



## Advanced Online Media

Dr. Cindy Royal

Texas State University at San Marcos

School of Journalism and Mass Communication

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## Using PHP

### What is PHP?

- Server side, scripting language
- Designed for use with html
- Adds flexibility to html
- Syntax similar to programming languages like C, Java, Perl, and ASP

### PHP History

Started in 1994, based on C language to replace some Perl script CGI binary files, to make maintenance of Web site easier. Originally it was called Personal Home Page (PHP) Tools. Upgraded in 1998 by others (Zend) and given a new recursive name PHP Hypertext Preprocessor. Currently at Version 5, both 4 and 5 are still being upgraded.

### Why PHP?

- Open Source, Free Software
- Cross platform for development, deployment and use
- Powerful, robust, scalable
- Web Development Specific
- Can be object-oriented
- Excellent documentation at [www.php.net](http://www.php.net)
- Large, active development community (20 million Web sites)

PHP can be used by itself for some functionality (basic scripting, server-side includes), but can be very powerful with integrated with a database application like MySQL. Our Old Main server has PHP and MySQL installed on it.

### Simple PHP script

PHP is easily embedded in an html page. Simple open the php area with `<?php`, write your code, then close with `?>`. You can have multiple PHP areas in an html page. PHP files must have a `.php` extension. Make sure you aren't using any rich text in the files (like curly quotes – will cause an error).

```
<?php
```

```
echo 'Hello World!';
```

```
?>
```

“echo” simply means to display it as html on the page. Text strings can be wrapped in “ or ‘. All statements are ended with a “;”.

PHP can also use variables. Variables must start with a \$. They are not wrapped in quotes.

```
<?php
```

```
$var1 = 'Hello World!';  
echo $var1;
```

```
?>
```

And, you can concatenate variables with strings or other variables very easily.

```
<?php
```

```
$var1 = "Cindy";  
  
echo "Hello " . $var1;
```

```
?>
```

Comments are helpful to use in programming to identify sections or to explain what you are doing. To comment a single line, use “//”. To comment a multi-line area, use “/\*” to open, and “\*/” to close.

You can also get into a lot of other detail with PHP, like if statements, loops, and functions. See the W3 Schools PHP tutorial at <http://www.w3schools.com/php/default.asp>

### **Server-side includes**

One good use of PHP is that of server-side includes. This lets you insert the contents of one html page into another. The benefit is that you can change the include page, thus changing it on every page that has it included.

You can achieve a similar effect by using frames or even iframes, but this is not recommended by developers. Frames are not as accessible, and the contents of frames must be entire html pages (head, body, etc.). An include page is a simple text file that includes the content you want to have included.

iFrame code:

```
<iframe  
src ="file.html"  
width="100%">
```

```
</iframe>
```

```
<?php  
include("filename.inc")
```

```
?>
```

The filename can have a php or txt extension as well, but the inc extension is useful in helping you identify and organize your files.

Server-side includes are great for footers or navigation or other sections of the page that need to be updated easily (like the Announcements section of our class site).

When PHP executes in the browser, you do not see the PHP code. You only see the html that it rendered. All processing is done on the server side.

## **Use PHP to Post to MySQL database**

### **5 steps of PHP/DB interaction**

1. Create a Connection to a DB
2. Select a DB
3. Perform a DB Query
4. User Returned Data
5. Close Connection

First you must set up the MySQL database. You can PHPMysqlAdmin to set up your fields.

In PHP, you can connect to the database, then execute commands that will write form data to the database.

Create a form that captures the necessary information. Use the following action in the form field:

```
<form name="frmName" method="post" action="d1.php">
```

You will need to include the file d1.php in the same folder as the form, or you will have to include a path.

Then, we create d1.php. First, we put the necessary information in variables. Then, we create a connection variable with the `mysql_connect` command, and then a `mysql_select_db` command.

Then, the `mysql_query` function is used to create a variable that inserts our variables into the database. Use the proper syntax as described below.

The header command redirects to the d1-reader.php page after it submits the query, then the mysql\_close is called.

### ***d1.php***

```
<?php
```

```
$hostname= "localhost";  
$databasename="yourdatabasename";  
$username="yourusername";  
$password="yourpassword";  
$connection = mysql_connect($hostname,$username, $password);  
mysql_select_db($databasename, $connection);
```

```
$_POST['Comments'] = nl2br($_POST['Comments']);  
//this allows the line breaks to occur in the reader
```

```
$insertQuery = mysql_query("Insert into test (Date, GuestName, Comments) values  
('".$_POST['Date']."', '".$_POST['GuestName']."', '".$_POST['Comments']."'"),  
$connection);
```

```
header("Location:d1-reader.php");
```

```
mysql_close($connection);
```

```
?>
```

The reader page (d1-reader.php) is simple. It is a table, but the code is used to create rows for the table as long as there is still data to read in the database.

Insert this table somewhere on a page:

### ***d1-reader.php***

```
<table border='1' cellspacing='0' cellpadding='5'  
width="750" style="border-collapse:collapse;  
font-family:sans-serif;">  
<tr style="background-color:#B2AC79"><th>  
Date</th><th>Name</th><th>Comments</th></tr>
```

```
<?PHP
```

```
$hostname= "localhost";  
$databasename="yourdatabasename";
```

```
$username="yourusername";  
$password="yourpassword";  
$connection = mysql_connect($hostname,$username, $password);  
mysql_select_db($databasename, $connection);
```

```
$result= @ mysql_query("SELECT * FROM test", $connection);  
//selects projects for this user
```

```
while($row = mysql_fetch_array($result))  
{  
print("<tr><td>".$row["Date"]."</td><td>".$row["GuestName"]."</td><td>".$row["Comments"]."</td></tr>");  
}
```

```
mysql_close($connection);
```

```
?>
```

```
</table>
```