

Web Authoring & Design

AMPPS *INTRODUCTION*

Web Authoring & Design

In this lesson :

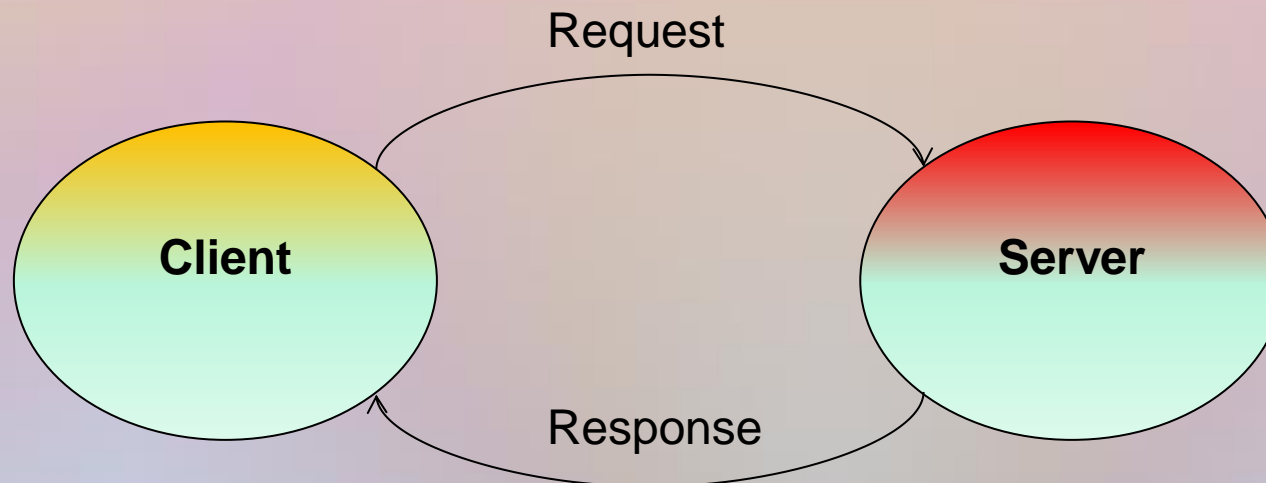
- ❖ **Server Side Programming**
- ❖ **What is AMPPS**
- ❖ **How to use AMPPS**

Web Authoring & Design

❏ Server Side Programming

❑ Client Server Architecture

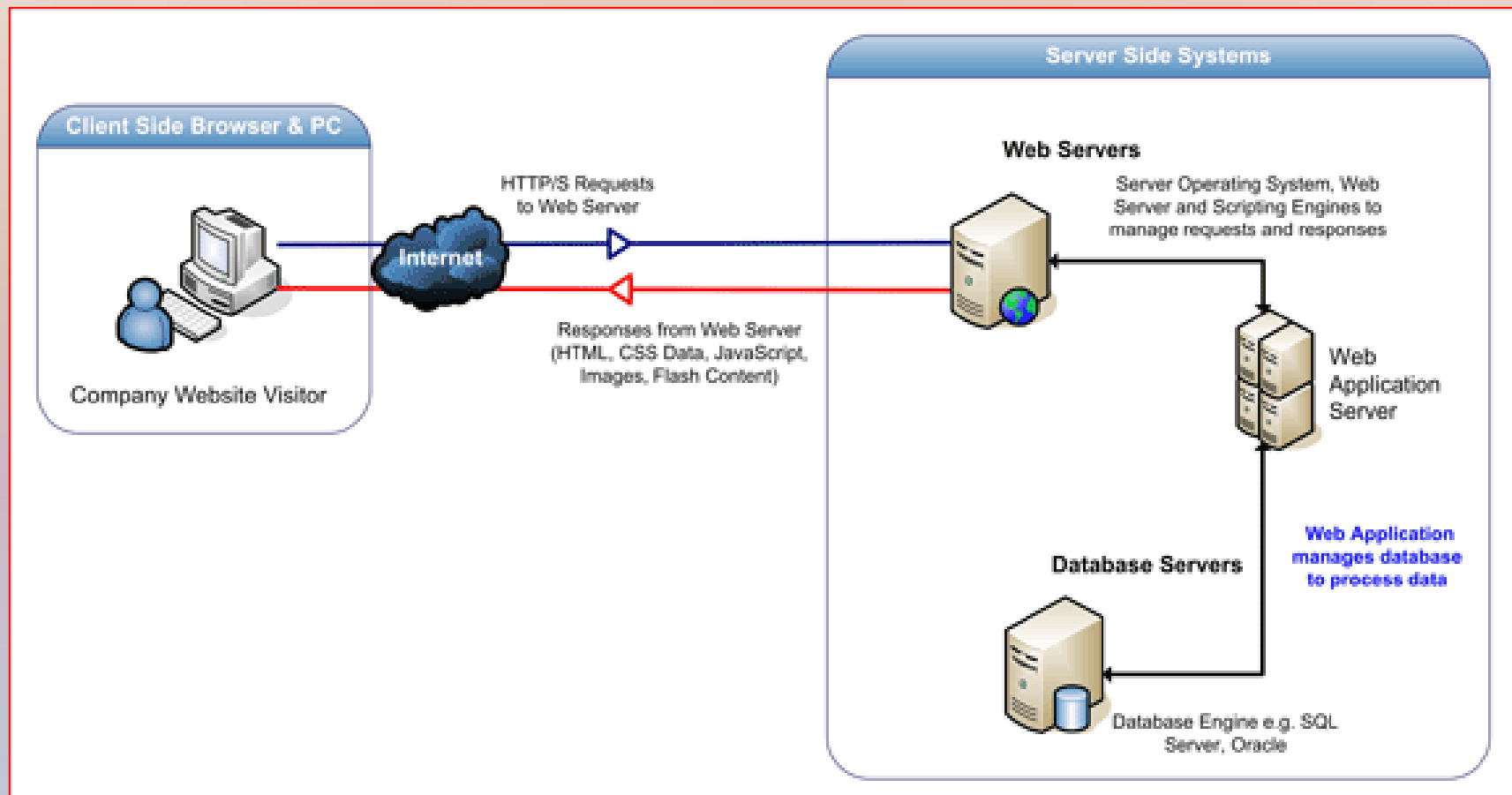
- ❑ A web application presents a Client-Server architecture, that can be represented in the following way:



Web Authoring & Design

❖ Server Side Programming

❑ Server Side Programming



Web Authoring & Design

❏ Server Side Programming

❑ How does it work?

- ❑ **Client** : send a **Request** to the Server for a specific web page
- ❑ **Server** : receives and analyses the request, and sends back the corresponding **Response**.

❑ Client Technologies

- HTML, CSS, JavaScript
- Use Notepad++ to create the desired web page
- Run this web page directly into our Web Browser (Firefox – Chrome)

Web Authoring & Design

❏ Server Side Programming

❑ How does it work?

❑ Server Technologies

- PHP , Apache, MySQL

- **PHP** : *server side programming language* to implement the code to run on a server

- **Apache** : Web Server used to manage the HTTP requests coming from clients

- **MySQL** : open source relational database

Web Authoring & Design

❏ Server Side Programming

❑ How does it work?

❑ Server Technologies

- Use Notepad++ to create the dynamic web page using PHP language
- The PHP server code must be executed by a special program called **Web Server (Apache)**
- **IF YOU RUN** this code directly into your Web Browser (Firefox – Chrome) it does not work!!!!!!!!!!
The reason will be clear in a while.....

Web Authoring & Design

❏ Server Side Programming

❑ Server Technologies

- ❑ To develop Server-Side programs, we need to install on our laptop **PHP, Apache, MySQL...**
- ❑ You can do this operation in two different ways:
 - 1) Download and install every single component...but it is a quite long operation as it requires a lot of time!!!
 - 2) Using specific tools containing all these technologies together as **AMPPS!!!!!!!**

Web Authoring & Design

❖ AMPPS Introduction

AMPPS Stack

AMPPS is a WAMP, MAMP and LAMP stack of Apache, MySQL, MongoDB, PHP, Perl & Python.

AMPPS enables you to focus more on using applications rather than maintaining them.

With AMPPS you can create a website by installing any of the 343 Apps, customizing it, and then simply publishing it on the internet via a wide choice of hosting service providers.



Web Authoring & Design

❏ **AMPPS Introduction**

❑ As you can see from this picture, this tool is defined as a “**stack**” of technologies as :

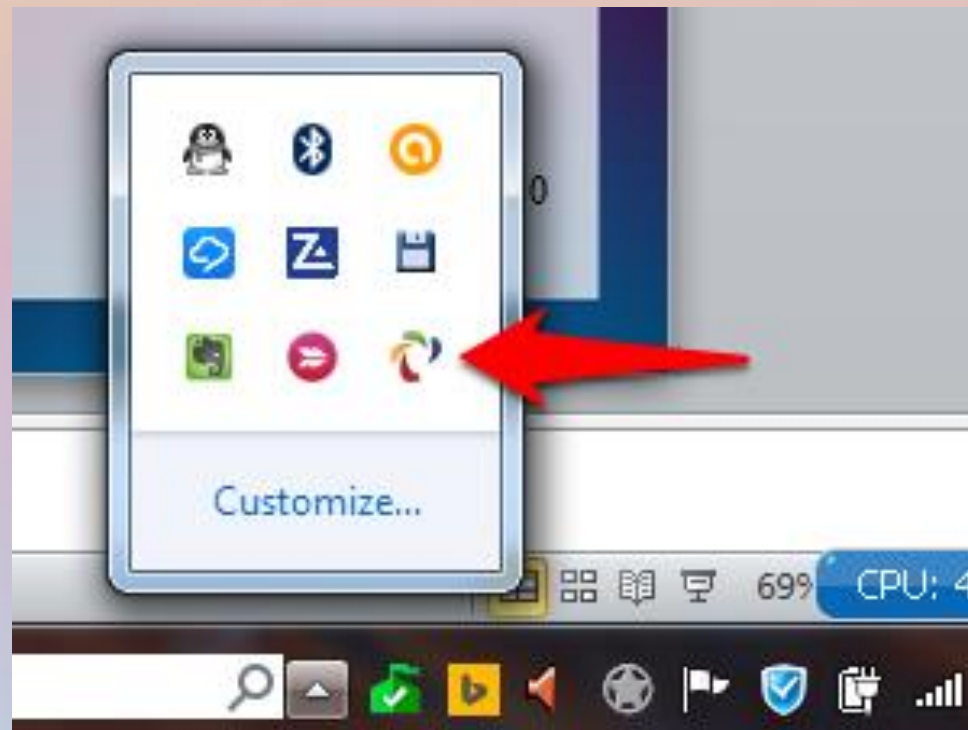
- **PHP** (scripting language)
- **Apache** (Web Server)
- **MySQL** (Database)

- Python (Not useful for our purpose)
- Perl (Not useful for our purpose)

Web Authoring & Design

❏ AMPPS Introduction

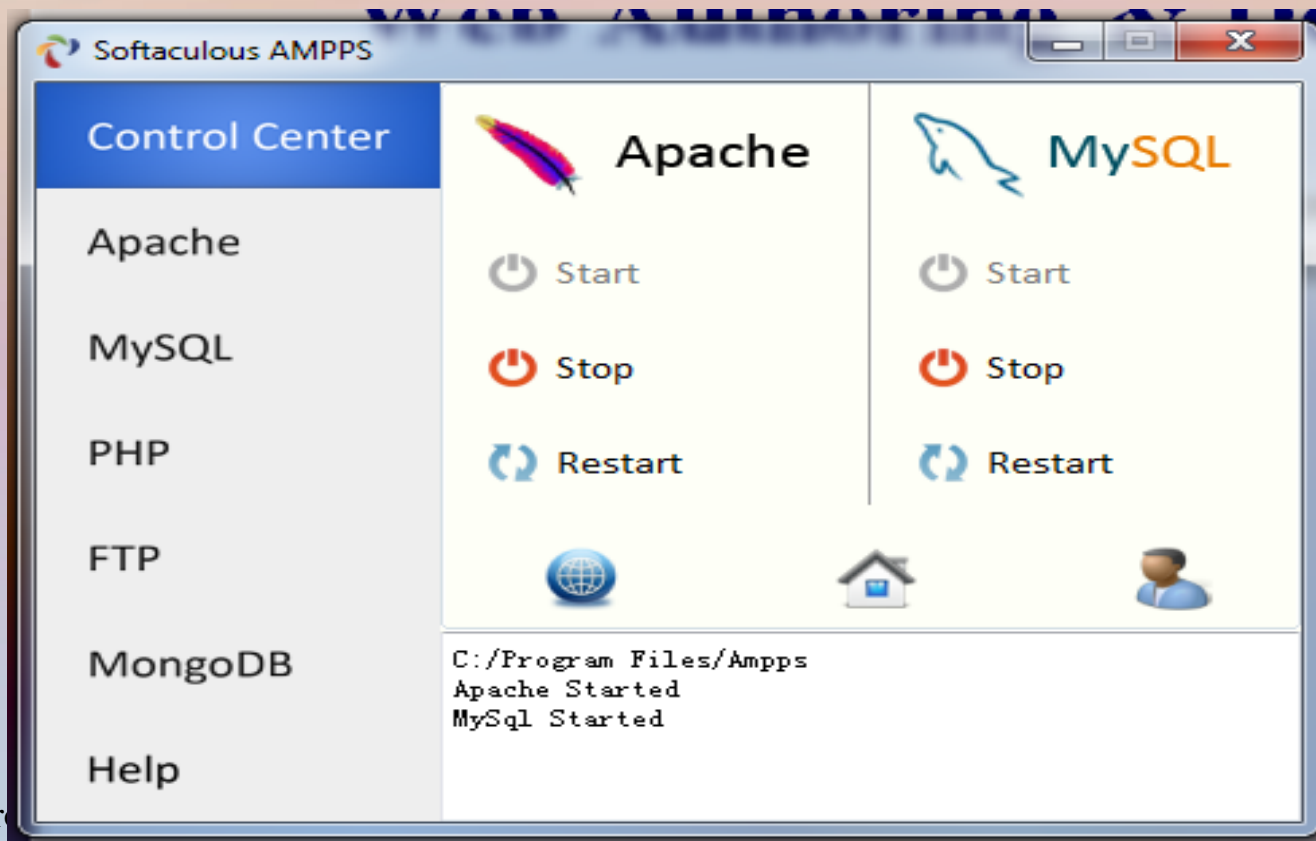
- ❑ Once you have installed AMPPS on your laptop, you can see the corresponding icon on the task bar...



Web Authoring & Design

❏ AMPPS Introduction

- ❑ If you double click on that icon, the **Main Control Window** will appear showing the current state for all the applications:



Web Authoring & Design

❏ AMPPS Introduction

- ❑ As you can see :
 - *On the left side* : you select the application you want to interact with
 - *On the right side* : you can change the corresponding settings
- For our purpose we have to verify that both services – **Apache** and **MySQL** – are running. If not, you have to start up these applications....
- ***PROBLEM*** : *Apache uses port 80 to receive requests...if another application (ex. Microsoft IIS or Skype....)is using the same port this service does not start...*

Web Authoring & Design

❏ AMPPS Introduction

- ❑ ***SOLUTION:*** *in this case you have to identify the process that is using port 80 and stop it!!!!*

So, usually you have to :

- ✓ *Stop IIS*
- ✓ *Stop Skype*

Web Authoring & Design

❏ **AMPPS Introduction**

- ❑ What is Apache?
 - It is the world's most widely-used **Web Server**
 - In 2009 became the first web server to serve more than 100 million web sites

- What is a Web Server ?????
- It is a software that :
 - **Receives and understands HTTP commands from the client**
 - **Executes PHP scripts (performing specific operations)**
 - **Returns the requested Web Page to the client as HTML code**

Web Authoring & Design

❏ AMPPS Introduction

- ❑ How can we use this web server?
 - **First** : we have to create a PHP script (of course we need to know PHP language)
 - **Second** : Apache must execute this script...so this script must be located in a specific folder called **WWW** (..I will show you in a while....)

Remember : *Web Server is going to return an HTML page that will be executed by the customer's Web Browser.*

Web Authoring & Design

❖ AMPPS Introduction



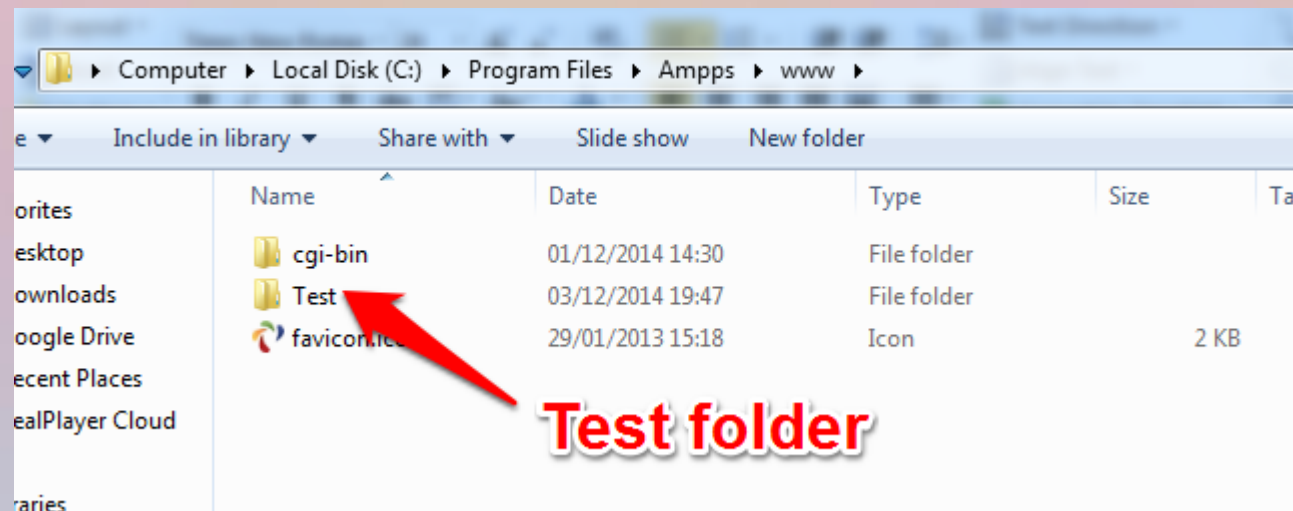
Students....try to remember the last slide otherwise will be difficult for you to understand future lessons....

Web Authoring & Design

AMPPS Introduction

- ❑ WWW folder
- ❑ AMPPS will be installed in C:/Program Files/Ampss
- ❑ Opening this folder you can find WWW folder that is the place where we will insert our projects...

❑ Example :



Web Authoring & Design

❏ AMPPS Introduction

❑ WWW folder



You do not need to know too much about Apache web server....

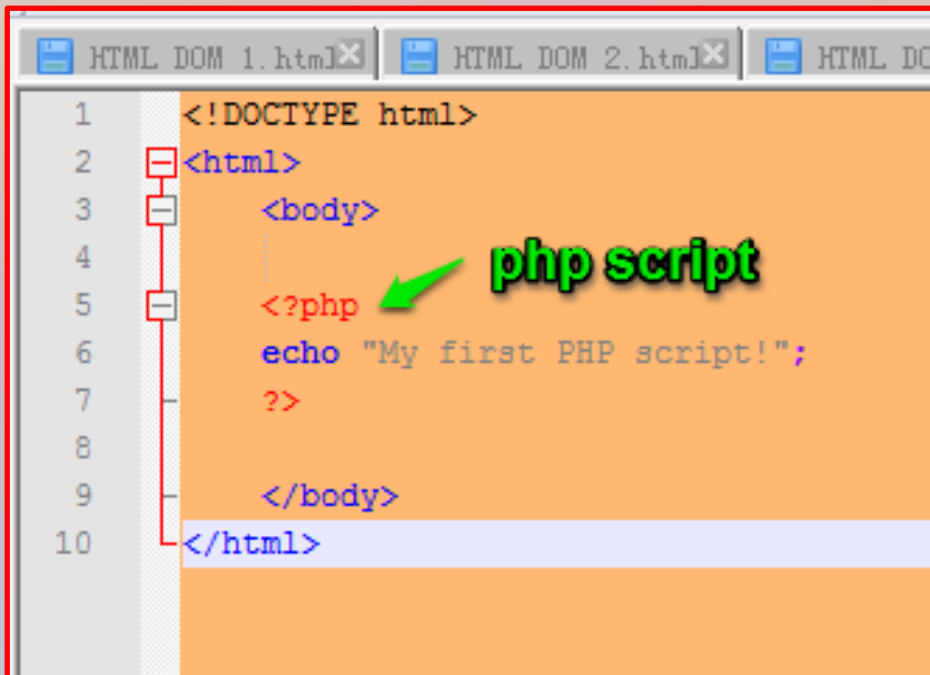
You just have to know where to insert your PHP script...

Web Authoring & Design

AMPPS Introduction

❑ PHP Script

- ❑ This one is a basic PHP script that shows a “My first PHP script” on the web page



```
1 <!DOCTYPE html>
2 <html>
3   <body>
4     <?php
5       echo "My first PHP script!";
6     ?>
7   </body>
8 </html>
```

The screenshot shows a web editor with three tabs: "HTML DOM 1.htm", "HTML DOM 2.htm", and "HTML DOM 3.htm". The active tab is "HTML DOM 2.htm". The code is displayed in a light orange background. A green arrow points to the opening PHP tag `<?php` on line 5, with the text "php script" written in green next to it. The code is as follows:

If you pay attention at this script, you will notice that:

- 1) PHP scripts :
 - 1) Starts with `<?php`
 - 2) Ends with `?>`
- 2) The script is inside the body tag
- 3) The script is part of an HTML page

Web Authoring & Design

AMPPS Introduction

- ❑ **Testing script**
- ❑ As usual we use Notepad ++ to write PHP code... at the end it is a text editor...so it writes just texts!!!!!!
- ❑ Once you have finished your code using Notepad++ , save it using the following name : **MyFirstPHP.php**



Hey ...student.
Wake – up !!!!!

Pay attention at
file's extension!!!!!!

Web Authoring & Design

❏ AMPPS Introduction

❑ Testing script

- Now, you can open Firefox and write **localhost** in the address bar
- This open a new window where you can see the following information:

Web Authoring & Design

AMPPS Introduction

Testing script

The screenshot shows a web browser window with the address bar set to 'localhost'. The page displays the AMPPS (by softaculous) interface. The navigation bar includes links for 'Getting Started', 'Suggested Sites', 'Web Slice Gallery', '建议网站', and '网页快讯库'. The main content area shows a file listing table with the following data:

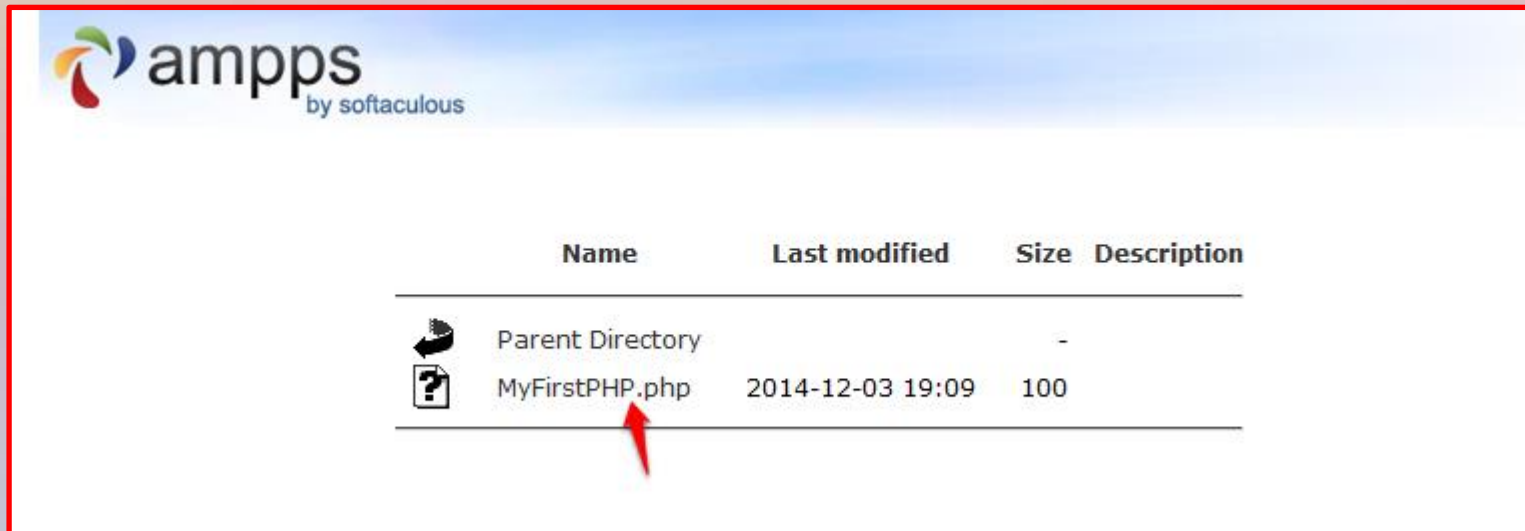
Name	Last modified	Size	Description
Test/	2014-12-03 19:48	-	
cgi-bin/	2014-12-01 22:01	-	
favicon.ico	2013-01-29 15:18	1.1K	

A red arrow points to the 'Test/' directory. The footer of the page states 'Powered by AMPPS and Softaculous'.

Web Authoring & Design

AMPPS Introduction

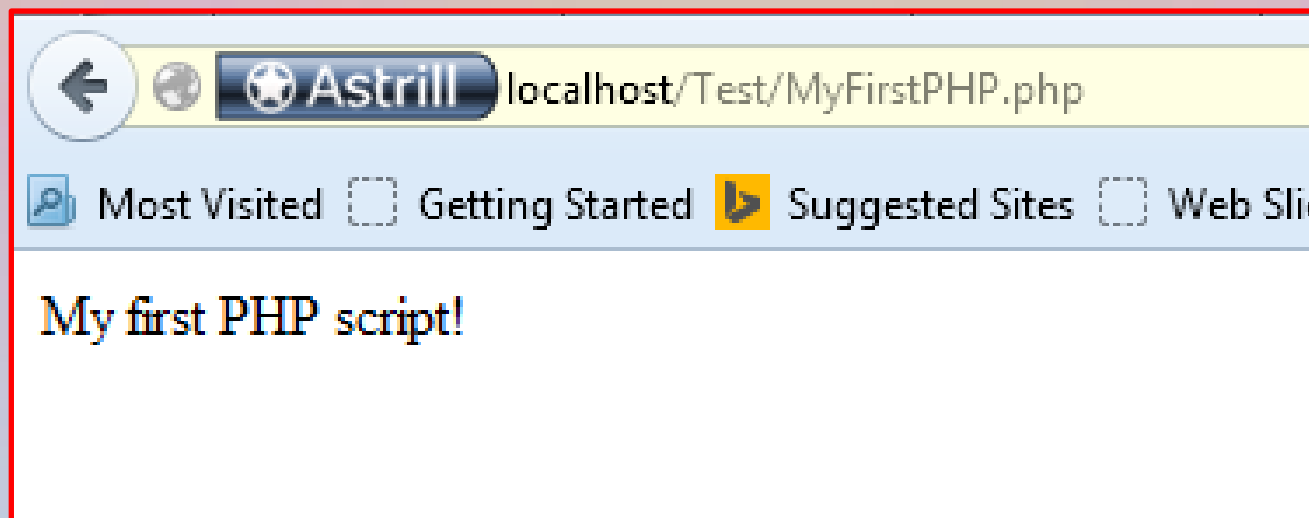
- ❑ **Testing script**
- ❑ Double clicking **Test** folder (to open it), you can find your php file:



Web Authoring & Design

❏ AMPPS Introduction

- ❑ **Testing script**
- ❑ Clicking **MyFirstPHP.php**, Apache runs this code executing the script and returning the corresponding HTML file to the web browser that will display on the screen



Web Authoring & Design

Review Lesson

1. Describe a Client-Server architecture
2. What technologies are used for Server side programming?
3. What is PHP and what is useful for?
4. Explain the function of a Web Server
5. What is AMPPS and why do we use it?
6. How does Apache work?
7. What is the WWW folder and how do we use it?
8. How do you create a Server – script?