PHP - Hypertext Preprocessor

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PHP

- Introduction
- History
- Language syntax
- Advantages
What is PHP

An established server-side, cross-platform embedded HTML scripting language for creating dynamic Web pages.

PHP provides many features that commercial entities are looking for.
PHP Advantages

• Exceptionally short learning curve
• Quick development time
• Very high performance
• supports all major platforms (UNIX, Windows and even mainframes).
• Features native support for most popular databases
"PHP was built with the needs of Web developers in mind... Unlike other cumbersome, overhead-laden approaches, PHP is lightweight and focused on the Web - where it can solve complex problem scenarios quicker and more easily than comparable technologies."
History of PHP

- 1994 - PHP was conceived sometimes in the Fall of 1994 by **Rasmus Lerdorf**
- 1997 – approximately 50,000 web sites. Introducing PHP Version 3. (Zeev Suraski and Andi Gutmans)
- 2000 – PHP 4 was introduced, using “Zend” scripting engine. (5.1 million web sites.)
PHP-Enabled Web Pages

- Treated just like regular HTML pages and you can create and edit them the same way you normally create regular HTML pages.
- As simple as HTML files with a whole new family of magical tags that let you do all sorts of things.
Simple Example:

File name: Hello.php

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

- Condition statements, loop statements, arrays ...
- Built in libraries. (sorting, list, queue..)
- Functions.
- Classes. ( Objects, Inheritance .. )
- String Manipulation. ( Perl )
- Built in support for encryption/Decryption functions.( MD5, DES, ...)
More on PHP Language:

- Text files manipulation. (Read, write, ..)
- Supports java objects, COM objects ...
- Sessions, cookies ...
A More Useful Example

- `<?php echo $HTTP_USER_AGENT; ?>`

  Mozilla/4.0 (compatible; MSIE 5.01; Windows NT 5.0)

- `<?php phpinfo(); ?>`

  A list of all the global variables.
Using if Statements

<?php
if(strstr($HTTP_USER_AGENT,"MS IE")) { ?>
  <center><b>You are using Internet Explorer</b></center>
<? } else { ?>
  <center><b>You are not using Internet Explorer</b></center>
<?} ?>
Dealing with Forms

- One of the most powerful features of PHP is the way it handles HTML forms.
- Any form element in a form will automatically result in a variable with the same name as the element being created on the target page.
FORM Example:

- **HTML Page:**

  ```html
  <form action="action.php" method="post">
  Your name: <input type="text" name="name">
  You age: <input type="text" name="age">
  <input type="submit">
  </form>
  ```

- **action.php.**

  ```php
  Hi <?php echo $name; ?>.
  You are <?php echo $age; ?> years old.
  ```
Database Support

- **MySQL** - PHP and MySQL work very well together, in addition to the speed and features of each individual tool.
- PHP is open-source, and offers excellent connectivity to most of today's common databases including Oracle, Sybase, MySQL, ODBC (and others).
- PHP also offers integration with various external libraries which enable the developer to do anything from generating PDF documents to parsing XML.
MySQL Example

- Connect to MySQL.
- Send a query.
- Print a table heading.
- Print table rows until end of the table has been reached.
MySQL Example

```php
<?php

$conn = mysql_connect("localhost", "yaron", "]");
$res  = mysql_query("SELECT * FROM users", $conn);
$header_printed = false;
print "<TABLE>
";
do {
    $data = mysql_fetch_array($res);
    // Retrieve the next row of data.
    if (!is_array($data)) {
        break;
    }
}
```
if (!$header_printed) {
    print " <TR>";
    reset($data);
    while (list($name, $value) = each($data)) {
        print " <TH>$name</TH> 
";
    }
    print " </TR> 
";
    $header_printed = true;
}
print " <TR> 
";
print " <TD> 
";
print implode("</TD> 
 <TD>", $data);
print " </TR> 
";
} while ($data);
print "</TABLE> 
";
?>
Reasons for Using PHP

- Speed and robustness.
- Superior Memory Management
- No Hidden Costs with PHP
- Integration with MySQL database.
- Closer to Java/C++ Style of Programming.
- No Show Stopper Bugs.
- Cross Platform Migration Strategy.
Where to Find More…

- PHP Homepage: http://www.php.net