



php

IGME-230

*What is Server Side Programming?
Intro to PHP*

PHP

- ◆ PHP is the language we will be using in this course to do server-side programming.
- ◆ “PHP” originally stood for “Personal Home Page”. It is now a recursive acronym that stands for “PHP Hypertext Preprocessor”
- ◆ Free and open source.
- ◆ Runs as a module in the Apache web server
- ◆ The code isn’t compiled in advance, is instead converted to *bytecode* at runtime.

Typical “Static” web pages ...

- ◆ How do browsers usually get HTML pages?
- ◆ Request / Response (simplified)
 - ◆ The web server receives a request for a HTML page or other file (image,stylesheet, ...) from a web browser.
 - ◆ The web server locates the file.
 - ◆ The web server returns the file to the web browser.
 - ◆ The web browser parses the file (if it's HTML) and displays it to the user.

Server-side programming - Web Servers and “dynamic” HTML

- ◆ **Dynamic Request/Response (simplified)**
 - ◆ The web server receives a request for a page from a web browser.
 - ◆ The web server locates the file and determines that it is a PHP script.
 - ◆ The web server invokes the PHP commands on the page, and replaces the PHP code with the results of the processing. The execution of the code could produce any sort of file: HTML, CSS, JavaScript, JPEG/GIF/PNG, XML, JSON, MOV, etc
 - ◆ ...
 - ◆ The web server returns this newly created file to the web browser.
 - ◆ The web browser parses the file (if it's HTML) and displays it to the user.

Server Side Processing

- ◆ How does the web server know there is PHP code on the page?
 - ◆ Usually because the filename ends in `.php`
 - ◆ a `.htaccess` file can be configured to allow the web server to recognize other extensions.

PHP “Hello World”

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

File name: hello.php

Try it. Type this into a text editor and open it in your web browser.

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Demo

???

- ◆ All I saw in the browser window was the code!
- ◆ That's OK - in order for the code to run, PHP requires a web server with the PHP module installed.
- ◆ Solution: Get the PHP file up on a web server and run the file, now you should just see the “Hello World!” message.

PHP “Hello World -2”

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <title>Hello 2</title>
</head>
<body>
<?php
    echo "<h1>Hello World!</h1>";
    echo "<p>It's " . date('r'); //a "dot" is used for string concatenation
?>
<footer>&copy; IGM 2018</footer>
</body>
</html>
```

File name: hello2.php

Above we see that PHP code can be embedded in HTML

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Demo

What version of PHP do we have?

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

File name: info.php

The `phpinfo()` function generates a web page that lists the capabilities of PHP on this particular server. This is usually the first PHP script you write when you are working with a new web server.

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PHP Version 5.2.17

System	SunOS web01ppl01c 5.10 Generic_147441-25 i86pc
Build Date	Mar 15 2011 17:23:16
Configure Command	'./configure' '--prefix=/usr/local/php5' '--enable-discard-path' '--with-openssl=/usr/local/ssl' '--with-zlib' '--enable-bcmath' '--with-bz2' '--enable-calendar' '--with-curl' '--with-curlwrappers' '--enable-dba' '--with-gdbm' '--with-db4' '--enable-exif' '--enable-ftp' '--with-gd' '--with-jpeg-dir' '--with-png-dir' '--with-gettext' '--with-gmp' '--with-imap=/usr/local/imap' '--with-imap-ssl' '--with-ldap' '--enable-mbstring' '--with-mcrypt' '--with-mhash' '--with-mysql=shared,/usr/local' '--with-mysqli=shared,/usr/local/bin/mysql_config' '--with-zlib' '--with-oci8=/opt/app/oracle/product/10.1.0.1.0/c' '--with-pspell' '--enable-soap' '--enable-sqlite-utf8' '--enable-wddx' '--with-tidy' '--with-xsl' '--with-pear' '--enable-fastcgi' '--with-freetype-dir=/usr' '--with-ttf' '--enable-zip'
Server API	CGI/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/usr/local/php5/lib
Loaded Configuration File	/home/acjvks/php_data/php.ini
Scan this dir for additional .ini files	(none)
additional .ini files parsed	(none)
PHP API	20041225
PHP Extension	20060613
Zend Extension	220060519
Debug Build	no
Thread Safety	disabled
Zend Memory	enabled

Demo of
info.php

Questions?