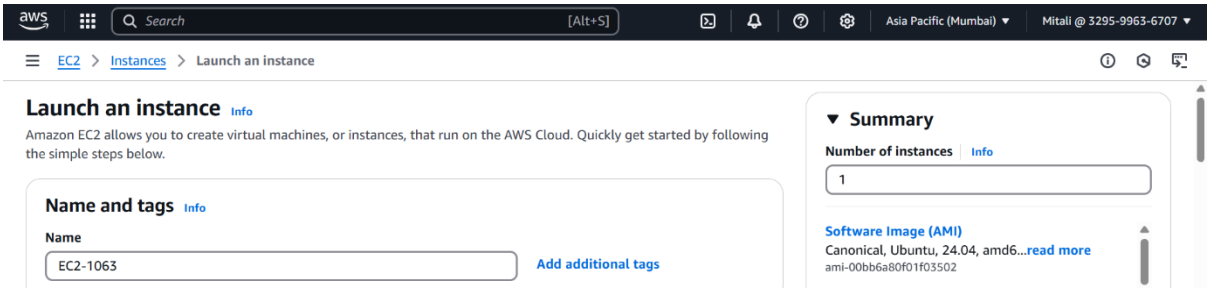
Name of the Student: **Mitali Bhattad** **PRN: 20220801063**

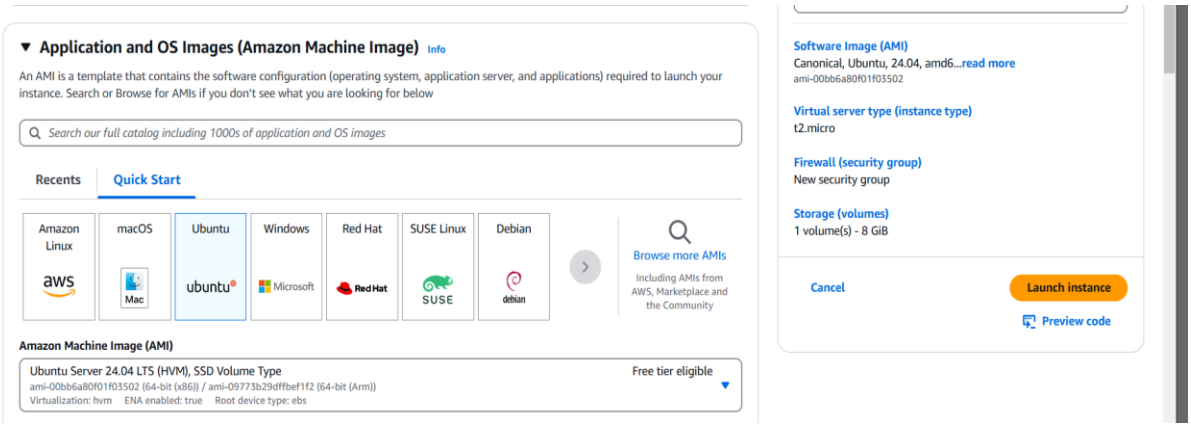
Title of Practical: **Setting Up Frontend WordPress and Backend MySQL Containers, Then Logging Into WordPress**

Step1: Launch an EC2 Instance

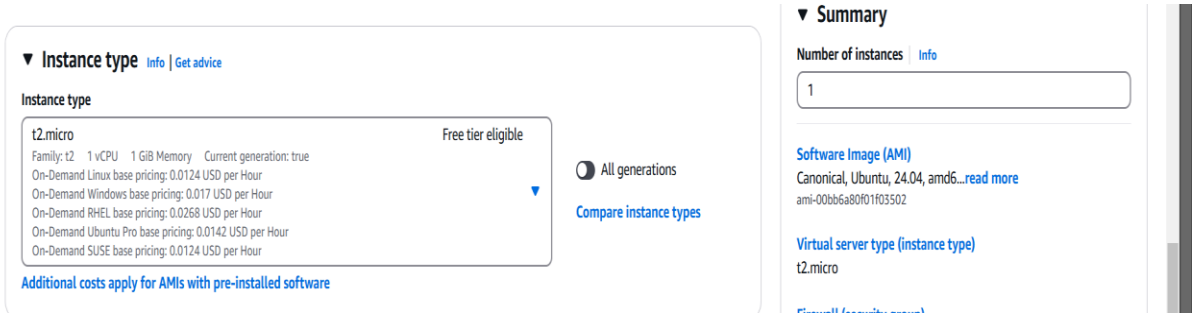
- Name the Instance



- Choose AMI: Ubuntu



- Select the instance type: t2 micro



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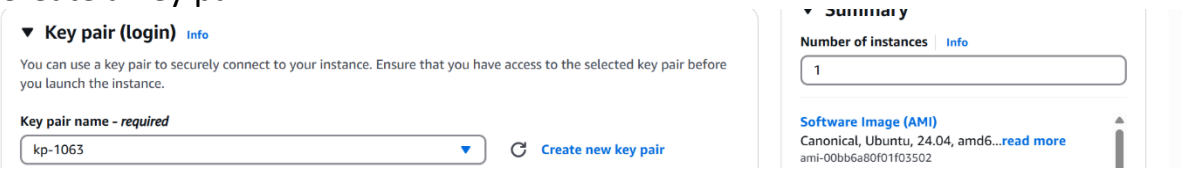
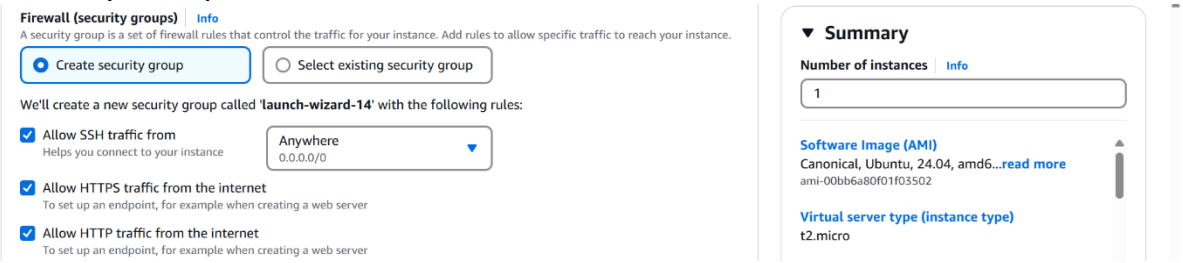
- Create a Key pair



- Security Group



- Launch the instance

Step 2: Connect the EC2 Instance and run the following commands:

1. Switch to root user and update and upgrade system packages
- sudo -i
- sudo apt update -y

```
ubuntu@ip-172-31-0-92:~$ sudo -i
root@ip-172-31-0-92:~# sudo apt update -y
```

2. Install Docker:
- sudo apt install docker.io -y

```
root@ip-172-31-0-92:~# sudo apt install docker.io -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

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Title of Practical: Setting Up Frontend WordPress and Backend MySQL Containers, Then Logging Into WordPress

3. Start and enable Docker and verify the version:
- sudo systemctl start docker
- sudo systemctl enable docker
- docker --version

```
root@ip-172-31-0-92:~# sudo systemctl start docker
root@ip-172-31-0-92:~# sudo systemctl enable docker
root@ip-172-31-0-92:~# docker --version
Docker version 26.1.3, build 26.1.3-0ubuntu1~24.04.1
```

4. Deploy MariaDB Container
docker pull mariadb
docker run -d --name mariadb \
-e MYSQL_ROOT_PASSWORD=rootpassword \
-e MYSQL_DATABASE=wordpress \
-e MYSQL_USER=wordpressuser \
-e MYSQL_PASSWORD=wordpresspassword \
mariadb

```
root@ip-172-31-0-92:~# docker pull mariadb
Using default tag: latest
latest: Pulling from library/mariadb
5a7813e071bf: Pull complete
bdecd990c29c: Pull complete
5db80086e4da: Pull complete
901fe9394c00: Pull complete
43eb19e1b102: Pull complete
597f7afe50fe: Pull complete
e1dede558384: Pull complete
5c3a22df929b: Pull complete
Digest: sha256:310d29fbb58169dcddb384b0ff138edb081e2773d6e2eceb976b3668089f2f84
Status: Downloaded newer image for mariadb:latest
docker.io/library/mariadb:latest
```

```
root@ip-172-31-0-92:~# docker run -d --name mariadb \
  -e MYSQL_ROOT_PASSWORD=rootpassword \
  -e MYSQL_DATABASE=wordpress \
  -e MYSQL_USER=wordpressuser \
  -e MYSQL_PASSWORD=wordpresspassword \
  mariadb
cde88660d3c9026068a92a408c72e93e2da29bc325e817df3379e548d9240da4
```

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Title of Practical: Setting Up Frontend WordPress and Backend MySQL Containers, Then Logging Into WordPress

5. Deploy WordPress Container

```
docker pull wordpress
docker run -d --name wordpress \
  -e WORDPRESS_DB_HOST=mariadb \
  -e WORDPRESS_DB_NAME=wordpress \
  -e WORDPRESS_DB_USER=wordpressuser \
  -e WORDPRESS_DB_PASSWORD=wordpresspassword \
  -p 80:80 \
  --link mariadb:mariadb \
  wordpress
```

```
root@ip-172-31-0-92:~# docker pull wordpress
Using default tag: latest
latest: Pulling from library/wordpress
7cf63256a31a: Pull complete
859c077b5003: Pull complete
59e01f001c00: Pull complete
7d7543348a2e: Pull complete
ee6fbc7f6010: Pull complete
7ac282ed1b18: Pull complete
ac27beeba4c1: Pull complete
848a107069e4: Pull complete
a02f50ccc1f1: Pull complete
897474ecb9dc: Pull complete
7b3a864a341f: Pull complete
5b3467e0601d: Pull complete
9e27623ff1e4: Pull complete
4f4fb700ef54: Pull complete
115a3dfab727: Pull complete
4cdbe039bbf5: Pull complete
0af0c10e3a6a: Pull complete
e9ab1aacf4f2: Pull complete
2e0cbc7f9407: Pull complete
9b2cf0bfcbcd: Pull complete
ecf9e78007a4: Pull complete
33569abf5deb: Pull complete
Digest: sha256:c31edd83f61ee9f524ff6a36357bd3bf6bdd4c397c32e15d7ce4708b717569e9
Status: Downloaded newer image for wordpress:latest
docker.io/library/wordpress:latest
```

```
root@ip-172-31-0-92:~# docker run -d --name wordpress \
  -e WORDPRESS_DB_HOST=mariadb \
  -e WORDPRESS_DB_NAME=wordpress \
  -e WORDPRESS_DB_USER=wordpressuser \
  -e WORDPRESS_DB_PASSWORD=wordpresspassword \
  -p 80:80 \
  --link mariadb:mariadb \
  wordpress
5fc14f989b5e37559bc7bbed94ed25527338a7c4fdccaca14ea3a767e8934123
```

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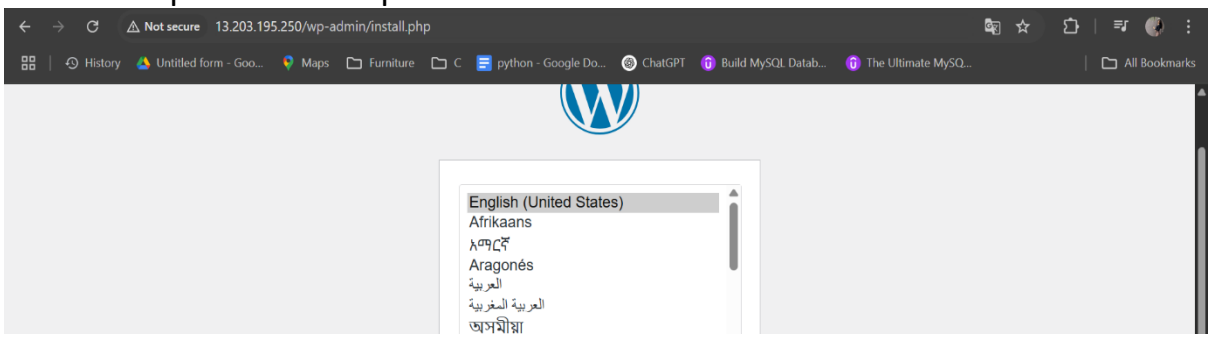
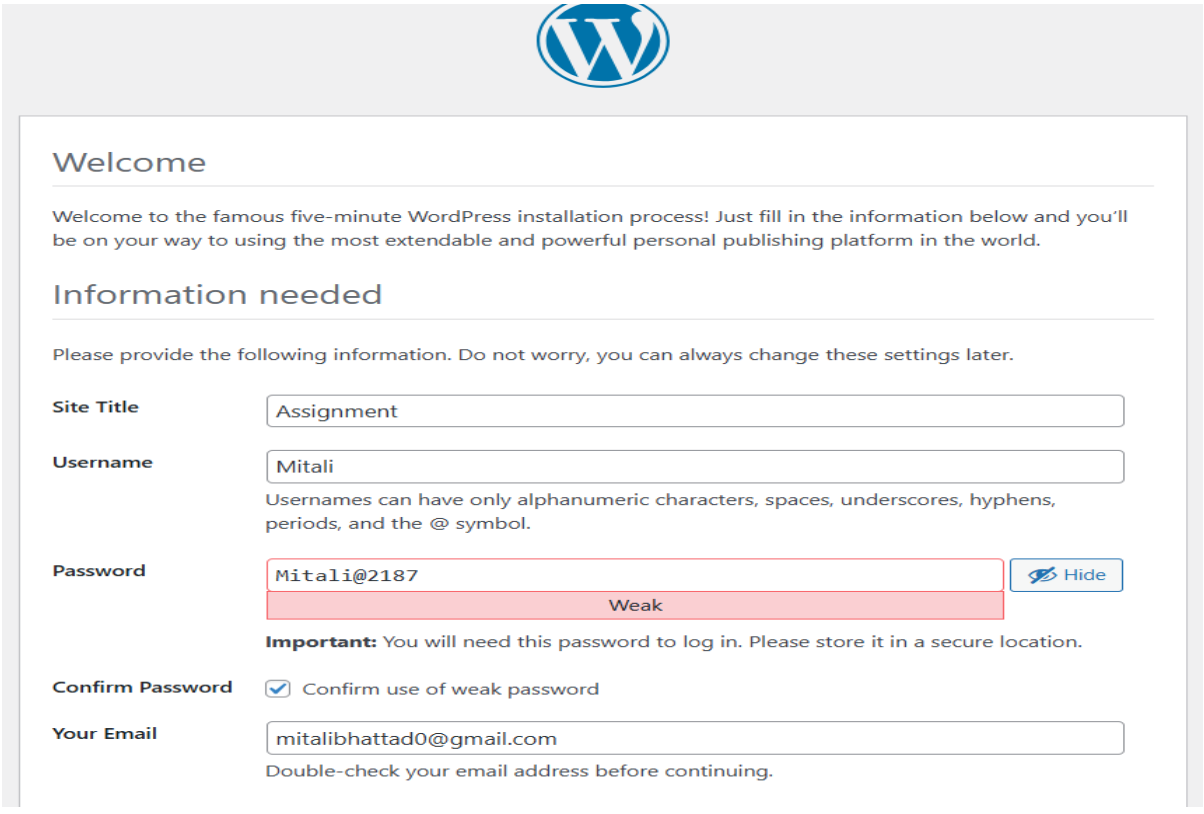
6. **Access WordPress**
   1. Open **http://<public-ip>** in a browser.
   2. Complete the setup wizard.





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