**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.