**Setting Up Your Enviornment**

Web Applications are built with multiple tiers:

* Client: Web Browser
* Web: HTTP Server (Apache)
* Business: Application Server (PHP)
* Data: Data Server (MySQL)

AMP Stack: Apache, MySQL, & PHP

Standard Ports: Ports are used to receive and send data and there are standard ports

* HTTP: Port 80
* MySQL: Port 3306

PHP is a preprocessor; it is code that runs when the server receives a request for a web page. It runs, works out what needs to be shown on the page, then sends that page to the browser.

**Installing LAMP on LINUX**

Install Apache on Linux:

* $: sudo apt-get install apache2 –y

Test Apache: By default, Apache puts a test HTML file in the web folder. This default web page is served when you browse to http://localhost/ on the Pi itself.

Install PHP:

* $: sudo apt-get install php5 libapache2-mod-php5 –y

Test PHP:

* Create a file called index.php in this directory cd /var/www/html : $: vim index.php
* Write this to the file: <?php echo “hello world”; ?>
* Remove the index.html page in the directory because it takes precedence over the php script: $: sudo rm index.html
* Refresh your browser and you should see “hello world”

Install MySQL:

* $: sudo apt-get install mysql-server php5-mysql –y
* You will be prompted for your root password
* Restart Apache: sudo service apache2 restart

**Installing MAMP on MAC**

- Go to <https://www.mamp.info/en/> and download MAMP.

- Install MAMP and open the MAMP application in the Application folder.

Configuring MAMP:

* You can do all your configurations from the MAMP preference screen. You can change the PORT’s used, what directory APACHE reads from, and other miscellaneous things.

You can change your php information by editing the file: //Applications/MAMP/bin/php/php7.1.6/conf/php.ini