

Unix Linux Development MacBook Deployment Notes

Tip: Running the app on a mac (when apache is running and webpack is an issue)

Tip: Different Port, cli commands for m1, 403 Error for Nodejs projects

Tip: How to clone a personal repo from github

Tip: How to install Apache on Monterey 12.xx (Mac M1)

Includes – Symbolic links, creating a file with touch, installing php.. etc..

Tip: Fixing git push not pushing to GitHub

Tip: How to view hidden files on your mac

Tip: Getting brew to be recognized / creating the .zshrc user file

Tip: Checking the Apache Version

Tip: Understanding Apache and -> (Determining what version of Apache you are using.. etc..)

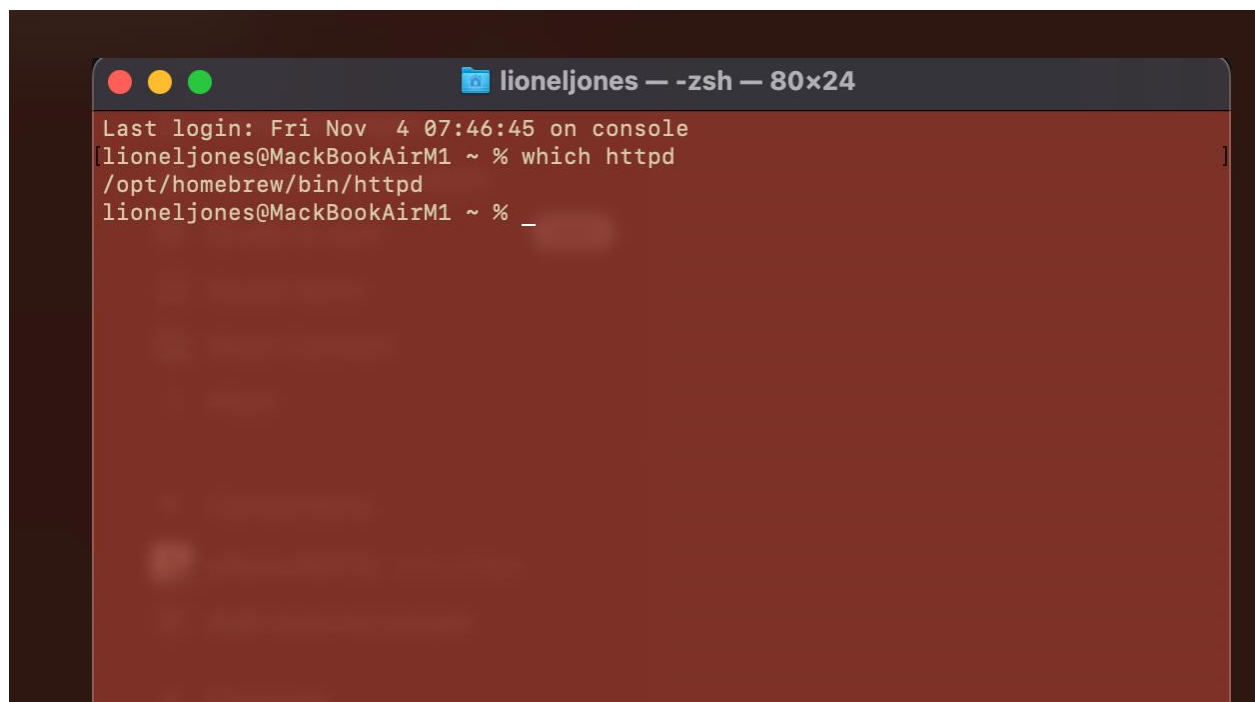
Tip: How to find the opt directory on macbook

Tip: Installing a React App with Apache on a MacBook

Tip: Installing a React App with Apache on a MacBook

<https://gist.github.com/ywwwtseng/63c36ccb58a25a09f7096bbb602ac1de>

Find out which version of Apache you are running (this determines where to copy over your files)

A terminal window titled "lioneljones — zsh — 80x24" with a dark red background. The window shows the following text: "Last login: Fri Nov 4 07:46:45 on console", "lioneljones@MackBookAirM1 ~ % which httpd", and the output "/opt/homebrew/bin/httpd". The prompt "lioneljones@MackBookAirM1 ~ % _" is visible at the bottom.

```
lioneljones — zsh — 80x24
Last login: Fri Nov 4 07:46:45 on console
lioneljones@MackBookAirM1 ~ % which httpd
/opt/homebrew/bin/httpd
lioneljones@MackBookAirM1 ~ % _
```

From there you can tell that your www folder is located under:

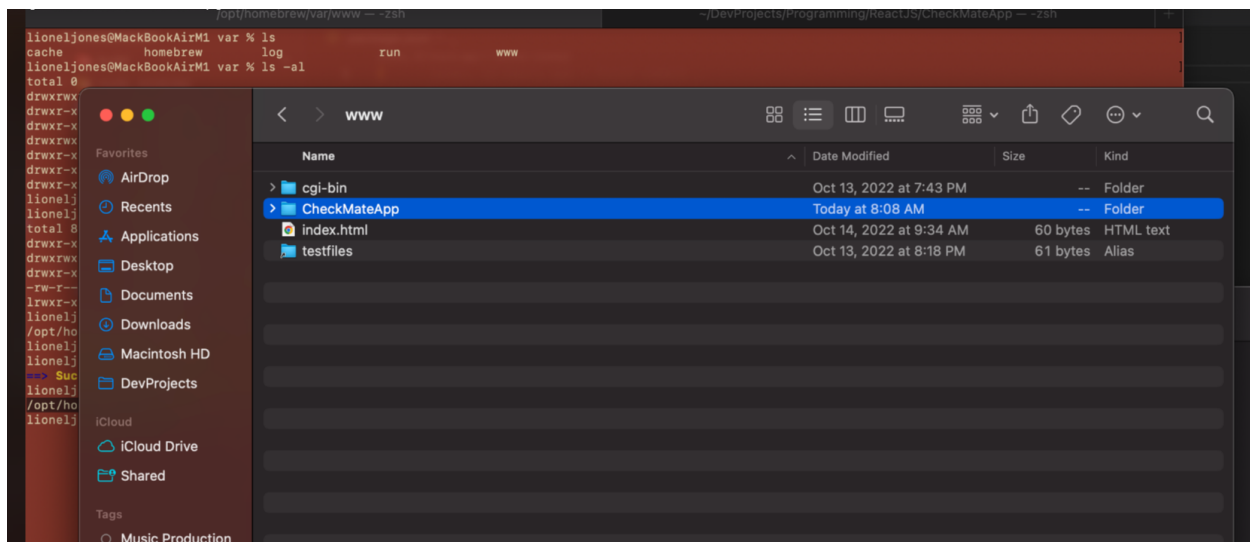
/opt/homebrew/var/www

Then

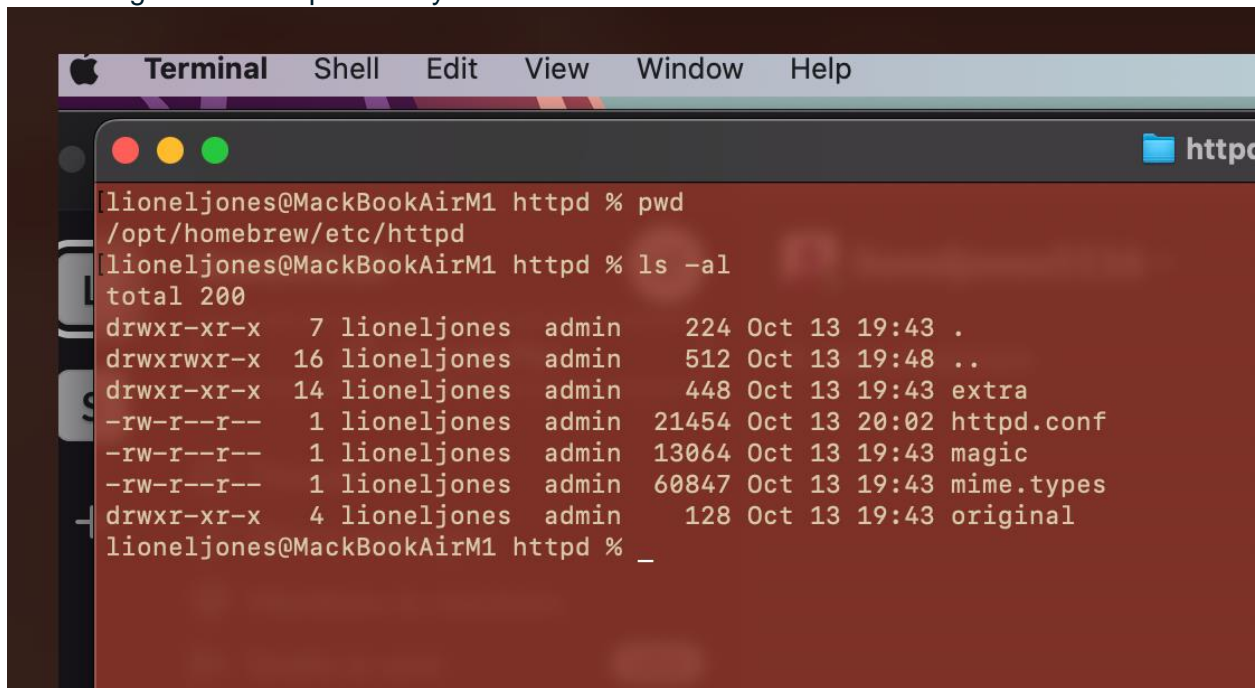
Build your app with npm run build

Copy over your build files to a folder in your wwwroot

```
lioneljones@MackBookAirM1 var % ls
cache      homebrew    log          run          www
lioneljones@MackBookAirM1 var % ls -al
total 0
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 .
drwxr-xr-x 32 lioneljones  admin  1024 Nov  1 14:52 ..
drwxr-xr-x  4 lioneljones  admin   128 Oct 13 19:48 cache
drwxrwxr-x  4 lioneljones  admin   128 Oct 13 18:48 homebrew
drwxr-xr-x  4 lioneljones  admin   128 Oct 13 19:48 log
drwxr-xr-x  3 lioneljones  admin    96 Oct 13 19:43 run
drwxr-xr-x  5 lioneljones  admin   160 Oct 13 20:22 www
lioneljones@MackBookAirM1 var % cd www
lioneljones@MackBookAirM1 www % ls -al
total 8
drwxr-xr-x  5 lioneljones  admin   160 Oct 13 20:22 .
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    60 Oct 14 09:34 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/DevProjects/Programming/WebSites/testfiles
lioneljones@MackBookAirM1 www % pwd
/opt/homebrew/var/www
lioneljones@MackBookAirM1 www % nano index.html
lioneljones@MackBookAirM1 www % brew services start httpd
Successfully started 'httpd' (label: homebrew.mxcl.httpd)
lioneljones@MackBookAirM1 www %
```

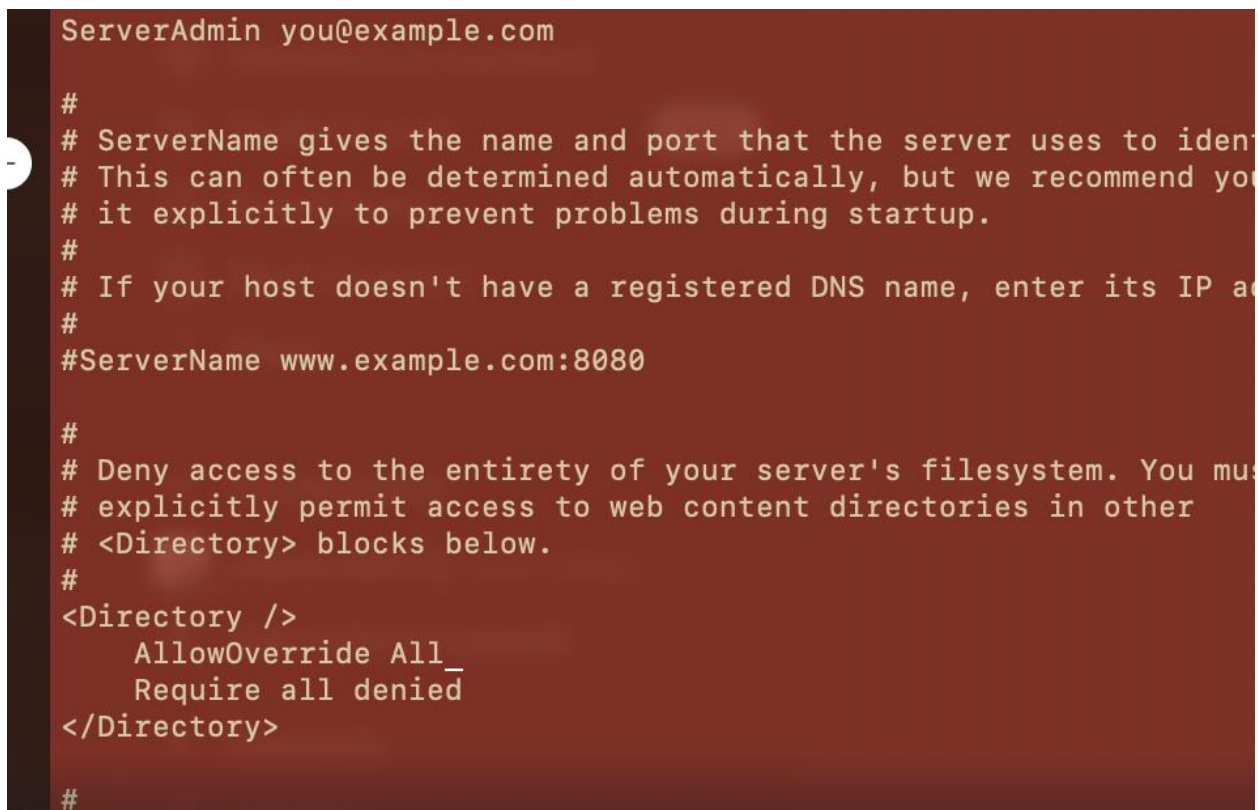


Next navigate to the httpd directory



```
lioneljones@MackBookAirM1 httpd % pwd
/opt/homebrew/etc/httpd
lioneljones@MackBookAirM1 httpd % ls -al
total 200
drwxr-xr-x  7 lioneljones  admin   224 Oct 13 19:43 .
drwxrwxr-x 16 lioneljones  admin   512 Oct 13 19:48 ..
drwxr-xr-x 14 lioneljones  admin   448 Oct 13 19:43 extra
-rw-r--r--  1 lioneljones  admin  21454 Oct 13 20:02 httpd.conf
-rw-r--r--  1 lioneljones  admin  13064 Oct 13 19:43 magic
-rw-r--r--  1 lioneljones  admin  60847 Oct 13 19:43 mime.types
drwxr-xr-x  4 lioneljones  admin   128 Oct 13 19:43 original
lioneljones@MackBookAirM1 httpd % _
```

Edit the httpd.conf file:



```
ServerAdmin you@example.com

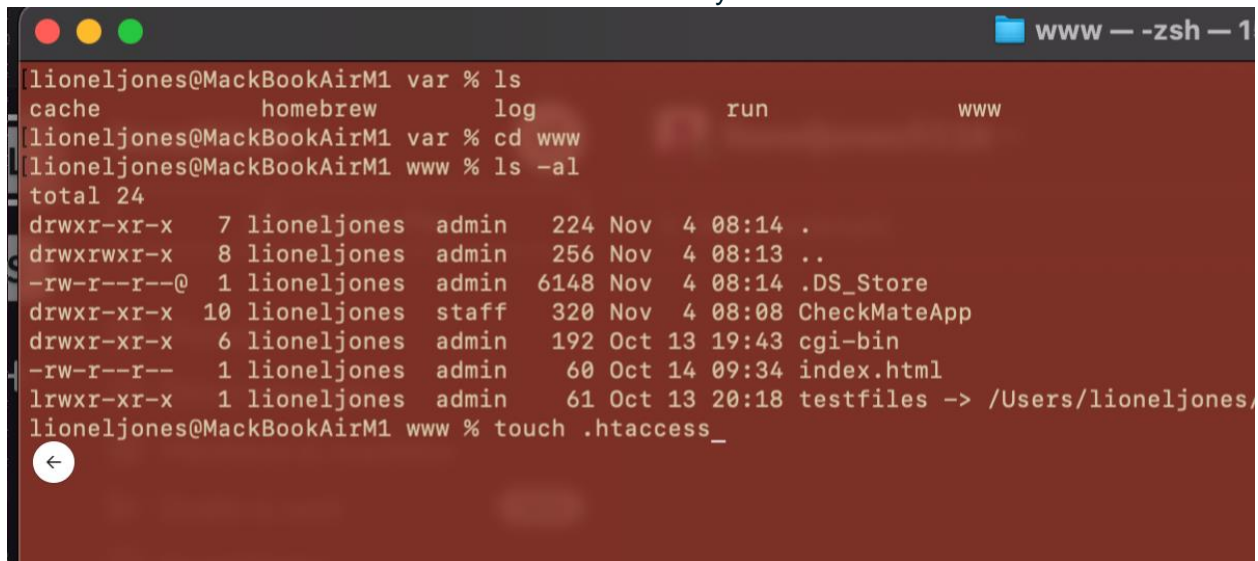
#
# ServerName gives the name and port that the server uses to identify itself
# This can often be determined automatically, but we recommend you specify
# it explicitly to prevent problems during startup.
#
# If your host doesn't have a registered DNS name, enter its IP address here.
#
#ServerName www.example.com:8080

#
# Deny access to the entirety of your server's filesystem. You must
# explicitly permit access to web content directories in other
# <Directory> blocks below.
#
<Directory />
    AllowOverride All
    Require all denied
</Directory>

#
```

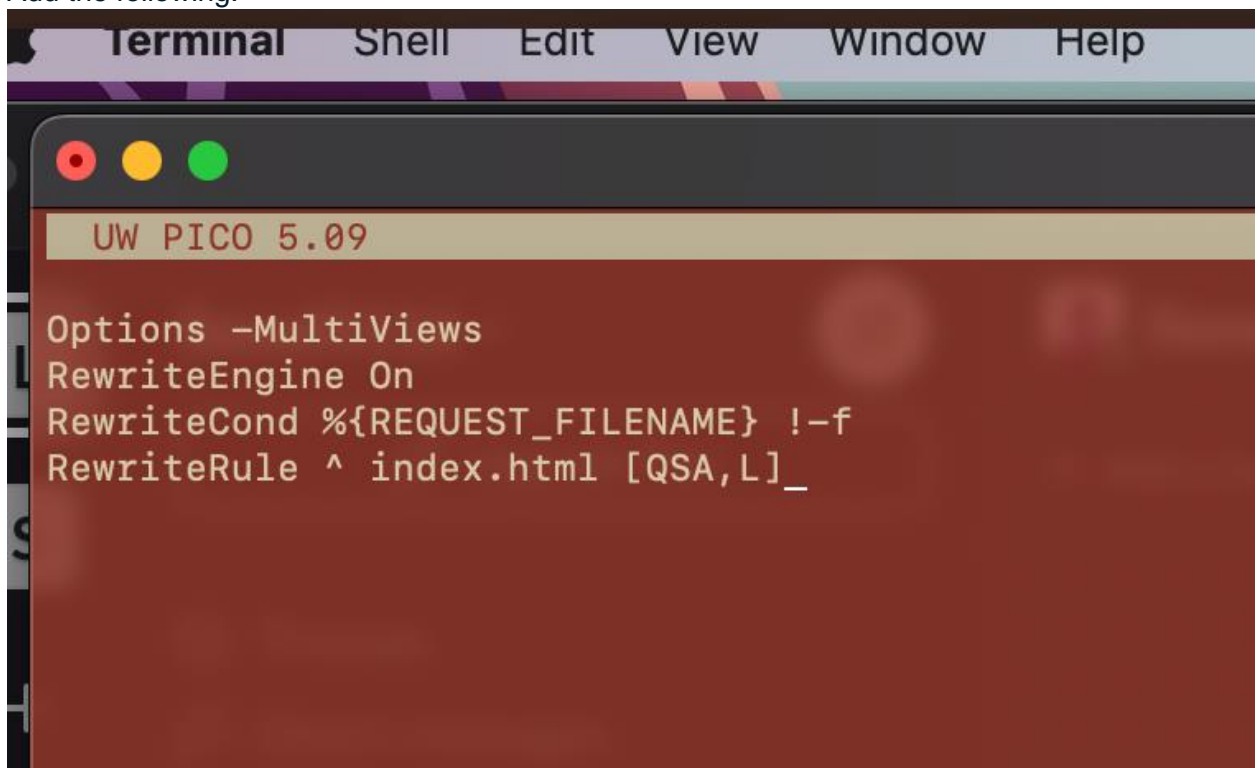
Change the value of AllowOveridde None to All as shown above

Next create a file named .htaccess in the www directory



```
lioneljones@MackBookAirM1 var % ls
cache          homebrew      log           run           www
lioneljones@MackBookAirM1 var % cd www
lioneljones@MackBookAirM1 www % ls -al
total 24
drwxr-xr-x  7 lioneljones  admin   224 Nov  4 08:14 .
drwxrwxr-x  8 lioneljones  admin   256 Nov  4 08:13 ..
-rw-r--r--@ 1 lioneljones  admin  6148 Nov  4 08:14 .DS_Store
drwxr-xr-x 10 lioneljones  staff   320 Nov  4 08:08 CheckMateApp
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    60 Oct 14 09:34 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/
lioneljones@MackBookAirM1 www % touch .htaccess_
```

Add the following:



```
Terminal  Shell  Edit  View  Window  Help

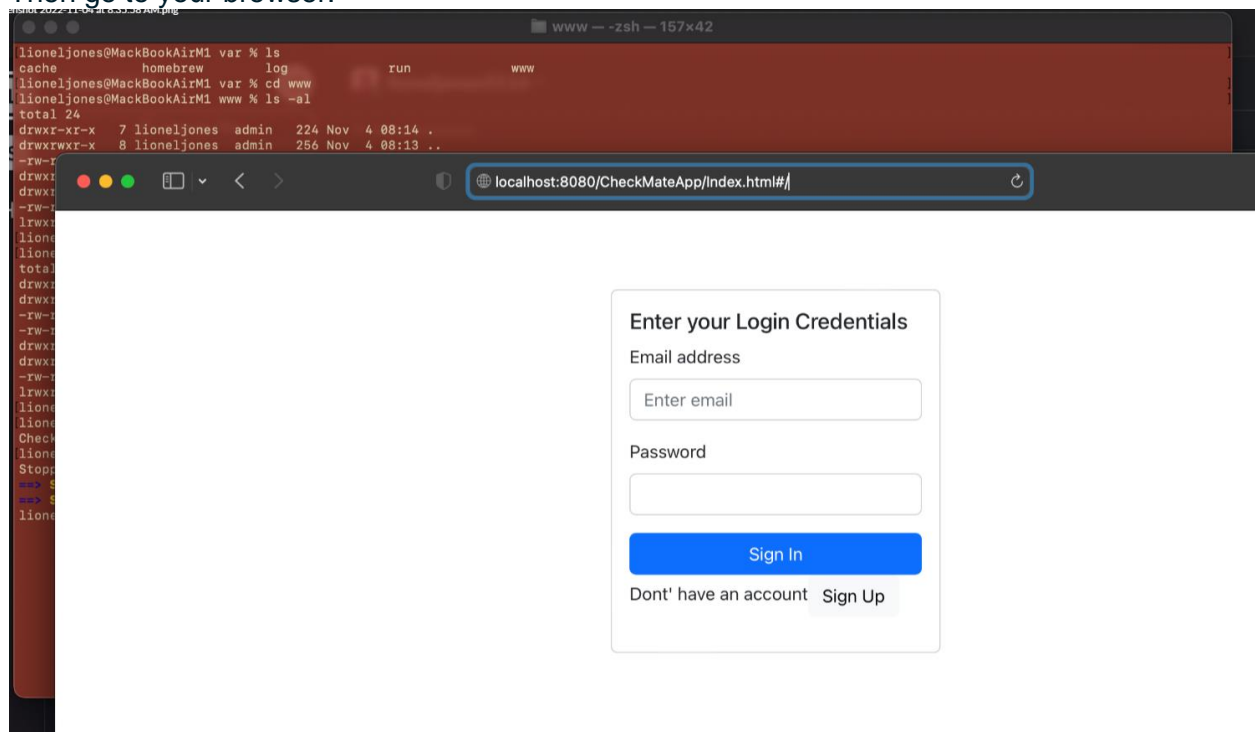
UW PICO 5.09

Options -MultiViews
RewriteEngine On
RewriteCond %{REQUEST_FILENAME} !-f
RewriteRule ^ index.html [QSA,L]_
```

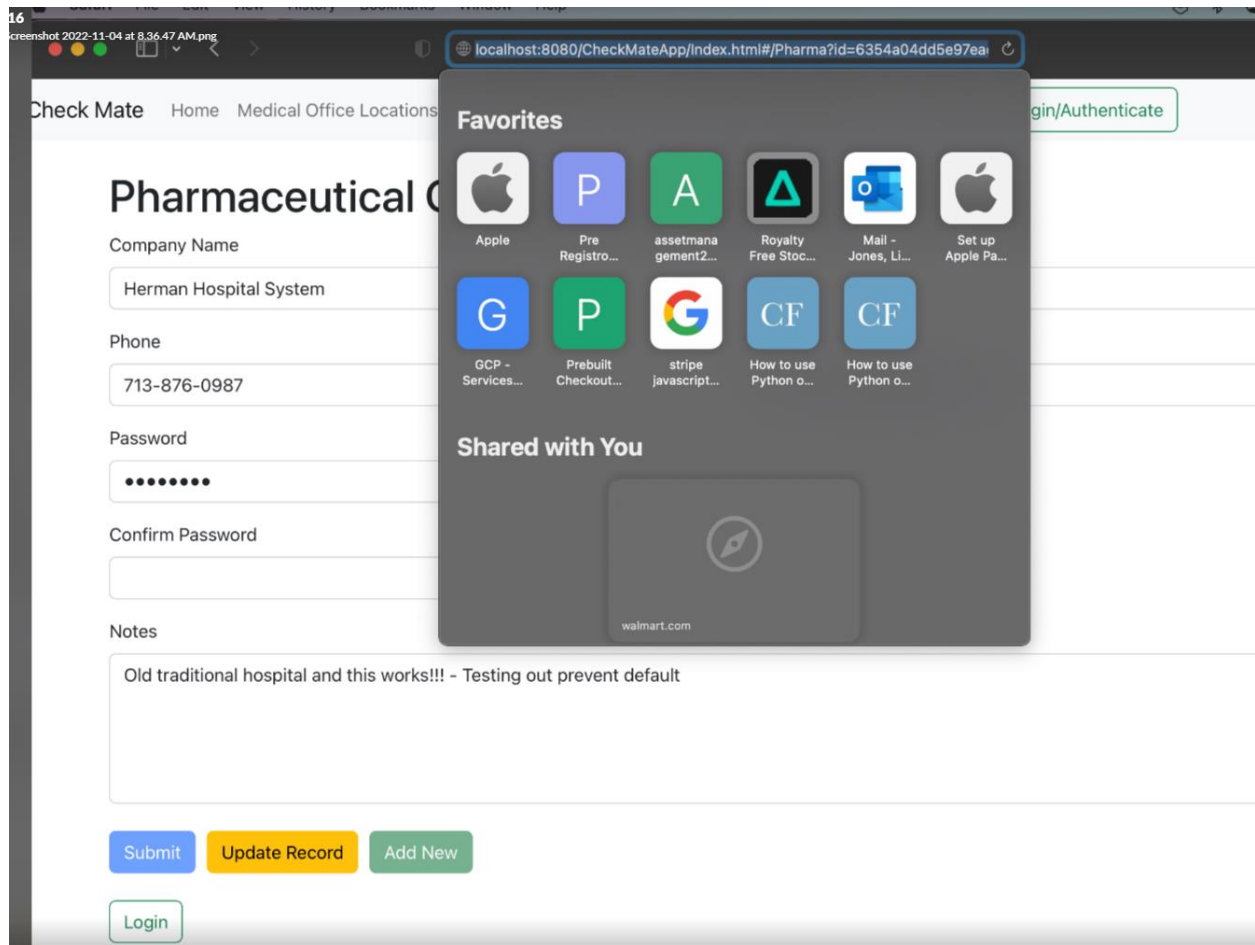
Next Restart Apache

```
lioneljones@MackBookAirM1 var % cd www
lioneljones@MackBookAirM1 www % ls -al
total 24
drwxr-xr-x  7 lioneljones  admin   224 Nov  4 08:14 .
drwxrwxr-x  8 lioneljones  admin   256 Nov  4 08:13 ..
-rw-r--r--@ 1 lioneljones  admin  6148 Nov  4 08:14 .DS_Store
drwxr-xr-x 10 lioneljones  staff   320 Nov  4 08:08 CheckMateApp
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    60 Oct 14 09:34 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/DevProjects/Programming/WebSites/te
lioneljones@MackBookAirM1 www % touch .htaccess
lioneljones@MackBookAirM1 www % ls -al
total 24
drwxr-xr-x  8 lioneljones  admin   256 Nov  4 08:30 .
drwxrwxr-x  8 lioneljones  admin   256 Nov  4 08:13 ..
-rw-r--r--@ 1 lioneljones  admin  6148 Nov  4 08:14 .DS_Store
-rw-r--r--  1 lioneljones  admin    60 Nov  4 08:30 .htaccess
drwxr-xr-x 10 lioneljones  staff   320 Nov  4 08:08 CheckMateApp
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    60 Oct 14 09:34 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/DevProjects/Programming/WebSites/te
lioneljones@MackBookAirM1 www % nano .htaccess
lioneljones@MackBookAirM1 www % ls
CheckMateApp  cgi-bin      index.html    testfiles
lioneljones@MackBookAirM1 www % brew services restart httpd
Stopping 'httpd'... (might take a while)
==> Successfully stopped 'httpd' (label: homebrew.mxcl.httpd)
==> Successfully started 'httpd' (label: homebrew.mxcl.httpd)
lioneljones@MackBookAirM1 www % _
```

Then go to your browser:

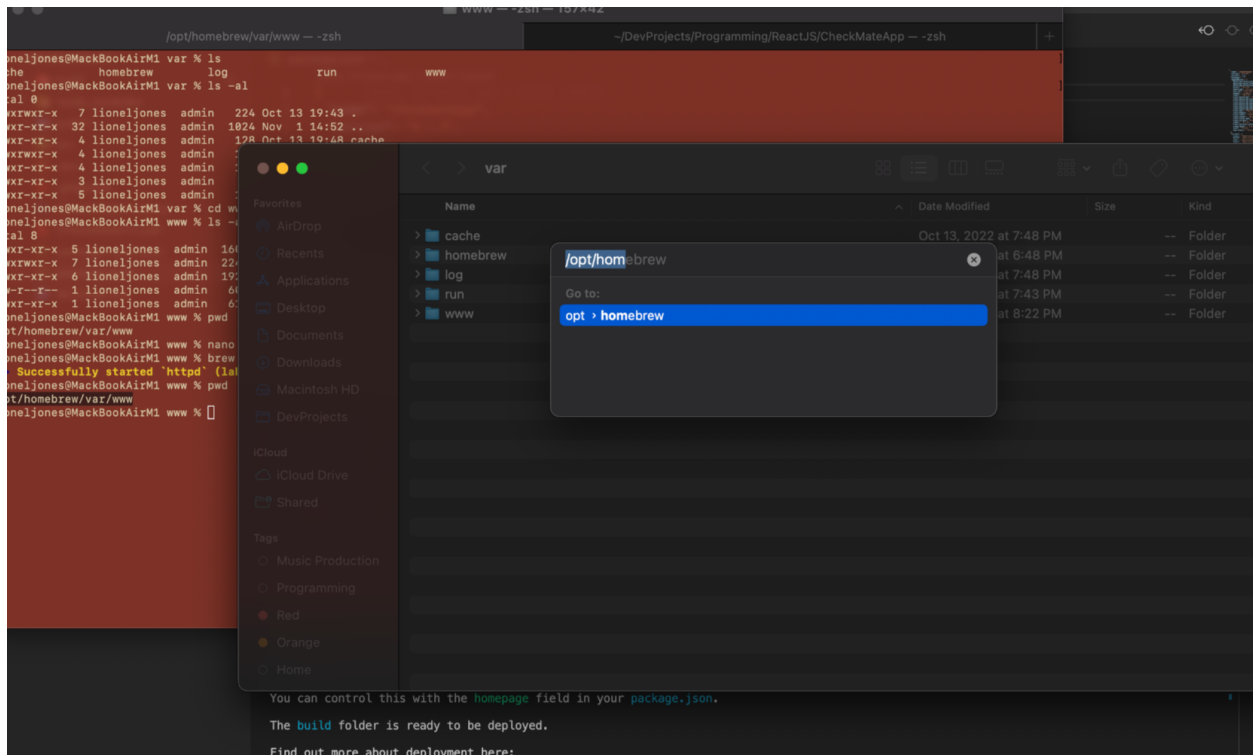


IT works!!!!



<http://localhost:8080/CheckMateApp/Index.html#/Login>

Tip: How to find the opt directory on macbook
Type CMD+SHIFT+G



Tip: Understanding Apache and -> (Determining what version of Apache you are using.. etc..)
The default path of the system installed version of Apache is
/etc/apache2
The configuration file is:
httpd.conf

```
lioneljones@LIONELJONESs-MacBook-Air /etc % cd apache2
lioneljones@LIONELJONESs-MacBook-Air apache2 % ls -al
total 88
drwxr-xr-x  9 root  wheel   288 Aug 24 03:59 .
drwxr-xr-x 80 root  wheel  2560 Oct 13 21:13 ..
drwxr-xr-x 14 root  wheel   448 Aug 24 03:59 extra
-rw-r--r--  1 root  wheel  21648 Aug 24 03:59 httpd.conf
-rw-r--r--  1 root  wheel  13064 Aug 24 03:59 magic
-rw-r--r--  1 root  wheel  61118 Aug 24 03:59 mime.types
drwxr-xr-x  4 root  wheel   128 Aug 24 03:59 original
drwxr-xr-x  4 root  wheel   128 Aug 24 03:59 other
drwxr-xr-x  2 root  wheel    64 Aug 24 03:59 users
lioneljones@LIONELJONESs-MacBook-Air apache2 % nano httpd.conf
lioneljones@LIONELJONESs-MacBook-Air apache2 % pwd
/etc/apache2
lioneljones@LIONELJONESs-MacBook-Air apache2 %
```

The default directory for the websites is located:
/Library/Webserver/Documents


```
apache2 — nano httpd.conf — 116x34
UW PICO 5.09 File: httpd.conf

# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
#
# 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/Documents"
<Directory "/Library/WebServer/Documents">
    #
    # Possible values for the Options directive are "None", "All",
    # or any combination of:
    #   Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI MultiViews
    #
    # Note that "MultiViews" must be named *explicitly* --- "Options All"
    # doesn't give it to you.
    #
    # The Options directive is both complicated and important. Please see
    # http://httpd.apache.org/docs/2.4/mod/core.html#options
    # for more information.
    #
    Options FollowSymLinks Multiviews
    MultiviewsMatch Any
#
```

There you will find the default index.html.en file with **it works!**

This configuration and index file is no longer used when you install Homebrew version of Apache – see the tip (**Tip:** How to install Apache on Monterey 12.xx (Mac M1))

The location of the homebrew installation is:

/opt/homebrew/

The configuration file for the homebrew version

/opt/homebrew/etc/httpd

```
httpd — -zsh — 116
lioneljones@LIONELJONESs-MacBook-Air httpd % pwd
/opt/homebrew/etc/httpd
lioneljones@LIONELJONESs-MacBook-Air httpd % ls -al
total 200
drwxr-xr-x   7  lioneljones  admin   224 Oct 13 19:43 .
drwxrwxr-x  16  lioneljones  admin   512 Oct 13 19:48 ..
drwxr-xr-x  14  lioneljones  admin   448 Oct 13 19:43 extra
-rw-r--r--   1  lioneljones  admin 21454 Oct 13 20:02 httpd.conf
-rw-r--r--   1  lioneljones  admin 13064 Oct 13 19:43 magic
-rw-r--r--   1  lioneljones  admin 60847 Oct 13 19:43 mime.types
drwxr-xr-x   4  lioneljones  admin   128 Oct 13 19:43 original
lioneljones@LIONELJONESs-MacBook-Air httpd %
```

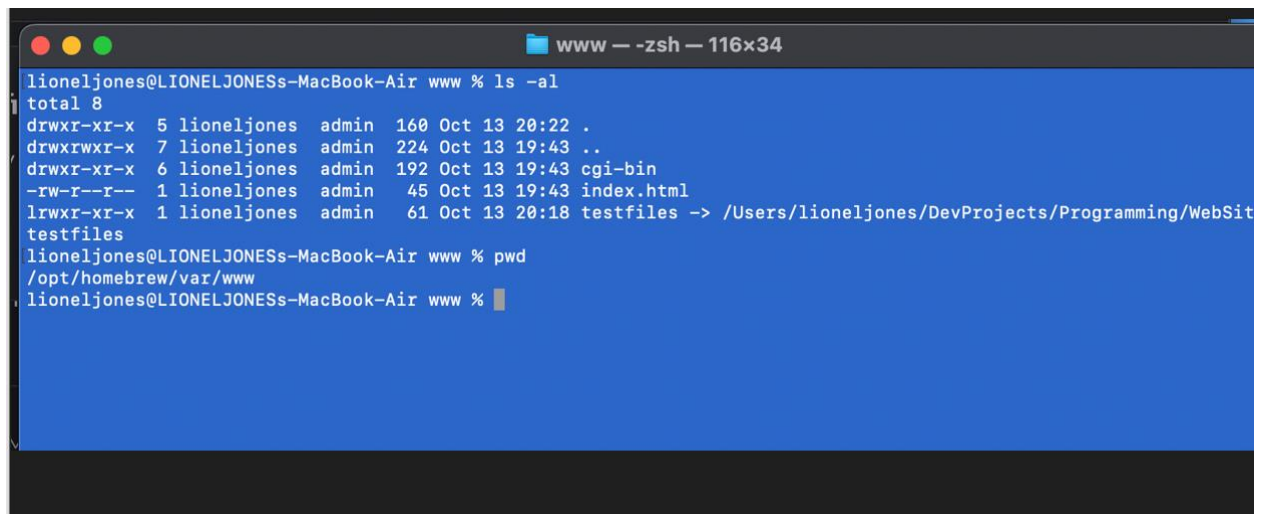
The httpd.conf file

Apache is configured by placing directives in plain text configuration files. The main configuration file is usually called **httpd.conf**.

The document root can be found in the config file for homebrew:

```
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
#
# 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 "/opt/homebrew/var/www"
<Directory "/opt/homebrew/var/www">
    #
    # Possible values for the Options directive are "None", "All",
    # or any combination of:
    #   Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI MultiViews
    #
    # Note that "MultiViews" must be named *explicitly* --- "Options All"
    # doesn't give it to you.
    #
    # The Options directive is both complicated and important. Please see
    # http://httpd.apache.org/docs/2.4/mod/core.html#options
    # for more information.
    #
    Options Indexes FollowSymLinks
```

⌘ Get Help ⌘ WriteOut ⌘ Read File ⌘ Prev Pg ⌘ Cut Text
⌘ Exit ⌘ Justify ⌘ Where is ⌘ Next Pg ⌘ UnCut Text

A screenshot of a macOS terminal window titled 'www - zsh - 116x34'. The terminal shows the output of the 'ls -al' command, listing files and directories with their permissions, sizes, dates, and owners. The files listed are '.', '..', 'cgi-bin', 'index.html', and 'testfiles'. The 'testfiles' entry shows a symlink to '/Users/lioneljones/DevProjects/Programming/WebS...'. Below the listing, the 'pwd' command is executed, showing the current directory as '/opt/homebrew/var/www'. The prompt 'lioneljones@LIONELJONESs-MacBook-Air www %' is visible at the bottom.

```
lioneljones@LIONELJONESs-MacBook-Air www % ls -al
total 8
drwxr-xr-x  5 lioneljones  admin   160 Oct 13 20:22 .
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    45 Oct 13 19:43 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/DevProjects/Programming/WebS...
testfiles
lioneljones@LIONELJONESs-MacBook-Air www % pwd
/opt/homebrew/var/www
lioneljones@LIONELJONESs-MacBook-Air www %
```

When you install HomeBrew's Apache, it takes over as the default installation.
Homebrew's apache is the latest and greatest version of Apache

Homebrew Apache commands

<https://wpbeaches.com/installing-configuring-apache-on-macos-using-homebrew/>

```
brew services start httpd
brew services stop httpd
brew services restart httpd
which httpd
```

Changing the Port Number

Next is to change the port numbers from 8080 to 80
nano /usr/local/etc/httpd/httpd.conf

And change Listen 8080 to:
Listen 80
brew services restart httpd

To determine which version of Apache you are using:

```
lioneljones — -zsh — 80x24
Last login: Fri Oct 14 08:36:16 on ttys000
lioneljones@LIONELJONESs-MacBook-Air ~ % which httpd
/opt/homebrew/bin/httpd
lioneljones@LIONELJONESs-MacBook-Air ~ % whereis
usage: whereis [-abmqu] [-BM dir ... -f] program ...
lioneljones@LIONELJONESs-MacBook-Air ~ % whereis httpd
httpd: /usr/sbin/httpd /opt/homebrew/share/man/man8/httpd.8
lioneljones@LIONELJONESs-MacBook-Air ~ % which -a httpd
/opt/homebrew/bin/httpd
/usr/sbin/httpd
lioneljones@LIONELJONESs-MacBook-Air ~ %
```

which shows you both of your apache,

whereis shows you the **currently used apache**

Tip: Checking the Apache Version

httpd -v

```
lioneljones — -zsh — 1
lioneljones@LIONELJONESs-MacBook-Air ~ % which -a httpd
/opt/homebrew/bin/httpd
/usr/sbin/httpd
lioneljones@LIONELJONESs-MacBook-Air ~ %
```

Internal Apache

- **Binary:** `/usr/sbin/httpd`
- **Start/Stop:** `sudo /usr/sbin/apachectl start`
- **Version:** `/usr/sbin/apachectl -v`
- **Config:** `/etc/apache2/httpd.conf`

Homebrew Apache

- **Binary:** `/usr/local/bin/httpd` (symlink to `../Cellar/httpd`)
- **Start/Stop:** `sudo /usr/local/bin/apachectl start`
- **Version:** `/usr/local/bin/apachectl -v`
- **Config:** `/usr/local/etc/httpd/httpd.conf`

Tip: Getting brew to be recognized / creating the `.zshrc` user file

To check the version of homebrew
brew --version

<https://superuser.com/questions/1621771/brew-command-not-found-after-installing-homebrew-on-an-arm-m1-mac>

The `.zshrc` file is not created by default on a fresh installation

`.Zshrc` is a configuration file that contains the commands that run the `zsh` shell, just like the `.bashrc` file that contains commands for the `bash` shell. It contains scripts that run whenever an interactive `zsh` session is launched. In Linux, the file is stored in the `home/user` directory as a hidden file.

What is `Zsh`?

`Zsh` is short for `Z shell`. It is an interactive login shell initially designed in the 1990s for the Unix operating system

Essentially you need create a `.zshrc` file in your home directory and add the following line:

```
eval $(/opt/homebrew/bin/brew shellenv)
```

macOS: Terminal & Z-Shell (zsh)

On macOS, the terminal is our "hardware" for the shell, so the tool where our shell software can run. In the past, the bash-shell was the standard, nowadays being replaced by the **z-shell (zsh)**

1 Answer

Sorted by: Highest score (default) ▾



4



Homebrew isn't included in your `$PATH` variable, which is the cause of the shell not finding the `brew` command.

To fix this, you must edit your shell startup script, `.zshrc`. The Homebrew installer doesn't make this edit, but rather instructs the user to do it, which you probably missed.

Add the following line to `.zshrc`:

```
eval $(/opt/homebrew/bin/brew shellenv)
```

You can either add it with a text editor or by executing a shell command:

```
$ echo 'eval $(/opt/homebrew/bin/brew shellenv)' >> $HOME/.zshrc
```

Now, reload the shell by opening a new shell window and you should be good to go.

Explanation

The lines in `.zshrc` are executed each time you open a new shell.

When the shell reaches the line

```
eval $(/opt/homebrew/bin/brew shellenv)
```

it will at first execute

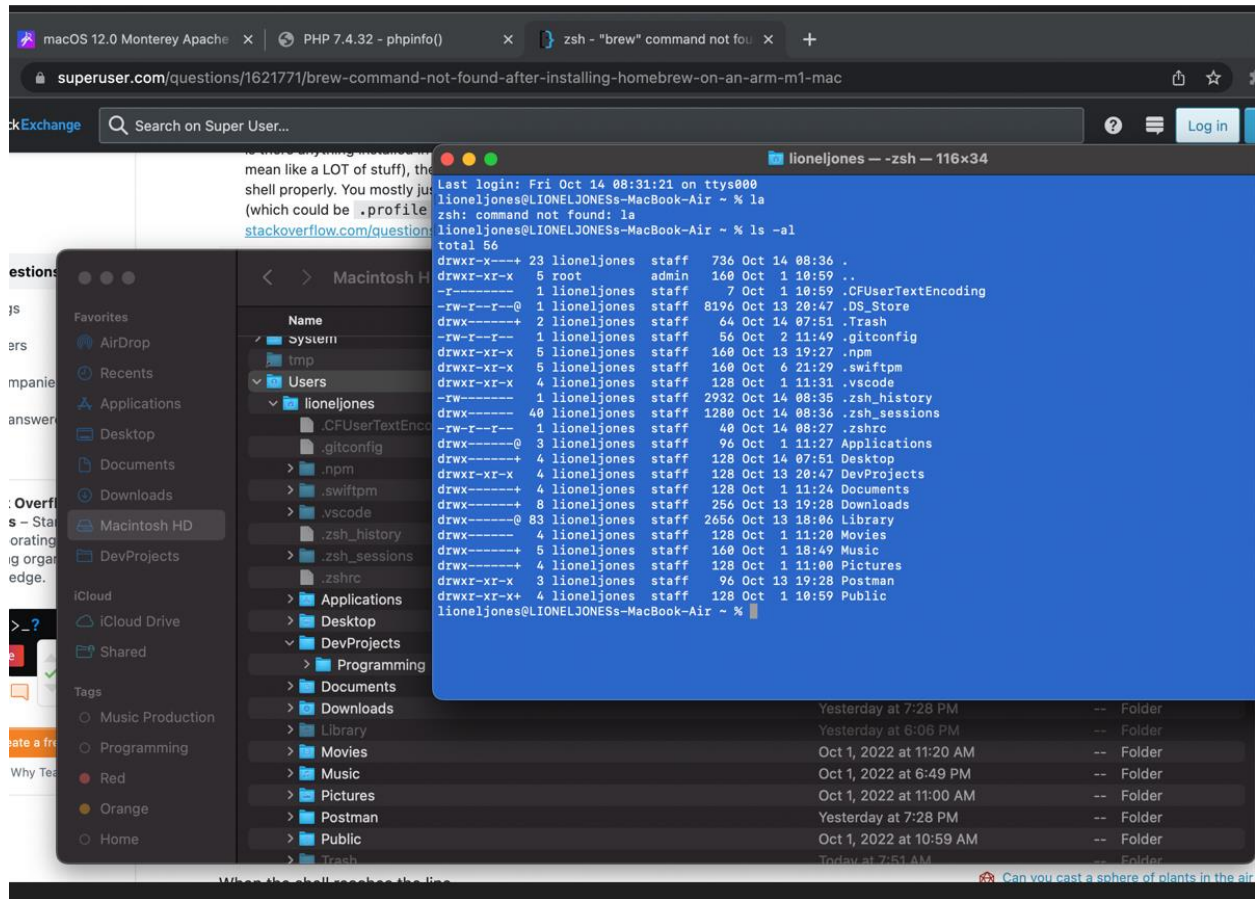
```
/opt/homebrew/bin/brew shellenv
```

Tip: How to view hidden files on your mac

Press **Command + Shift .**

(Press all three at the same time including the period)

You can only see hidden files in explorer



Tip: Fixing git push not pushing to GitHub
Do a git status:

```
Command Prompt
c:\DevProjects\Programming\Nodejs\assetmgmtservice>git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    AssetMgmtService.docx
        deleted:    AssetMgmtService.pdf

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        AssetMgmtService_V2.docx
        AssetMgmtService_V2.pdf

no changes added to commit (use "git add" and/or "git commit -a")

c:\DevProjects\Programming\Nodejs\assetmgmtservice>git add .

c:\DevProjects\Programming\Nodejs\assetmgmtservice>git commit -m "added some new files"
[master 57059ce] added some new files
 2 files changed, 0 insertions(+), 0 deletions(-)
 rename AssetMgmtService.docx => AssetMgmtService_V2.docx (59%)
 rename AssetMgmtService.pdf => AssetMgmtService_V2.pdf (71%)

c:\DevProjects\Programming\Nodejs\assetmgmtservice>git push origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/lionel5116/assetmgmtservice.git'

c:\DevProjects\Programming\Nodejs\assetmgmtservice>git push origin master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 10.47 MiB | 750.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/lionel5116/assetmgmtservice.git
 d9d3c83..57059ce master -> master

c:\DevProjects\Programming\Nodejs\assetmgmtservice>
```

Then follow what you see that some files have changed, so type the command:

git add .

Then

git commit -m "added .."

Then

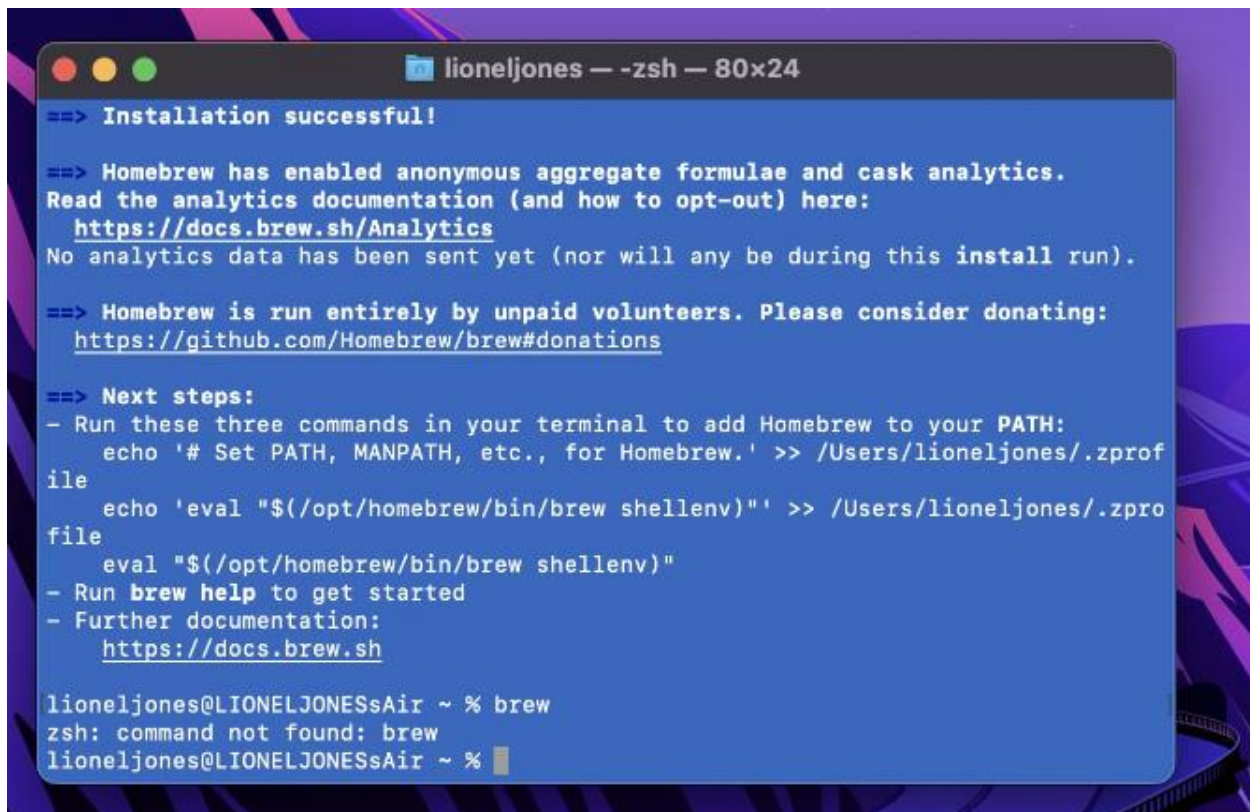
git push origin master

Tip: How to install Apache on Monterey 12.xx (Mac M1)

<https://dev.to/hte305/how-to-install-apache-in-macos-m1-montery-12xx-2k51>

Install Homebrew

/bin/bash -c "\$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

A terminal window titled 'lioneljones — -zsh — 80x24' with a blue background. It displays the output of a Homebrew installation script. The text includes: 'Installation successful!', a message about analytics with a link to 'https://docs.brew.sh/Analytics', a message about donations with a link to 'https://github.com/Homebrew/brew#donations', and 'Next steps:' which lists three commands to add Homebrew to the PATH. At the bottom, it shows the user attempting to run 'brew' and receiving the error 'zsh: command not found: brew'.

```
lioneljones@LIONELJONESsAir ~ % brew
zsh: command not found: brew
lioneljones@LIONELJONESsAir ~ %
```

lioneljones@LIONELJONESsAir ~ % brew

zsh: command not found: brew

lioneljones@LIONELJONESsAir ~ %

Add homebrew to your path with this command:

```
export PATH="/opt/homebrew/bin:$PATH"
```

Next install httpd
brew install httpd

This installed Apache
To test type the following command:

```
brew services start httpd
```

```
lioneljones — -zsh — 80x24

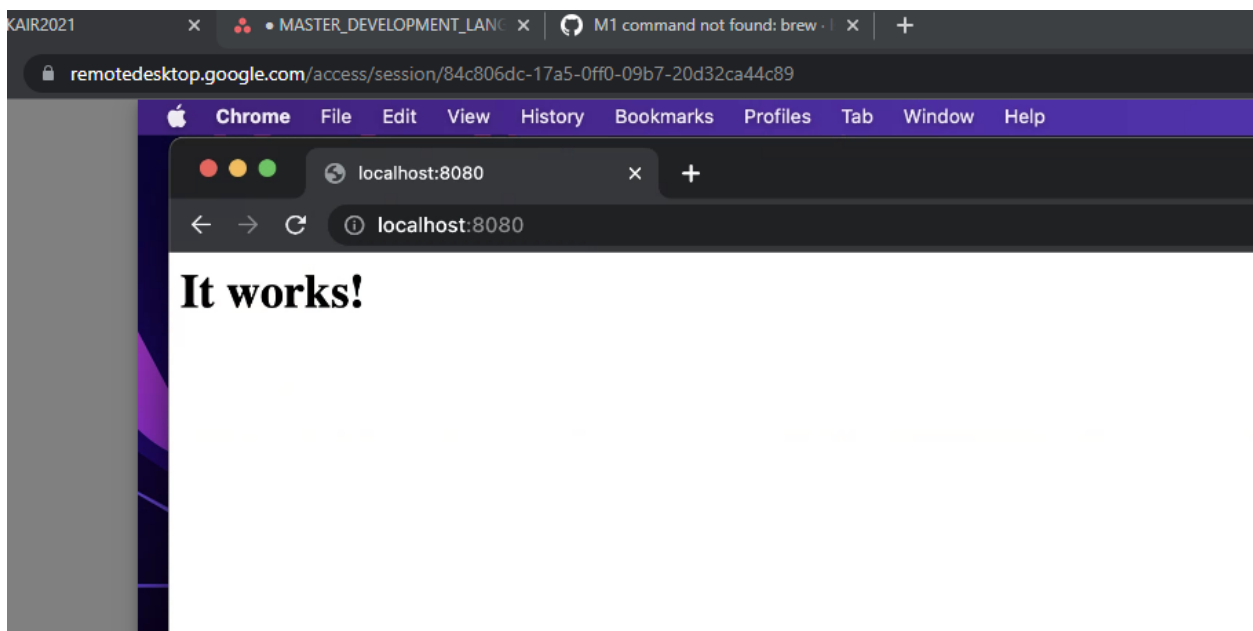
==> httpd
DocumentRoot is /opt/homebrew/var/www.

The default ports have been set in /opt/homebrew/etc/httpd/httpd.conf to 8080 and in
/opt/homebrew/etc/httpd/extra/httpd-ssl.conf to 8443 so that httpd can run without sudo.

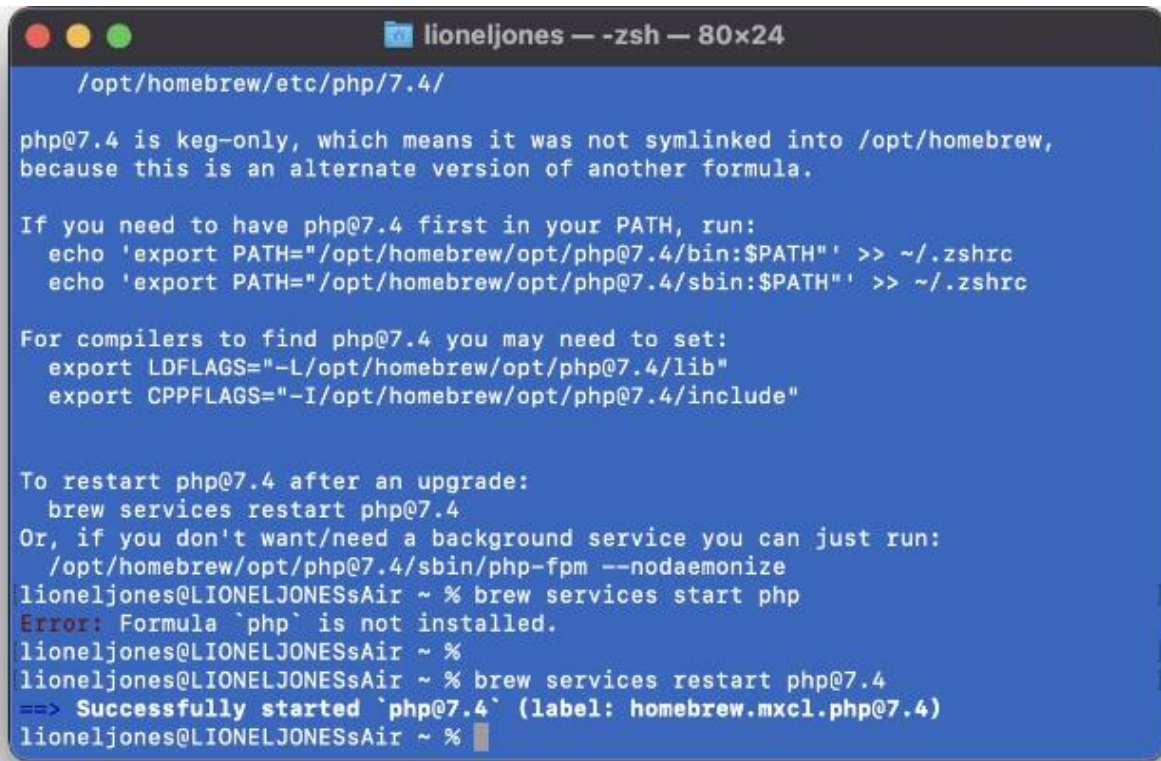
To restart httpd after an upgrade:
  brew services restart httpd
Or, if you don't want/need a background service you can just run:
  /opt/homebrew/opt/httpd/bin/httpd -D FOREGROUND
lioneljones@LIONELJONESsAir ~ % brew services start httpd
==> Tapping homebrew/services
Cloning into '/opt/homebrew/Library/Taps/homebrew/homebrew-services'...
remote: Enumerating objects: 2139, done.
remote: Counting objects: 100% (33/33), done.
remote: Compressing objects: 100% (25/25), done.
remote: Total 2139 (delta 11), reused 25 (delta 8), pack-reused 2106
Receiving objects: 100% (2139/2139), 600.69 KiB | 1.98 MiB/s, done.
Resolving deltas: 100% (948/948), done.
Tapped 1 command (45 files, 756.7KB).
==> Successfully started `httpd` (label: homebrew.mxcl.httpd)
lioneljones@LIONELJONESsAir ~ %
```

Type the following:

<http://localhost:8080>



Install PHP
brew install [php@7.4](#)



```
/opt/homebrew/etc/php/7.4/

php@7.4 is keg-only, which means it was not symlinked into /opt/homebrew,
because this is an alternate version of another formula.

If you need to have php@7.4 first in your PATH, run:
  echo 'export PATH="/opt/homebrew/opt/php@7.4/bin:$PATH"' >> ~/.zshrc
  echo 'export PATH="/opt/homebrew/opt/php@7.4/sbin:$PATH"' >> ~/.zshrc

For compilers to find php@7.4 you may need to set:
  export LDFLAGS="-L/opt/homebrew/opt/php@7.4/lib"
  export CPPFLAGS="-I/opt/homebrew/opt/php@7.4/include"

To restart php@7.4 after an upgrade:
  brew services restart php@7.4
Or, if you don't want/need a background service you can just run:
  /opt/homebrew/opt/php@7.4/sbin/php-fpm --nodaemonize
lioneljones@LIONELJONESsAir ~ % brew services start php
Error: Formula `php` is not installed.
lioneljones@LIONELJONESsAir ~ %
lioneljones@LIONELJONESsAir ~ % brew services restart php@7.4
==> Successfully started `php@7.4` (label: homebrew.mxcl.php@7.4)
lioneljones@LIONELJONESsAir ~ %
```

After the install start the php services:
brew services restart [php@7.4](#)

Correct paths for PHP
export PATH="/opt/homebrew/opt/php@7.4/bin:\$PATH"
export PATH="/opt/homebrew/opt/php@7.4/sbin:\$PATH"

Run this command to check the version
php -v

```
lioneljones — -zsh — 80x24
export CPPFLAGS="-I/opt/homebrew/opt/php@7.4/include"

To restart php@7.4 after an upgrade:
brew services restart php@7.4
Or, if you don't want/need a background service you can just run:
/opt/homebrew/opt/php@7.4/sbin/php-fpm --nodaemonize
lioneljones@LIONELJONESsAir ~ % brew services start php
Error: Formula `php` is not installed.
lioneljones@LIONELJONESsAir ~ %
lioneljones@LIONELJONESsAir ~ % brew services restart php@7.4
==> Successfully started `php@7.4` (label: homebrew.mxcl.php@7.4)
lioneljones@LIONELJONESsAir ~ % php -v
zsh: command not found: php
lioneljones@LIONELJONESsAir ~ % export PATH="/opt/homebrew/opt/php@7.4/bin:$PATH"
lioneljones@LIONELJONESsAir ~ % export PATH="/opt/homebrew/opt/php@7.4/sbin:$PATH"
lioneljones@LIONELJONESsAir ~ % php -v
PHP 7.4.32 (cli) (built: Sep 29 2022 10:45:51) ( NTS )
Copyright (c) The PHP Group
Zend Engine v3.4.0, Copyright (c) Zend Technologies
    with Zend OPcache v7.4.32, Copyright (c), by Zend Technologies
lioneljones@LIONELJONESsAir ~ %
```

The path where your files are for Apache's websites is located:

/opt/homebrew/var/www

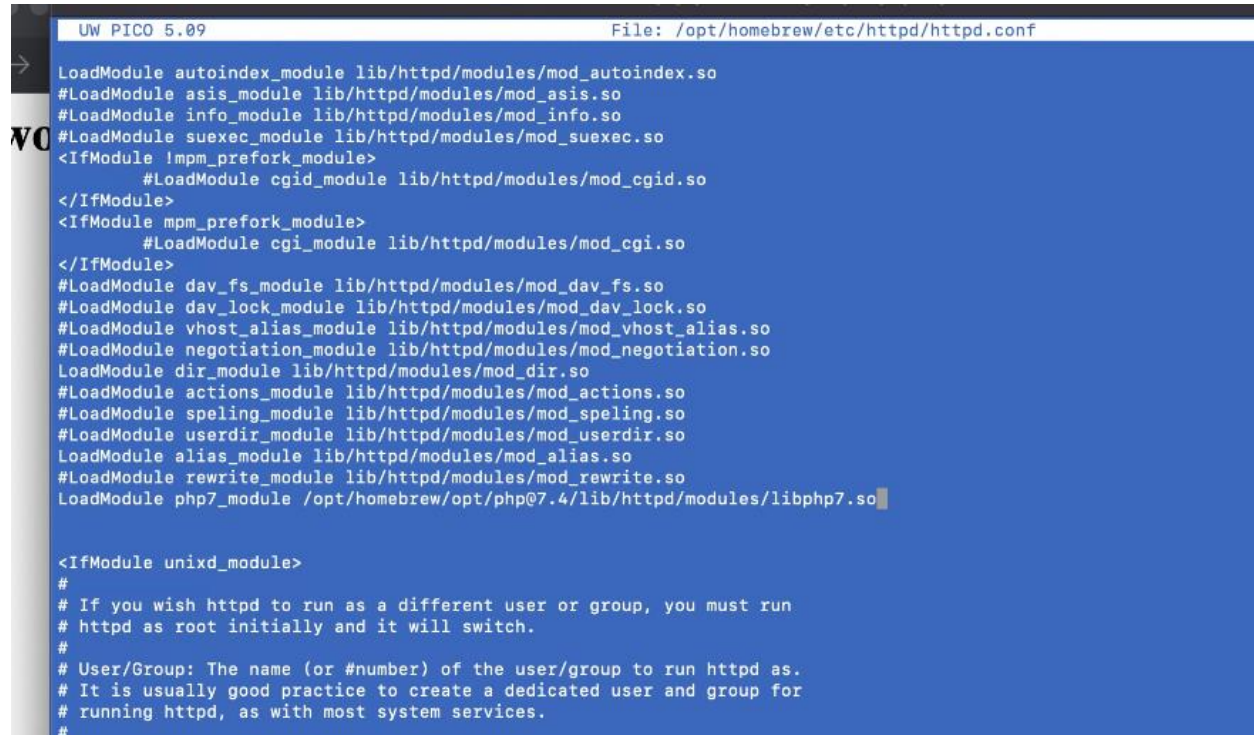
```
terminal  Shell  Edit  View  Window  Help
www — -zsh — 141x50
lioneljones@LIONELJONESsAir www % pwd
/opt/homebrew/var/www
lioneljones@LIONELJONESsAir www % ls -al
total 8
drwxr-xr-x  4 LionelJones  admin   128 Oct 13 19:43 .
drwxrwxr-x  7 LionelJones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 LionelJones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 LionelJones  admin    45 Oct 13 19:43 index.html
lioneljones@LIONELJONESsAir www %
```

Next setup php in httpd

nano /opt/homebrew/etc/httpd/httpd.conf

Search for the last LoadModule and paste:

LoadModule php7_module /opt/homebrew/opt/php@7.4/lib/httpd/modules/libphp7.so



```
UW PICO 5.09 File: /opt/homebrew/etc/httpd/httpd.conf

LoadModule autoindex_module lib/httpd/modules/mod_autoindex.so
#LoadModule asis_module lib/httpd/modules/mod_asis.so
#LoadModule info_module lib/httpd/modules/mod_info.so
#LoadModule suexec_module lib/httpd/modules/mod_suexec.so
<IfModule !mpm_prefork_module>
    #LoadModule cgid_module lib/httpd/modules/mod_cgid.so
</IfModule>
<IfModule mpm_prefork_module>
    #LoadModule cgi_module lib/httpd/modules/mod_cgi.so
</IfModule>
#LoadModule dav_fs_module lib/httpd/modules/mod_dav_fs.so
#LoadModule dav_lock_module lib/httpd/modules/mod_dav_lock.so
#LoadModule vhost_alias_module lib/httpd/modules/mod_vhost_alias.so
#LoadModule negotiation_module lib/httpd/modules/mod_negotiation.so
LoadModule dir_module lib/httpd/modules/mod_dir.so
#LoadModule actions_module lib/httpd/modules/mod_actions.so
#LoadModule speling_module lib/httpd/modules/mod_speling.so
#LoadModule userdir_module lib/httpd/modules/mod_userdir.so
LoadModule alias_module lib/httpd/modules/mod_alias.so
#LoadModule rewrite_module lib/httpd/modules/mod_rewrite.so
LoadModule php7_module /opt/homebrew/opt/php@7.4/lib/httpd/modules/libphp7.so

<IfModule unixd_module>
#
# If you wish httpd to run as a different user or group, you must run
# httpd as root initially and it will switch.
#
# User/Group: The name (or #number) of the user/group to run httpd as.
# It is usually good practice to create a dedicated user and group for
# running httpd, as with most system services.
#
```

Paste this below the line you pasted for LoadModule PHP

<FilesMatch \.php\$>

SetHandler application/x-httpd-php

</FilesMatch>

```

→ LoadModule autoindex_module lib/httpd/modules/mod_autoindex.so
#LoadModule asis_module lib/httpd/modules/mod_asis.so
#LoadModule info_module lib/httpd/modules/mod_info.so
WO #LoadModule suexec_module lib/httpd/modules/mod_suexec.so
<IfModule !mpm_prefork_module>
    #LoadModule cgid_module lib/httpd/modules/mod_cgid.so
</IfModule>
<IfModule mpm_prefork_module>
    #LoadModule cgi_module lib/httpd/modules/mod_cgi.so
</IfModule>
#LoadModule dav_fs_module lib/httpd/modules/mod_dav_fs.so
#LoadModule dav_lock_module lib/httpd/modules/mod_dav_lock.so
#LoadModule vhost_alias_module lib/httpd/modules/mod_vhost_alias.so
#LoadModule negotiation_module lib/httpd/modules/mod_negotiation.so
LoadModule dir_module lib/httpd/modules/mod_dir.so
#LoadModule actions_module lib/httpd/modules/mod_actions.so
#LoadModule speling_module lib/httpd/modules/mod_speling.so
#LoadModule userdir_module lib/httpd/modules/mod_userdir.so
LoadModule alias_module lib/httpd/modules/mod_alias.so
#LoadModule rewrite_module lib/httpd/modules/mod_rewrite.so
LoadModule php7_module /opt/homebrew/opt/php@7.4/lib/httpd/modules/libphp7.so

<FilesMatch \.php$>
    SetHandler application/x-httpd-php
</FilesMatch>

<IfModule unixd_module>
#
# If you wish httpd to run as a different user or group, you must run
# httpd as root initially and it will switch.
#
# User/Group: The name (or #number) of the user/group to run httpd as.
# It is usually good practice to create a dedicated user and group for
# running httpd, as with most system services.
#
User _www
Group _www

</IfModule>

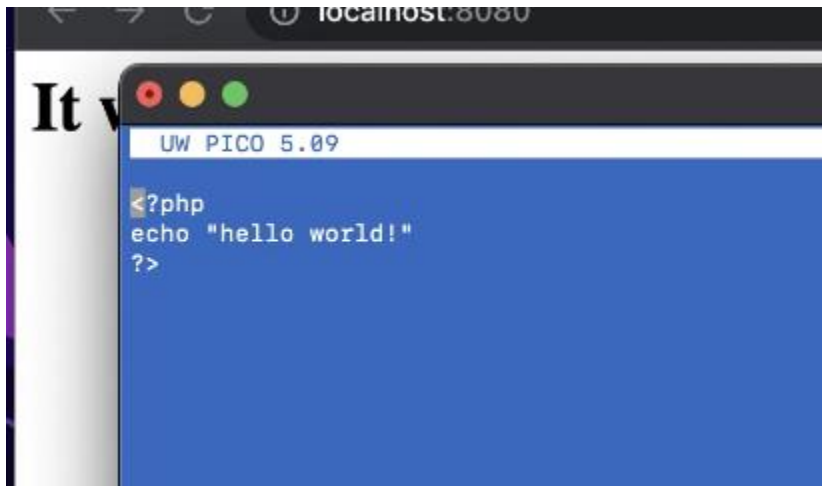
# 'Main' server configuration
#
# The directives in this section set up the values used by the 'main'
# server, which responds to any requests that aren't handled by a

```

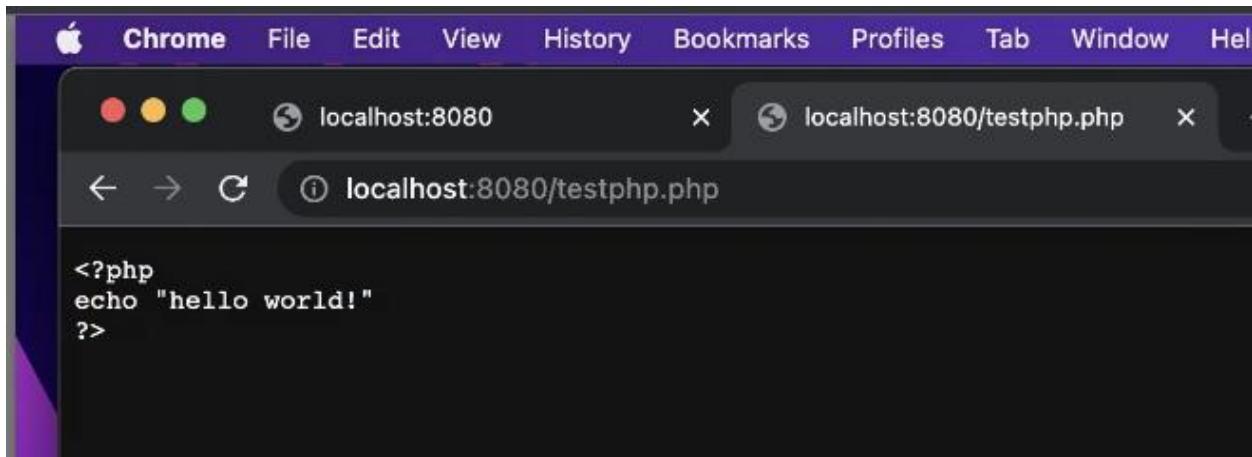
Next create an empty file at the command line

`touch testphp.php`

Do a nano testphp.php and replace the contents with:



<http://localhost:8080/testphp.php>



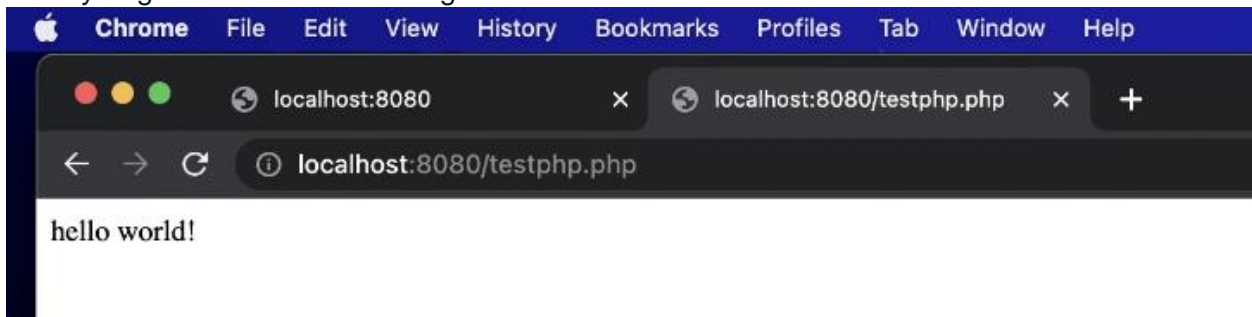
Something's off

Start and stop apache

brew services stop httpd

brew services start httpd

Then you get the correct rendering



Next I created a symbolic link to a folder to place test files

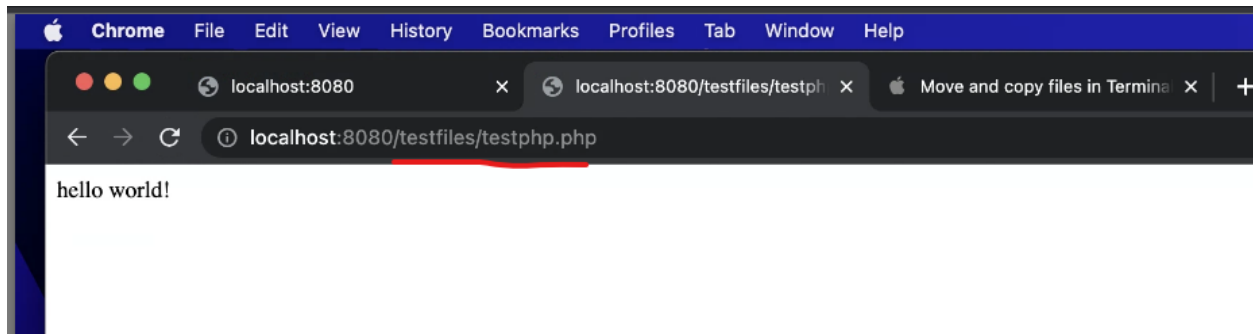
In -s /Users/lioneljones/DevProjects/Programming/WebSites/testfiles /opt/homebrew/var/www

```
total 8
drwxr-xr-x  4 lioneljones  admin   128 Oct 13 19:43 .
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    45 Oct 13 19:43 index.html
lioneljones@LIONELJONESsAir www % touch testphp.php
lioneljones@LIONELJONESsAir www % ls -al
total 8
drwxr-xr-x  5 lioneljones  admin   160 Oct 13 20:07 .
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    45 Oct 13 19:43 index.html
-rw-r--r--  1 lioneljones  admin     0 Oct 13 20:07 testphp.php
lioneljones@LIONELJONESsAir www % nano testphp.php
lioneljones@LIONELJONESsAir www % nano testphp.php
lioneljones@LIONELJONESsAir www % brew services stop httpd
Stopping 'httpd'... (might take a while)
==> Successfully stopped 'httpd' (label: homebrew.mxcl.httpd)
lioneljones@LIONELJONESsAir www % brew services start httpd
==> Successfully started 'httpd' (label: homebrew.mxcl.httpd)
lioneljones@LIONELJONESsAir www % pwd
/opt/homebrew/var/www
lioneljones@LIONELJONESsAir www % ln -s /Users/lioneljones/DevProjects/Programming/WebSites/testfiles /opt/homebrew/var/www
lioneljones@LIONELJONESsAir www % ls -al
total 16
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 20:18 .
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    45 Oct 13 19:43 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/DevProjects/Programming/WebSites/testfiles
-rw-r--r--  1 lioneljones  admin    29 Oct 13 20:08 testphp.php
lioneljones@LIONELJONESsAir www %
```

Then we move the test file to a linked directory

```
lioneljones@LIONELJONESsAir www % ls -al
total 8
drwxr-xr-x  5 lioneljones  admin   160 Oct 13 20:22 .
drwxrwxr-x  7 lioneljones  admin   224 Oct 13 19:43 ..
drwxr-xr-x  6 lioneljones  admin   192 Oct 13 19:43 cgi-bin
-rw-r--r--  1 lioneljones  admin    45 Oct 13 19:43 index.html
lrwxr-xr-x  1 lioneljones  admin    61 Oct 13 20:18 testfiles -> /Users/lioneljones/DevProjects/Programming/WebSites/testfiles
lioneljones@LIONELJONESsAir www % mv testphp.php testfiles
```

Now browse file from the symbolic link directory



Tip: Running the app on a mac (when apache is running and webpack is an issue)

On a mac, if you do a npm install on the client folder, you will get a npm run webpack error,
If you look at the error, it will tell you what command to run to get npm install to run
npm install -f (or npm install -force

For Apache – The default port for Apache Is set to 8080

Stop Apache with:

brew services stop http

Then when you run your application, the default page will come up if cached, if that happens, do a page refresh and it will come up

Tip: Different Port, cli commands for m1, 403 Error for Nodejs projects

For Macs, you have to change the port in your server.js file to some port other than 5000, apparently this port is used by some other mac process.

```

39 if (process.env.NODE_ENV === 'production') {
40   {
41     //Set static folder (our public folder)
42     app.use(express.static('client/dist'));
43     app.get('*', (req, res) => {
44       res.sendFile(path.resolve(__dirname, 'client', 'dist', 'index.html'));
45     })
46   }
47 }
48
49 //HEROKU LOOKS AT THE process.env.PORT
50 const PORT = process.env.PORT || 5000;
51
52 app.listen(PORT, () => console.log(`Server started on port ${PORT}`));

```

And for the proxy, you have to change the Vue.config.js file as well

```

vue.config.js
client > vue.config.js > ...
1 const { defineConfig } = require('@vue/cli-service')
2 module.exports = defineConfig({
3   transpileDependencies: true,
4   publicPath: ''
5 })
6
7 module.exports = {
8   configureWebpack: {
9     devtool: 'source-map'
10   }
11 }
12
13
14 module.exports = {
15   devServer: {
16     proxy: {
17       '/api': {
18         target: 'http://localhost:5000/',
19         ws: true,
20         changeOrigin: true,
21       },
22     },
23   },
24 }
25

```

If not, you will get a 403 forbidden error.

This also has to be done on other nodejs projects where you are using proxy in your package.json file

Here are some other commands for installing the cli on M1

command to install heroku on m1


```
arch -arm64 brew install heroku
```

Heroku Credentials

PE

BFLU@

Installing vue on m1

```
sudo npm install -g @vue/cli
```

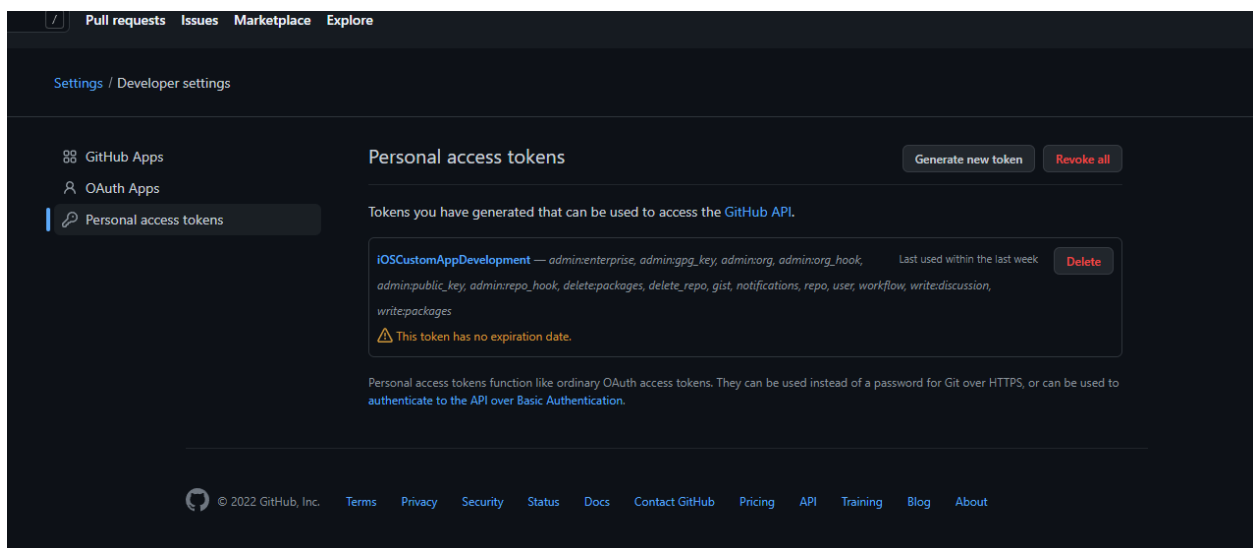
**Port in use kill commands
for mac**

```
netstat -vanp tcp | grep 5001
```

```
kill -9 <pid>
```

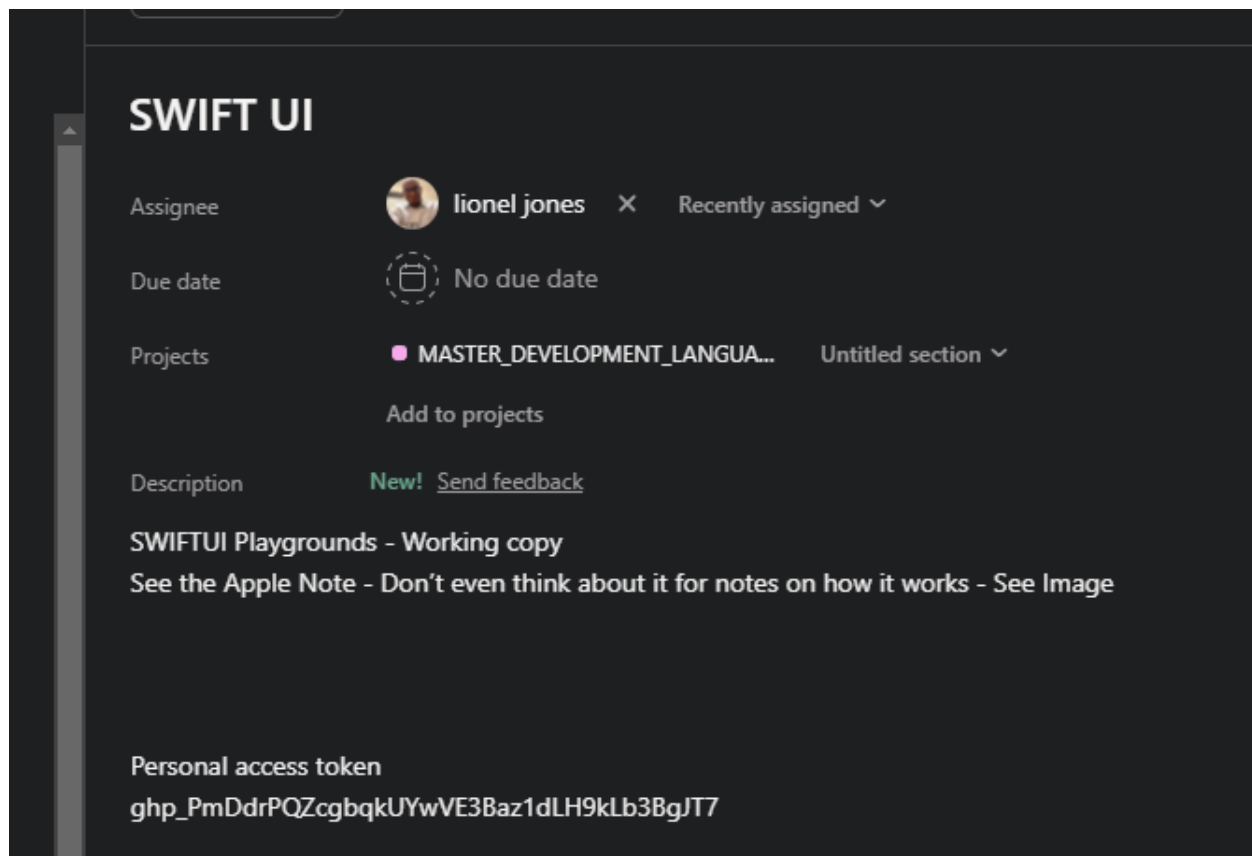
Tip: How to clone a personal repo from github

The first thing you have to do is create a personal access token on GitHub



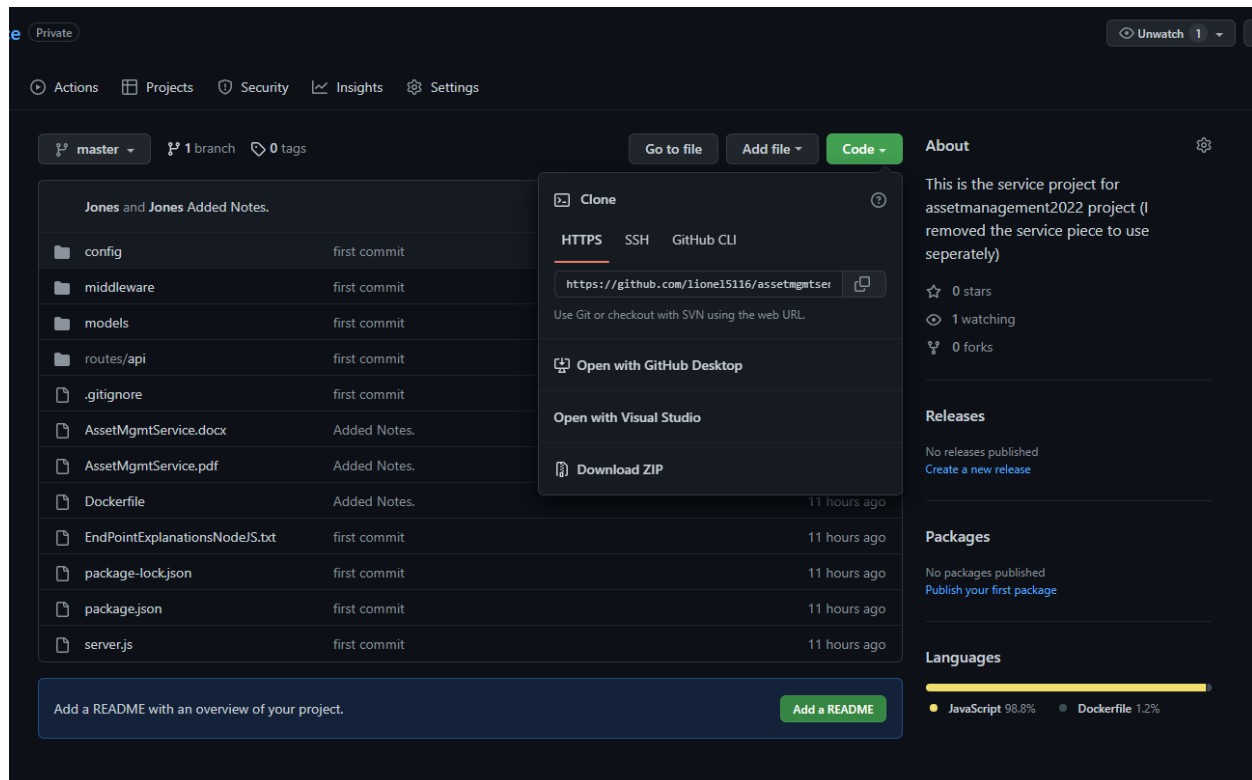
<https://www.youtube.com/watch?v=PPaKnLbYs7o>

I already have one



I generated one with SWIFTUI project for XCODE

Next copy the https: URL from your app



This is your ending URL

git clone https://ghp_PmDdrPQZcgbqkUYwVE3Baz1dLH9kLb3BqJT7:x-oauth-basic@github.com/1lone15116/assetmgmtservice.git

It's made up of:

https:<personal access token>

:x-oauth-basic@github.com/1lone15116/

<Your repo name>

And it works on windows or mac

