**How to deploy laravel application to the cloud**

This was challenging but I managed to pull it over don’t give up

**Reference ->ChatGPT**

**Step 1: Create an EC2 Instance:**

Step 1: **Create an EC2 Instance:**

* Log in to the AWS Management Console.
* Go to the EC2 service.
* Click on "Launch Instance" to create a new instance.
* Choose an Amazon Machine Image (AMI) with Ubuntu Server. (**use the ubuntu machine)**
* Select an instance type (e.g., t2.micro) and click "Next".
* Configure the instance details as per your requirements and click "Next".
* Add storage as needed and click "Next".
* Configure security groups to allow inbound traffic for HTTP (port 80), HTTPS (port 443), and SSH (port 22).Remember also to allow outbound traffic too.
* Review your settings and click "Launch".
* Select or create a key pair to connect to your instance securely.You can also create your new ssh key for connecting

**Test:** After the instance is created and running, note down its public IP address. You should be able to ping the IP address from your local machine's terminal or command prompt.

**Step 2: Connect to your server through your ssh key-pair**

Go to your instance and select connect then coppy the ssh and paste ,Use the following command but remember to replace them this is just an example:

After connecting to your instance via git bash complete all the instructions below



Some commands are not visible above here are they

Install the required package👇👇

**sudo apt install apache2 mysql-server php php-mysql libapache2-mod-php php-cli php-mbstring php-xml unzip git –y**

After completing the commands above restart your apache using the following command



After all these you can oen your IP Adress in the browser and you should see the apache default page

You can use the command **sudo su** to become the root user but you must remember some commands will not work with sudo

**Step 3: Clone your git repository to your instance**

To achieve this correctly you need to ssh your server to github

Run the following command inside your remote server,I mean where you are right now

Replace with your true email



This will generate an ssh key for you.

Run the following command to see the ssh key



Copy your ssh key and follow the commands below to ssh to github



After that you can now clone your github repository to your ec2 instance Using the following code



If you don’t know your cloned directory you can do the ls command. To see the directories

After moving to your project directory,you are suppose to install composer

Copy the following commands:

**sudo php -r "copy('https://getcomposer.org/installer', 'composer-setup.php');"**

**sudo php composer-setup.php --install-dir=/usr/local/bin --filename=composer**

**sudo php -r "unlink('composer-setup.php');"**

**composer install --no-dev --optimize-autoloader**

Set appropriate permissions for Laravel:

Remember to replace your folder\_directory with your correct directory



Remember to replace your directory name

**Step5: Configure the Database**

Run the folllowing command to login to your database.

You will be asked for your password.Provide the password you signed in to amazon if not leave the password field blank.after loginin run the following command replacing your username with root and password to your actual password.

CREATE DATABASE your\_database\_name;

CREATE USER 'your\_username'@'localhost' IDENTIFIED BY 'your\_password';

GRANT ALL PRIVILEGES ON your\_database\_name.\* TO 'your\_username'@'localhost';

FLUSH PRIVILEGES;

EXIT;

Now hence forth your username is

**Root** your DBname is **localhost** and your password is the password that you **created just now.**

Now it is time to edit your .env file

Run this command to open the vim ensure you are a sudo or root user by running **sudo su** first.

Vi .env

The command will open vim editor and you do **shift+I to enter insert mode**

And change your DBname,DBuser and DBpassword fields.

After that press **esc+shift+colon then write wq and press enter to escape.**

Now it is time to configure your apache virtuall host



Run the following command and replace your project directory with your actuall directory.this is telling your browser that the public directory is the main directory.

After doing that

Run the following commands



Then restart your apache for the effect to take place you restart your apache like this



When you open your browser you should be able to see your folders for your projects.

Step 6: **Install php my admin and connect it to our databse then import our local database.**

To install our phpmy admin ,Run the following command



After this command do this👇👇



If you find any code inside there don’t interfere with it quit and leave but if not add the following code inside that file then save quit and leave



After that you need to enable all the configuration.Do the following command



Then restart the apache server using the following code.



Then open your Ip adress and login as root and import your localdatabase

After that go back to your instance and cd to your directory the run

**php artisan migrate**

**And you have successfully deployed your laravel application to the ec2 instance.**