

电子商务实验报告 1

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macOS 搭建 HTTP 服务器

配置 Apache 服务（在这里我们也可以用 NGINX 服务器来搭建 HTTP 服务器）

环境：macOS Ventura 13.1

第一步：由于 mac 自带 Apache 环境，所以我直接在终端 terminal 直接输入 `sudo apachectl start` 来启动 apache 服务

Last login: Thu Feb 23 12:34:30 on ttys001

```
The default interactive shell is now zsh.  
To update your account to use zsh, please run `chsh -s /bin/zsh`.  
For more details, please visit https://support.apple.com/kb/HT208050.  
MacBook-Air:~ alex$ sudo apachectl start  
Password:
```

输入完本机密码之后 我们浏览器打开 `http://localhost/`
就会显示 it Works!



第一步： 我们要找到我们的 **Apache** 所在的目录 首先我们要点击前往文件夹并输入这个 `/Library/WebServer/Documents/`就能找到

`#index.html` 是一个特殊的 HTML 文件，用于为访问的网站定义其首页。您可以将其看作是一个入口，通常在网站根目录中找到，用户访问网站时，此文件会自动显示出来，也就是说我们可在这个文件里编辑内容最终都会显示在我们的屏幕。

第三步：查看 apache 的 httpd.conf 如何配置 sudo vim httpd.conf

```
# This is the main Apache HTTP server configuration file. It contains the
# configuration directives that give the server its instructions.
# See http://httpd.apache.org/docs/2.4/ for detailed information.
# In particular, see
# http://httpd.apache.org/docs/2.4/mod/directives.html
# for a discussion of each configuration directive.
#
# Do not simply read the instructions in here without understanding
# what they do. They're here only as hints or reminders. If you are unsure
# consult the online docs. You have been warned.
#
# Configuration and logfile names: If the filenames you specify for many
# of the server's control files begin with "/" (or "drive://" for win32), the
# server will use that exact path. If the filenames do not begin
# with "/", the value of ServerRoot is prepended -- so "logs/access_log"
# with ServerRoot set to /usr/local/apache2 will be interpreted by the
# server as "/usr/local/apache2/logs/access_log", whereas "logs/access_log"
# will be interpreted as "logs/access_log".
#
#
# ServerRoot: The top of the directory tree under which the server's
# configuration, error, and log files are kept.
#
# Do not add a slash at the end of the directory path. If you point
# ServerRoot at a non-local disk, be sure to specify a local disk on the
# file system first. If file-based mutexes are used, if you wish to share the
# same ServerRoot for multiple httpd daemons, you will need to change at
# least PidFile.
#
# ServerRoot "/usr"
#
#
# Mutex: Allows you to set the mutex mechanism and mutex file directory
# for individual mutexes, or change the global defaults
#
# Uncomment and change the directory if mutexes are file-based and the default
# mutex file directory is not on a local disk or is not appropriate for the
# entire reason.
#
# Mutex default:private/var/run
#
#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the VirtualHost
# directive.
#
# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
Listen 12.34.56.78:80
<#Define SERVER_APP_HAS_DEFAULT_PORTS>
    Listen 8080
</#Define>
<#Define SERVER_APP_HAS_DEFAULT_PORTS>
    Listen 80
</#Define>
#
#
# Dynamic Shared Object (DSO) Support
#
# To be able to use the functionality of a module which was built as a DSO you
# have to place corresponding 'LoadModule' lines at this location so the
# module can be loaded at runtime. To see the functions available for the
```

第四步：mac 进入 vim 模式,命令行模式后打 /DocumentRoot 找到后更改目录地址

```
#
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "/Library/WebServer/Sites1"
<Directory "/Library/WebServer/Sites1">
#
```

第五步：然后继续利用命令模式输入 /Listen，看到侦听端口，在这里的我的端口是 8080，一般默认端口是 80

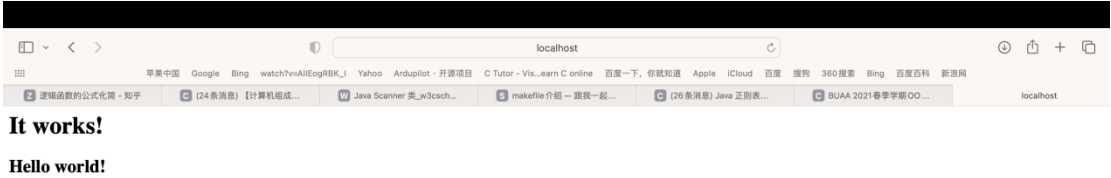
```
..
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
#Listen 12.34.56.78:80
<IfDefine SERVER_APP_HAS_DEFAULT_PORTS>
    Listen 8080
</IfDefine>
<IfDefine !SERVER_APP_HAS_DEFAULT_PORTS>
    Listen 80
</IfDefine>
```

困难：在这边需要了解一下 vim 模式的操作比如 shift+ : 是命令行模式，i 则是 insert 模式可以插入编辑删除信息等

第六步：继续搜索 /ServerName 来知道我们的域名，我们可以修改，不改则服务器 IP 为 localhost

```
#
# ServerName gives the name and port that the server uses to identify itself.
# This can often be determined automatically, but we recommend you specify
# it explicitly to prevent problems during startup.
#
# If your host doesn't have a registered DNS name, enter its IP address here.
#
#ServerName www.example.com:80
```

第七步：因为我们没有修改域名，所以当我们重新用浏览器打开想看是否运行成功的时候，我们就要在浏览器输入 `http://localhost/` 则显示 **It Works!**！但我们注意到下面还会显示 **Hello World!** 这是为什么呢？原因因为我修改 `index.html` 文件里的内容，所以就像上面注释写到，当用户访问网站时，此文件会自动显示出来。



总结：由于 `mac` 自帶了 `Apache` 环境，所以在这次实验我并不需要太麻烦的操作。