decrementing Operators**

<code>++\$a</code>	Pre-increment
<code>\$a++</code>	Post-increment
<code>--\$a</code>	Pre-decrement
<code>\$a--</code>	Post-decrement

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# Language Reference Operators (cont.)

## Logical Operators

<code>\$a &amp;&amp; \$b</code>	And
<code>\$a    \$b</code>	Or
<code>!\$a</code>	Not
<code>\$a xor \$b</code>	Xor

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# Language Reference

## Operators (cont.)

### **String Operators**

There are two string operators. The first is the concatenation operator ('.'), which returns the concatenation of its right and left arguments.

The second is the concatenating assignment operator ('.='), which appends the argument on the right side to the argument on the left side.

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# Language Reference

## Control Structures

- if
- else
- elseif
- while
- do...while
- for
- foreach
- break
- continue
- switch
- declare
- return
- require
- include
- require\_once
- include\_once

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# Language Reference Functions

Arguments

```
function foo ($arg_1, $arg_2, ..., $arg_n) {  
    echo "Example function.\n";  
    return $retval;  
}
```

Return value

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# Language Reference Classes and Object

Later (4/21/03)!

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# The PHP Manual

- <http://www.php.net/manual/en/>
- Quick ref: [php.net/count](http://php.net/count)
- Downloadable:
  - HTML
  - PDF
  - CHM
  - (<http://www.php.net/download-docs.php>)
- User comments

**RTMF**

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## New York PHP

**Dedicated to the development of PHP and AMP Technology.**

**Over 700 members worldwide**

**Largest group in the United States.**

**We actively support the PHP/AMP community through Open Source projects, sponsoring of networking events and meetings, and technical mailing lists.**

**Developing partnerships with New York's business community and national PHP companies**

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# New York PHP

## Important Dates

**April 21 – 22:** PHP Training (<http://nyphp.org/training.php>)

**April 22:** NYPHP Monthly Meeting with Special Guest Zeev Suraski

**April 23 – 24:** PHP-Con (<http://nyphp.org/phpcon>)

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exit(0);



NEW  
YORK  
PHP

exit(0);

# Thank You!

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