Cloud (AWS) Week 1 Task

Deploy Application in monolithic and Microservices Architecture

*Description:

Task 1: For Microservices: 2 EC2 instances, 1 for Wordpress and EC2 instances, 1 for MYSQL.

Task 2: For Monolithic: 1 EC2 instance, deploy Wordpress and MYSQL on the same instance.

-Configure the necessary security group for the instances

-EC2 instance type:t2 micro, AMI-Ubuntu-*

Task 1

For Microservices: 2 EC2 instances, 1 for Wordpress and 1 EC2 instances, 1 for MYSQL

    a) **1 EC2 instance for wordpress**

Create a wordpress instance launch

b) 1 EC2 instance for MYSQL

Create MySQL Server instance launch

Commands:

sudo apt update

 sudo apt install mysql-server

sudo systemctl status mysql

sudo mysql
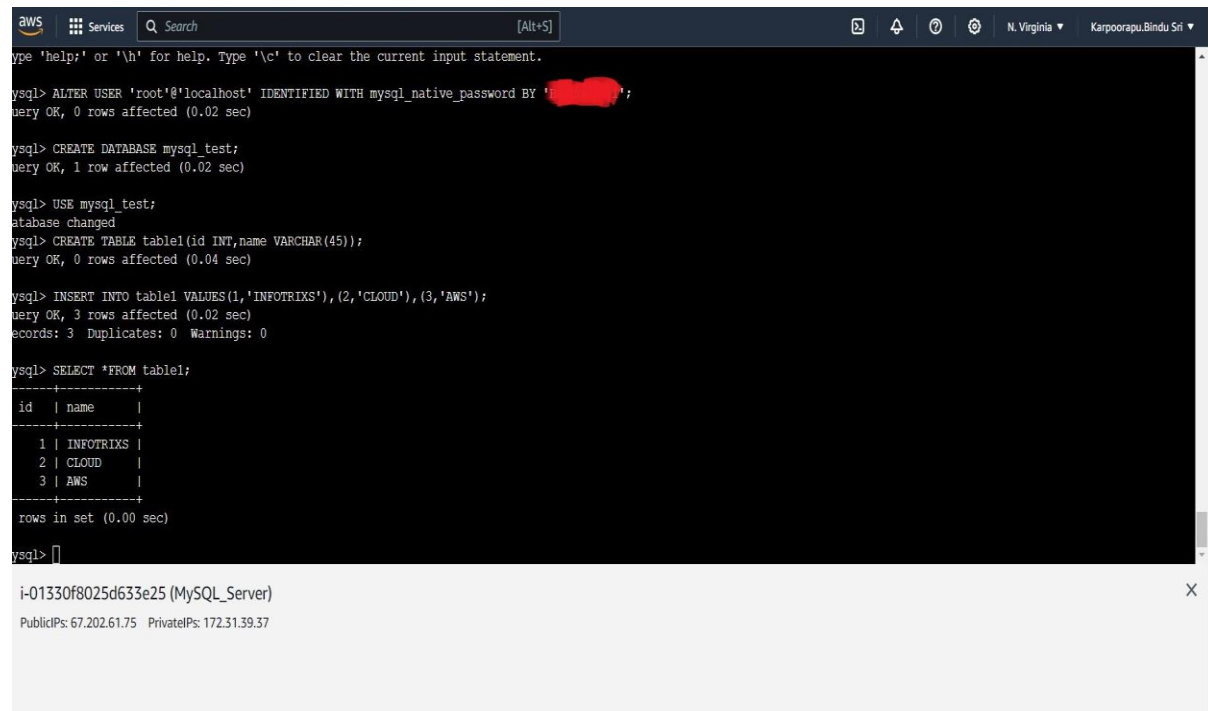
ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password B Y '███████████';

CREATE DATABASE mysql_test;

USE mysql_test;

CREATE TABLE table1 (id INT, name VARCHAR(45)); INSERT INTO table1 VALUES(1, 'INFOTRIXS'), (2,'CLOUD'), (3,'AWS');

SELECT *FROM table1;


```
ype 'help;' or '\h' for help. Type '\c' to clear the current input statement.

ysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY '██████';
uery OK, 0 rows affected (0.02 sec)

ysql> CREATE DATABASE mysql_test;
uery OK, 1 row affected (0.02 sec)

ysql> USE mysql_test;
atabase changed
ysql> CREATE TABLE table1(id INT,name VARCHAR(45));
uery OK, 0 rows affected (0.04 sec)

ysql> INSERT INTO table1 VALUES(1,'INFOTRIXS'),(2,'CLOUD'),(3,'AWS');
uery OK, 3 rows affected (0.02 sec)
ecords: 3  Duplicates: 0  Warnings: 0

ysql> SELECT *FROM table1;
-----+----------+
id   | name     |
-----+----------+
   1 | INFOTRIXS |
   2 | CLOUD    |
   3 | AWS      |
-----+----------+
 rows in set (0.00 sec)

ysql> []
```

i-01330f8025d633e25 (MySQL_Server)

PublicIPs: 67.202.61.75   PrivateIPs: 172.31.39.37

Task -2

1) **For Monolithic : 1 EC2 instances, deploy wordpress and MYSQL, on the same instance.**

Commands:

1. Install Apache server on Ubuntu

>   **sudo apt install apache2**

2. Install php runtime and php mysql connector

>   **sudo apt install php libapache2-mod-php php-mysql**

3. Install MySQL server

>   **sudo apt install mysql-server**

4. Login to MySQL server

>   **sudo mysql -u root**

5. Change authentication plugin to mysql_native_password (change the password to something strong)

>   **ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password by** ██████████████**';**

6. Create a new database user for wordpress (change the password to something strong)
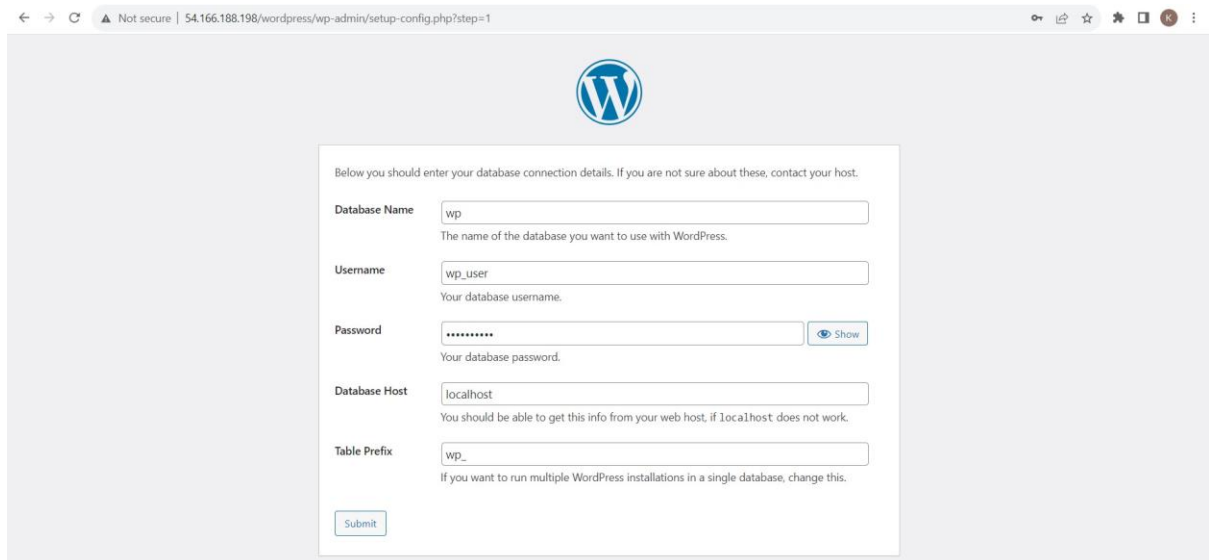
>   **CREATE USER 'wp_user'@localhost IDENTIFIED BY** ██████████████**';**

7. Create a database for wordpress

>   **CREATE DATABASE wp;**

8. Grant all privilges on the database 'wp' to the newly created user

GRANT ALL PRIVILEGES ON wp.* TO 'wp_user'@localhost;

9. Download wordpress

cd /tmp

wget https://wordpress.org/latest.tar.gz

10. Unzip

tar -xvf latest.tar.gz

11. Move wordpress folder to apache document root

sudo mv wordpress/ /var/www/html

cd /var/www/html/

ls

cd wordpress

nano wp-config.php

Not secure | 54.166.188.198/wordpress/wp-admin/install.php?language=en_US

Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title
my sample website

Username
Bindu Sri

Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password
•••••••••••••
👁 Show

Strong

Important: You will need this password to log in. Please store it in a secure location.

Your Email
bindusrikarpurapu@gmail.com

Double-check your email address before continuing.

Search engine visibility
☐ Discourage search engines from indexing this site

It is up to search engines to honor this request.

Install WordPress

Not secure | 54.166.188.198/wordpress/wp-login.php

Username or Email Address
bindusrikarpurapu@gma

Password
•••••••••••••• 👁

☐ Remember Me
Log In

Lost your password?

← Go to my sample website

Not secure | 54.166.188.198/wordpress/

🍥 my sample website 🖉 Edit site ↻ 1 💬 0 ＋ New   Howdy, Bindu Sri 🔍

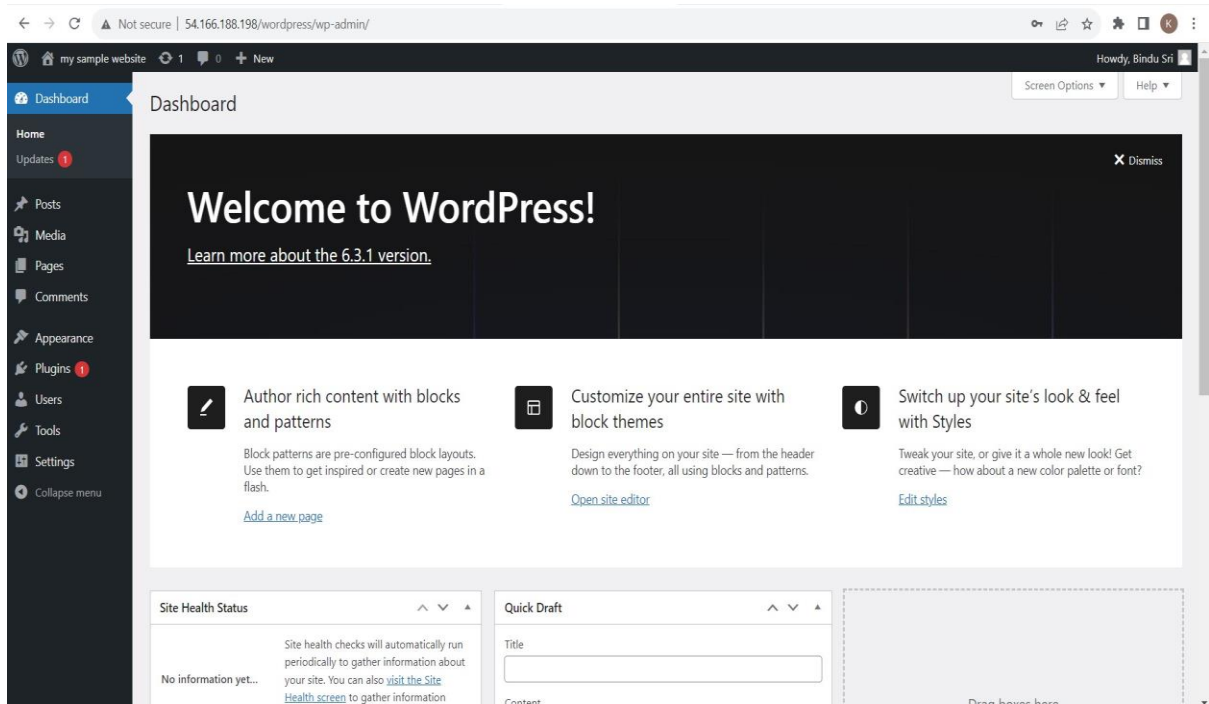my sample website   Sample Page

Mindblown: a blog about philosophy.

Hello world!

Welcome to WordPress. This is your first post.
Edit or delete it, then start writing!

October 7, 2023

Adding Security groups to instances