



<http://www.lockergnome.com/wp-content/uploads/2011/11/web-design.jpeg>

## Lesson 2: Setting Up a Web Server

# HTTP vs. HTML

- HTTP: hypertext transfer **protocol**
  - The rules governing the conversation between a web client and a web server
- HTML: hypertext **markup language**
  - Definitions of tags that are added to Web documents to control their appearance

# An HTML Example

- The HTML document is divided into two major parts:

- HEAD-

```
<html>  
<head>  
  <title>New Zealand Dollar Rates</title>  
</head>
```

- BODY-

```
<body>
```

<<Contents...>>

```
</body>
```

```
</html>
```

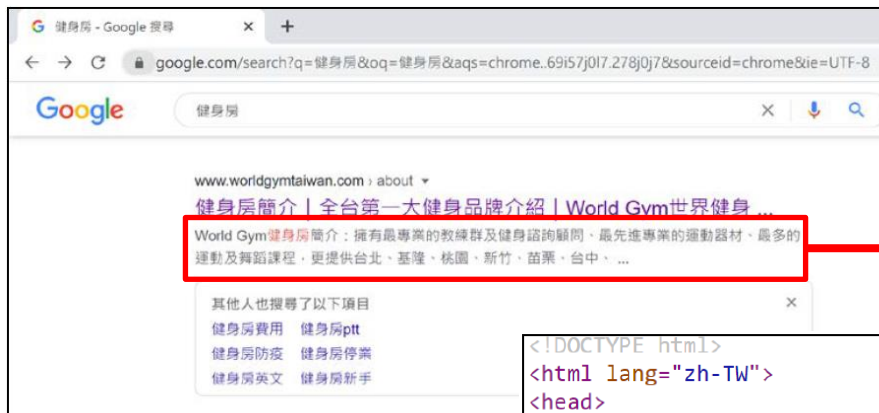
# HTML Document Structure (1/4)

- **HEAD**- contains information about the document
  - Title of the page <title>NCKU, 國立成功大學...</title>
    - Appears at the top of the browser window



# HTML Document Structure (2/4)

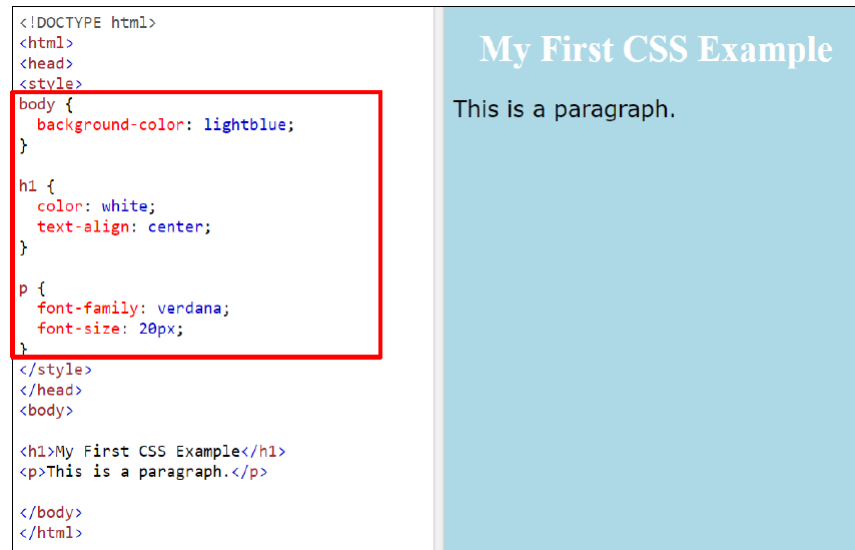
- **HEAD**- contains information about the document
  - Meta tags <meta>
    - used to describe the content (used by Search engines)



```
<!DOCTYPE html>
<html lang="zh-TW">
<head>
  <meta charset="utf-8"/>
  <meta http-equiv="X-UA-Compatible" content="IE=edge" />
  <meta name="format-detection" content="telephone=no" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>健身房簡介 | 全台第一大健身品牌介紹 | World Gym世界健身俱樂部</title>
  <meta name="description" content="World Gym健身房簡介：擁有最專業的教練群及健身諮詢顧問、最先進專業的運動器材、最多的運動及舞蹈課程，更提供台北、基隆、桃園、新竹、苗栗、台中、彰化、雲林、台南、高雄、屏東、宜蘭、花蓮地區最寬敞的健身及休憩空間，使運動成為一種生活享受！" />
  <meta name="keywords" content="健身房簡介, 健身房介紹, 健身品牌, 健身房, 健身" />
</head>
```

# HTML Document Structure (3/4)

- **HEAD**- contains information about the document
  - JavaScript or Cascading Style Sheets (CSS)
    - JavaScript: adds some functionality, validates forms, communicates with the server ...
    - CSS: controls the style and layout of multiple web pages all at once



```
<!DOCTYPE html>
<html>
<head>
<style>
body {
  background-color: lightblue;
}
h1 {
  color: white;
  text-align: center;
}
p {
  font-family: verdana;
  font-size: 20px;
}
</style>
</head>
<body>

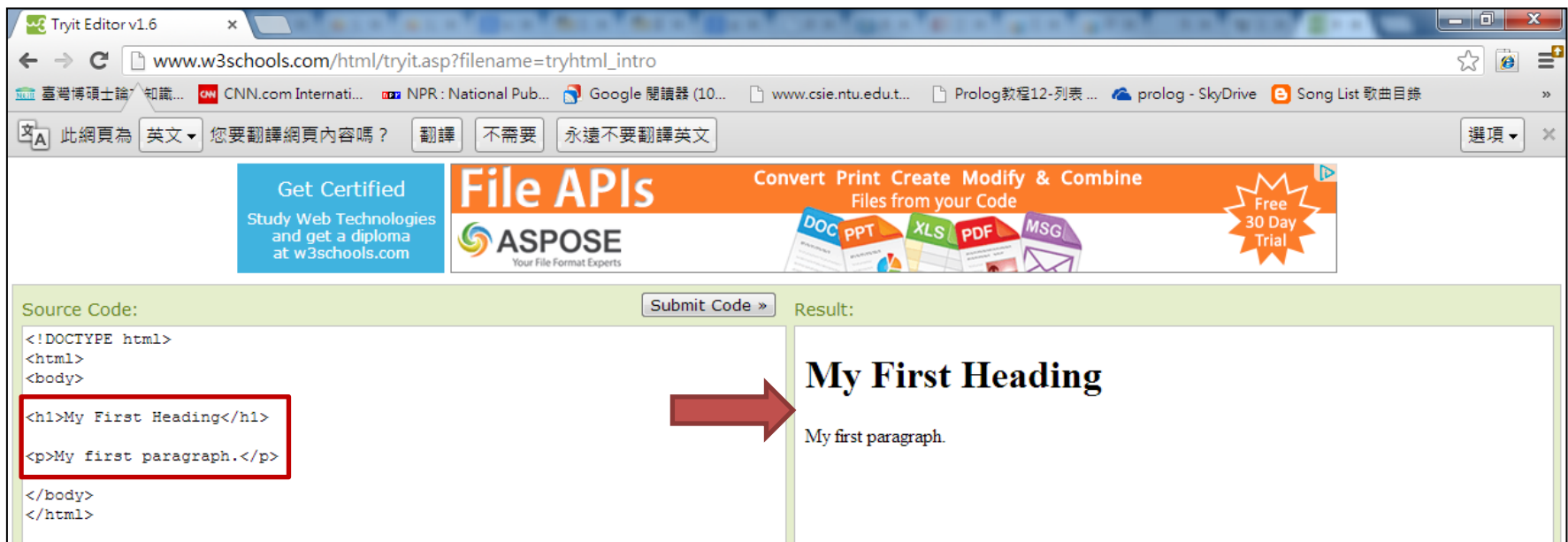
<h1>My First CSS Example</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

[https://www.w3schools.com/css/tryit.asp?filename=trycss\\_default](https://www.w3schools.com/css/tryit.asp?filename=trycss_default)

# HTML Document Structure (4/4)

- **BODY**-Contains the actual content of the document
  - This is the part that will be displayed in the browser window



The screenshot shows the W3Schools Tryit Editor interface. The browser address bar displays `www.w3schools.com/html/tryit.asp?filename=tryhtml_intro`. Below the browser window, there are several banners: a blue one for 'Get Certified', an orange one for 'File APIs' by ASPOSE, and a starburst for 'Free 30 Day Trial'. The main area is divided into two panels. The left panel, titled 'Source Code:', contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

The code lines `<h1>My First Heading</h1>` and `<p>My first paragraph.</p>` are highlighted with a red box. A large red arrow points from this box to the right panel. The right panel, titled 'Result:', shows the rendered output: 'My First Heading' in a large, bold, black serif font, followed by 'My first paragraph.' in a smaller, regular black serif font.

[http://www.w3schools.com/html/tryit.asp?filename=tryhtml\\_intro](http://www.w3schools.com/html/tryit.asp?filename=tryhtml_intro)

# HTML Tags

- HTML tags almost appear pairwise
  - The start tag is often called the **opening tag**, and the end tag is called the **closing tag**
  - Example: `<head> </head> & <body> </body>`
- Standalone tags
  - There are a few HTML tags which do not use an end tag
    - `<img>`, `<br>`, `<hr>`...



# Some Common HTML Tags

- `<!-- .... -->`: comments
- `<br>`: defines a single line break
- `<font>...</font>`

Example:

```
<font face="verdana" color="green">This is some text!</font>
```

This is some text!

- `<a href= link>...</a>`


Example:

```
<a href="http://www.ncku.edu.tw/">成功大學</a>
```

[成功大學](http://www.ncku.edu.tw/)

- HTML tag list: <https://www.w3schools.com/tags/default.asp>

# Developing Environment

- The common development environment is **WAMP**
  - Windows + Apache + MySQL + PHP
- Here are some good and open-source tools
  - Wampserver  
<http://www.wampserver.com/en/>
  - AppServ  AppServ Open Project  
<https://www.appserv.org/en/>

# How to Install AppServ?

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## Home

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### AppServ : Apache + PHP + MySQL

Simple package for programming

- Quickly and easy to install Apache, PHP, MySQL.
- Don't need any skill for setting up step by step.
- Can turn your PC to Web Server and Database Server.

AppServ is **FREE** for everyone in this world.





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support this fund can  
give developer to  
active this project and

### AppServ 8.6.0

- Apache 2.4.25
- PHP 5.6.30
- PHP 7.1.1
- MySQL 5.7.17
- phpMyAdmin 4.6.6
- Support TLS,SSL or https
- Can switch the PHP version as you need.

Release Date : **2017-01-25**

[DOWNLOAD](#) 

- A good tutorial: <https://sofree.cc/windows-appserv/>

# How to See If It Works?

- Open a web browser and go to <http://localhost>

**The AppServ Open Project - 8.6.0 for Windows**  
Now you running on **PHP 5.6.30**

 **phpMyAdmin Database Manager Version 4.6.6**  
 **PHP Information Version**

About AppServ Version 8.6.0 for Windows  
AppServ is a merging open source software installer package for Windows includes :

- **Apache Web Server** Version **2.4.25**
- **PHP Script Language** Version **5.6.30 & 7.1.1**
- **MySQL Database** Version **5.7.17**
- **phpMyAdmin Database Manager** Version **4.6.6**

- [ChangeLog](#)
- [README](#)
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**Official Site :** <http://www.AppServ.org>  
**Hosting by :** <http://www.AppServHosting.com>

**Change Language :**  

 **Easy way to build Webserver, Database Server with AppServ :-)**

# phpMyAdmin

- You can handle MySQL with this management tool

The screenshot displays the phpMyAdmin interface for a MySQL server on localhost. The left sidebar shows a tree view of databases: information\_schema, mysql, performance\_schema, and sys. The main content area is divided into two panels: '一般設定' (General) and '外觀設定' (Appearance). The '一般設定' panel includes a '修改密碼' (Change Password) link and a dropdown menu for '伺服器連線編碼與排序' (Server connection encoding and collation) set to 'utf8mb4\_unicode\_ci'. The '外觀設定' panel includes a '語系 - Language' dropdown set to '中文 - Chinese traditional', a '主題' (Theme) dropdown set to 'pmahomme', and a '字體大小' (Font size) dropdown set to '82%'. The right sidebar contains three sections: '資料庫伺服器' (Database server) listing server details like localhost via TCP/IP, MySQL version 5.7.17-log, and user root@localhost; '網頁伺服器' (Web server) listing Apache/2.4.25, OpenSSL/1.0.2j, PHP/5.6.30, and MySQL version 5.0.11-dev; and 'phpMyAdmin' listing version 4.6.6 and links to documentation, official page, contributions, technical support, version history, and permissions.

phpMyAdmin

伺服器: localhost

資料庫 SQL 狀態 使用者帳號 匯出 匯入 設定 備援 變數 字元編碼 引擎 附加元件

最近使用 我的最愛

新增

- information\_schema
- mysql
- performance\_schema
- sys

一般設定

修改密碼

伺服器連線編碼與排序: utf8mb4\_unicode\_ci

外觀設定

語系 - Language: 中文 - Chinese traditional

主題: pmahomme

字體大小: 82%

更多設定

主控台

資料庫伺服器

- 伺服器: localhost via TCP/IP
- 伺服器類別: MySQL
- 伺服器版本: 5.7.17-log - MySQL Community Server (GPL)
- 協定版本: 10
- 使用者: root@localhost
- 伺服器字元集: UTF-8 Unicode (utf8)

網頁伺服器

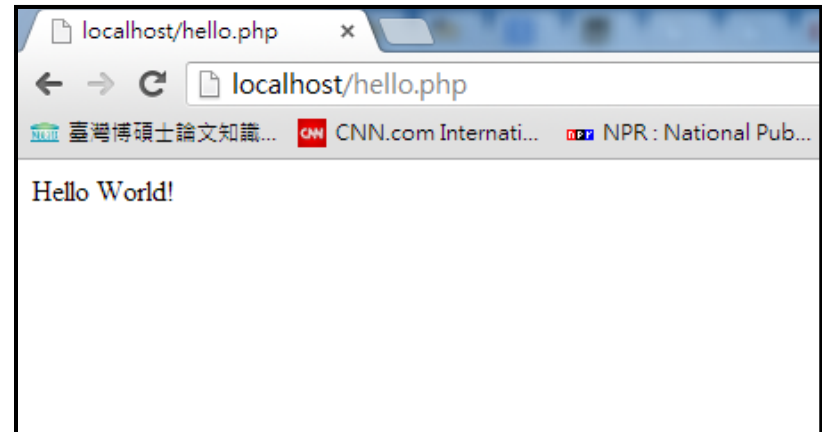
- Apache/2.4.25 (Win32) OpenSSL/1.0.2j PHP/5.6.30
- 資料庫用戶端版本: libmysql - mysqlnd 5.0.11-dev - 20120503 - \$Id: 76b08b24596e12d4553bd41fc93cccd5bac2fe7a \$
- PHP 擴充套件: mysqli curl mbstring
- PHP 版本: 5.6.30

phpMyAdmin

- 版本資訊: 4.6.6
- 說明文件
- 官方首頁
- 貢獻
- 技術支援
- 版本沿革
- 授權

# Writing a First PHP Script

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

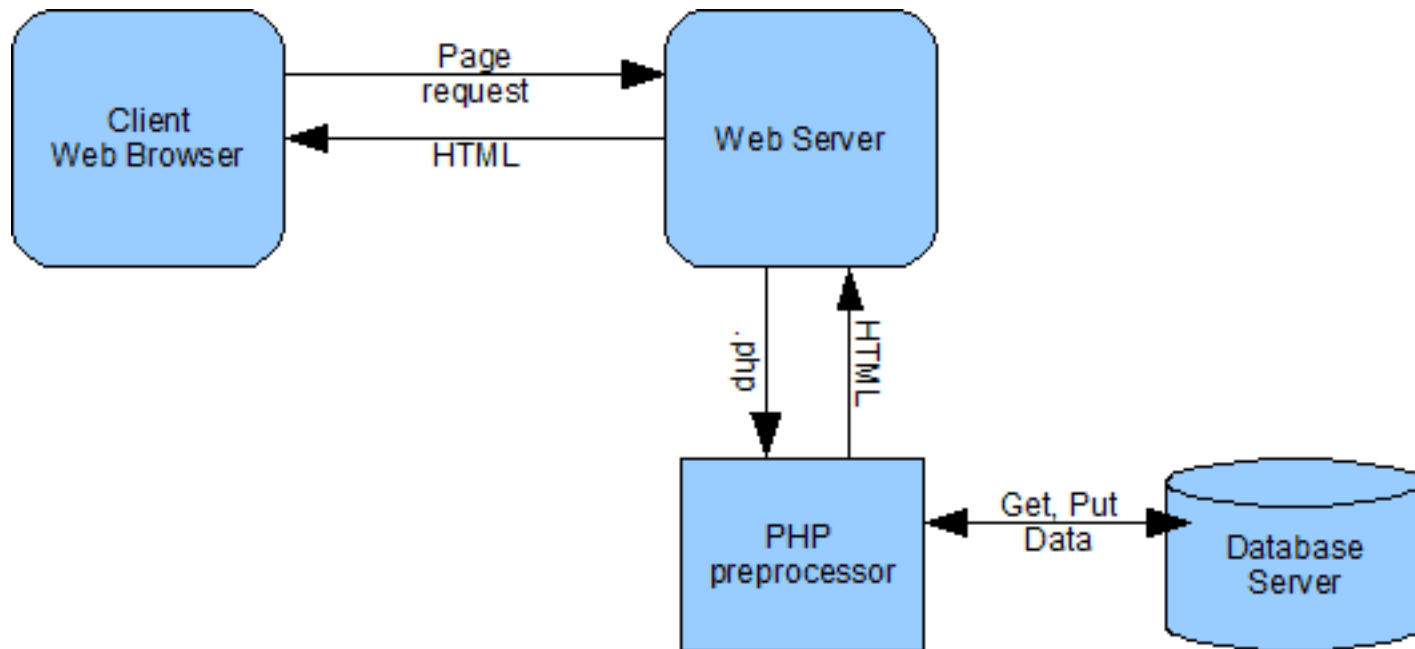


Step 1: Save as a php file named hello.php

Step 2: Put it in the C:\Appserv\www folder

Step 3: Go to <http://localhost/hello.php> to check if it works

# How Does PHP Work?



[http://www.classicpageworks.com/articles/images/PHP\\_Client\\_Server\\_Messaging.gif](http://www.classicpageworks.com/articles/images/PHP_Client_Server_Messaging.gif)

# Q&A