

Jovanie Lawrence

Project proposal draft

This project is about utilising the Amazon workspaces which is a development environment on the prestigious Amazon Web Services (AWS). I will use this platform to create an educational online software environment for teaching website development in Middlesex University. With the success of this process, I will then create a Docker Image then will run on Docker.

I aim to undertake a fascinating technology that is revolutionising the tech industry. Docker is the leader in the containerization market, combining an enterprise-grade container platform with world-class services to give developers and IT alike the freedom to build (Docker. <https://www.docker.com/company> 2018).

Deliverables

I will have to sign up to the student account on the AWS website, that will enable me to start developing. A student account will not be authorised immediately, It will take a short period for the staff at AWS to verify my account. Once verified, my account is free to begin developing in Amazon Workspaces.

Docker is a free internet software which is quite straight forward to download and install. The aim to begin running some of the images on the operating system level virtualisation software. There are numerous support for this software that has been in existence since 2013.

To aid me in my research I shall use numerous resources online which is relevant to my broad research. There is a substantial library on www.docker.com, which explains all the images available on docker and its functionalities in vast detail. There are online articles written by esteemed authors and professors detailing the personal research they have done on the container software. There are physical and e-books that are based on Docker and I will also document my own findings by experimenting with the software by running images and evaluate them. For example, I have used the image for virtual machines where a created a machine where I can run multiple operating systems on my mac. Each quote I will use be it from a book, article or a website, I will be sure to use the appropriate Harvard style referencing in my project dissertation.

Problem

We have a web development issue in a computer science module at university. There is a difficult of combining different technologies to run web pages on a host. Technologies such as MYSQL and PHP. The conventional way to run these technologies is using Xampp or Mamp which are free software that is recommended by several educational institutions. These software has problems in particular the MYSQL section.

I had a problem recently when using SQL to create database tables and it ask for a password. Once that password is declared, MYSQL is locked to that password. In a likely situation that a user forgets the password, the database software will be locked. I aim to standardise an environment that will run all these technologies and will allow students to do web development task at will.

Evaluate

I aim to my findings by talking to my fellow student whom are enthusiastic about web development. The most successful way to do this is to perhaps create a questionnaire and issue it to ten or more students. I then will combine the results of the questionnaire and present them in a chart to create a visual representation of my findings.

List of resources

- Amazon webs services student account.
<https://aws.amazon.com/education/awseducate/>
I signed up to this account using my student email address. The verification process takes a few days for AWS to verify that I am indeed a student. I got the congratulations email after two days informing me that my account has been successfully authorised.

Docker

<https://www.docker.com/>

This is the software I will acquire. There are different versions of Docker however the desktop version offers the complete development environment.

List of publications

- Automated Deployment of Software Containers Using Dockers by Dr. Latika Kharb
- <http://www.citethisforme.com/harvard-referencing> - To provide the correct methods of Harvard referencing.
- Comparing Virtual Machines vs Docker Containers by Nick Janetakis – this articles explains and compares virtual machines and Docker containers
- Amazon Web Services in Action by Andreas and Michael Witting – One of the best books for actively using AWS
- Amazon workspaces Documentation.
https://docs.aws.amazon.com/workspaces/index.html#lang/en_us

This documentation offers guides to using workspaces to creating virtual desktop experiences on a cloud. This service can be connected using a PC, mac, tablet or smartphone.

- Docker documentation

<https://docs.docker.com/docker-for-mac/>

Docker conveniently provides a massive and detailed documentation that shows all the commands to carry out any the user desire including AWS which I will be utilising for my project.