**E-commerce web application**

**Summary**

We are going to make E-commerce web application with linux OS

First we are going to launch the EC2 instance for linux though AWS cloud

We have configured the linux for security group and storage as our needs.

We logged in to the linux instance through putty. Now we are going to run the

Machine for web application we are going to working on database and apache service,

Firewalld. Deploy and configure the web packages. Finally we will run the web application.

**Working process on web application**

**Deploy Pre-Requisites**

**Here's how to deploy it on linux systems:**

First we will install to the firewalld service because it is used to protect our

Network for inbound and outbound, Then that service should be configured and enabled.

The commands are below;

**sudo yum install -y firewalld**

**sudo service firewalld start**

**sudo systemctl enable firewalld**

**Deploy and Configure Database**

Now we are going to the deploy and configure a database

We have to install the database server mariadb.

The commands are below:

**sudo yum install -y mariadb-server**

**sudo vi /etc/my.cnf**

**sudo service mariadb start**

**sudo systemctl enable mariadb**

**Configure firewall for Database**

We need to configure the firewalld to the database then we have run the

Database to particular port which we needed.we will configure to the firewalld to run

firewallld to set the database configuration.

The commands are below:

**sudo firewall-cmd --permanent --zone=public --add-port=3306/tcp**

**sudo firewall-cmd --reload**

**Configure Database**

Creating database for E commerce on mariadb and we have to create the user and

Password for our E commerce database on mariadb then we have to grant all privileges provide the

Our ecommerce user localhost and flush the privileges.

The commands are below;

**$ mysql**

**MariaDB > CREATE DATABASE ecomdb;**

**MariaDB > CREATE USER 'ecomuser'@'localhost' IDENTIFIED BY 'ecompassword';**

**MariaDB > GRANT ALL PRIVILEGES ON \*.\* TO 'ecomuser'@'localhost';**

**MariaDB > FLUSH PRIVILEGES;**

**Load Product Inventory Information to database**

To create the db-load-script.sql file for load the our product inventory information to database

Then we run the sql script on the database because the file should be containing our product information.

The commands are below;

**cat > db-load-script.sql <<-EOF**

**USE ecomdb;**

**CREATE TABLE products (id mediumint(8) unsigned NOT NULL auto\_increment,Name varchar(255) default NULL,Price varchar(255) default NULL, ImageUrl varchar(255) default NULL,PRIMARY KEY (id)) AUTO\_INCREMENT=1;**

**INSERT INTO products (Name,Price,ImageUrl) VALUES ("Laptop","100","c-1.png"),("Drone","200","c-2.png"),("VR","300","c-3.png"),("Tablet","50","c-5.png"),("Watch","90","c-6.png"),("Phone Covers","20","c-7.png"),("Phone","80","c-8.png"),("Laptop","150","c-4.png");**

**EOF**

**mysql < db-load-script.sql**

**Deploy and Configure Web**

We have to install the required package to deploy and configure on

Web application. We have install to httpd apache service and php service and

Php –mysql service .

The commands are below;

**sudo yum install -y httpd php php-mysql**

**Configure firewall**

We have to configure the firewalld to add the tcp

And reload the firewalld configuration.

The commands are below;

**sudo firewall-cmd --permanent --zone=public --add-port=80/tcp**

**sudo firewall-cmd –reload**

**Configure httpd service**

Now we are going to change DirectoryIndex index.html to DirectoryIndex index.php to

make the php page the default page to set the httpd configure service.

The commands are below;

**sudo sed -i 's/index.html/index.php/g' /etc/httpd/conf/httpd.conf**

**Start the httpd service;**

To start the httpd service and enable to the system

To check the service and it’s active.

The commands are below;

**sudo service httpd start**

**sudo systemctl enable httpd**

**sudo service httpd status**

**Dowdload the code from git hub**

We have to check the git service if its unavailable,we need to install the git service.

Then we will downloading the code form the git use the git service.

The commands are below;

**sudo yum install -y git**

**git clone https://github.com/kodekloudhub/learning-app-ecommerce.git /var/www/html/**

**Update index.php**

Update index.php file to connect to the right database server. In this case localhost

since the database is on the same server

the commands are below;

**sudo sed -i 's/172.20.1.101/localhost/g' /var/www/html/index.php**

**<?php**

**$link = mysqli\_connect('172.20.1.101', 'ecomuser', 'ecompassword', 'ecomdb');**

**if ($link) {**

**$res = mysqli\_query($link, "select \* from products;");**

**while ($row = mysqli\_fetch\_assoc($res)) { ?>**

**Test.**

Finally we have to test the e commerce web application.

The command is below;

**curl http://localhost**

to run the e-commerce web application.