CLOUD COMPUTING LAB 8

AWS: Account Setup, IAM, VPC Inventory, EC2, Docker & Gitea

Submitted to: Engr. Waqas Saleem
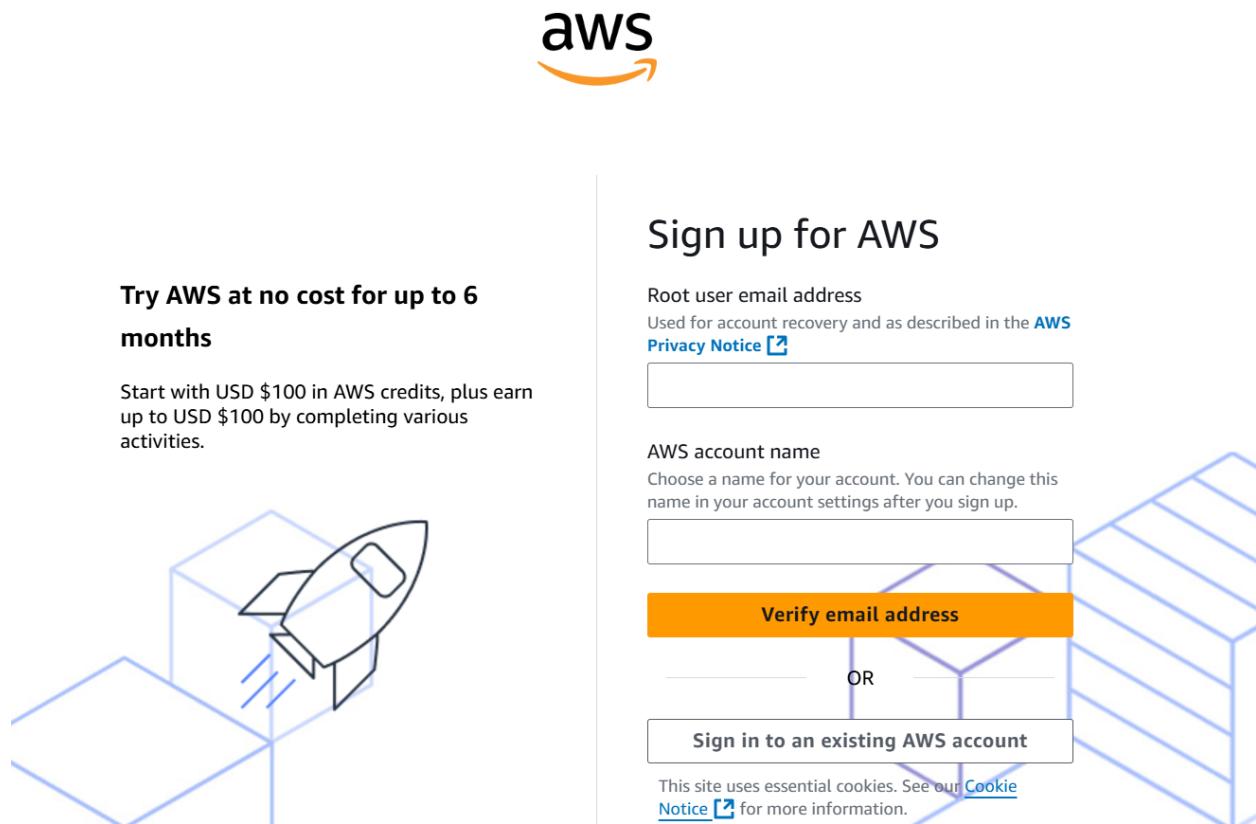
Engr. Muhammad Shahzad

Submitted by: Maham Saleem
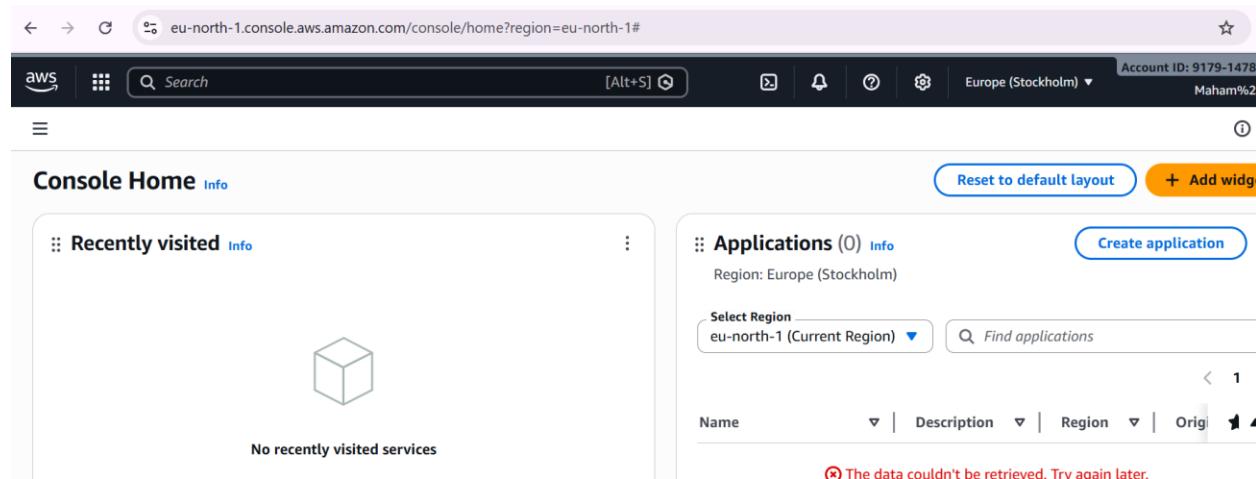
Registration no.: 2023-BSE-035

Task 1 — AWS Root Account + UAE Region

task1_open_signup_page.png

task1_signed_up_confirmation.png

task1_root_signed_in.png

task1_enable_region_me-central-1.png

|		
from the region selector located in the top navigation bar.		
☐ Asia Pacific (Thailand)	⊗ Disabled	
☐ Canada (Calgary)	⊗ Disabled	
☐ Europe (Zurich)	⊗ Disabled	
☐ Europe (Milan)	⊗ Disabled	
☐ Europe (Spain)	⊗ Disabled	
☐ Israel (Tel Aviv)	⊗ Disabled	
☐ Middle East (UAE)	⊘ Enabled	
☐ Middle East (Bahrain)	⊗ Disabled	
☐ Mexico (Central)	⊗ Disabled	
☐ Asia Pacific (Tokyo)	⊘ Enabled by default	
☐ Asia Pacific (Seoul)	⊘ Enabled by default	
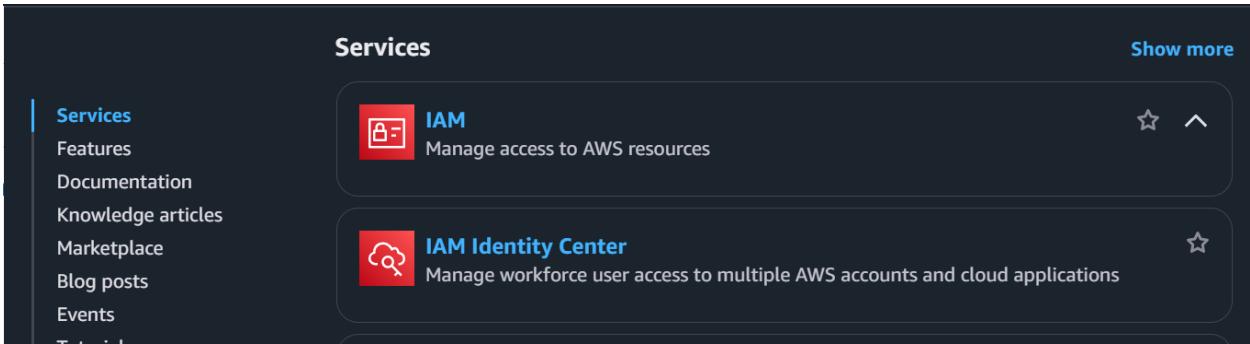
task1_summary.png
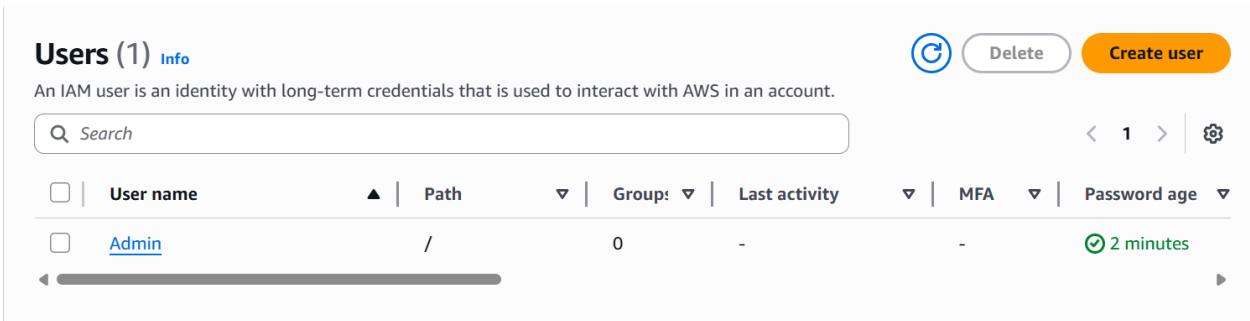
Task 2 — IAM Admin + Lab8User

task2_open_iam_console.png

task2_admin_create_confirmation.png

task2_admin_csv_and_signin_url.png

task2_admin_console_after_login.png
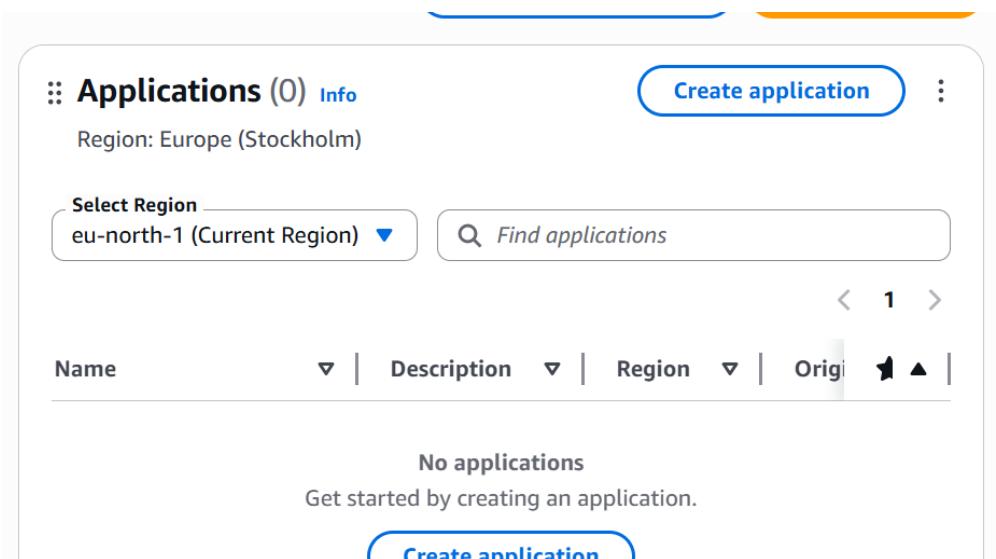
task2_create_lab8user_and_csv.png

task2_lab8user_csv_saved.png

task2_lab8user_logged_in.png
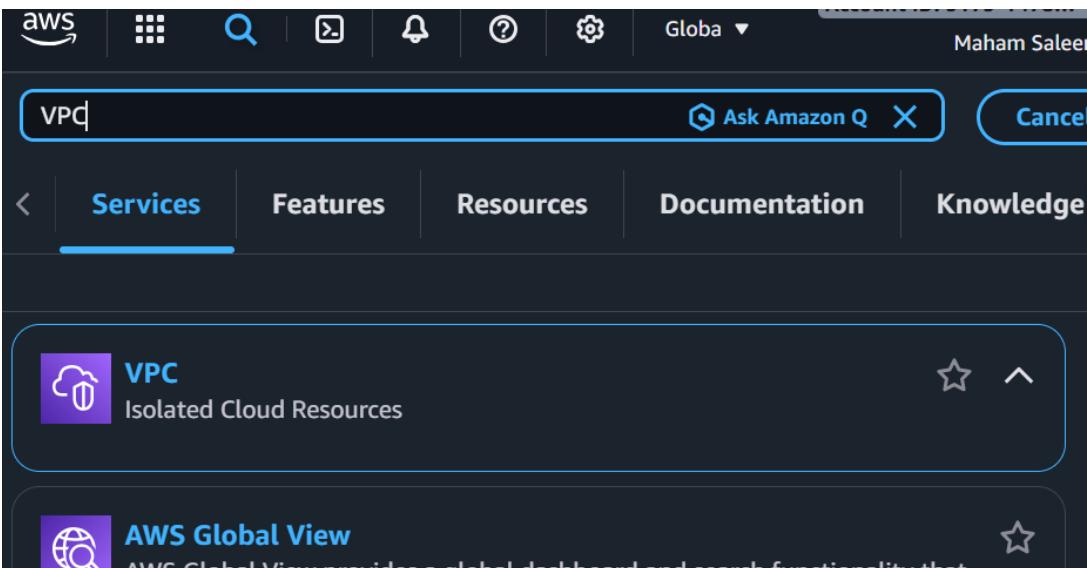
task2_summary.png

Task 3 — Inspect VPC resources (in UAE me-central-1)

task3_open_vpc_console.png

task3_vpcs_list.png

Your VPCs

| VPCs | VPC encryption controls |
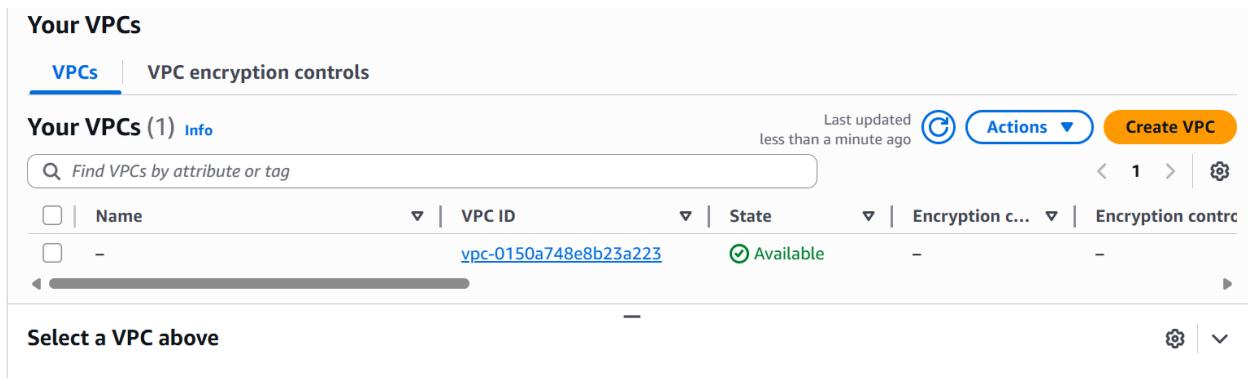
Your VPCs (1) Info   Last updated less than a minute ago   ↻   Actions ▼   **Create VPC**

🔍 Find VPCs by attribute or tag   ‹ 1 › ⚙

	Name ▽	VPC ID ▽	State ▽	Encryption c... ▽	Encryption contro
☐	–	vpc-0150a748e8b23a223	⊘ Available	–	–

Select a VPC above   ⚙ ⌄
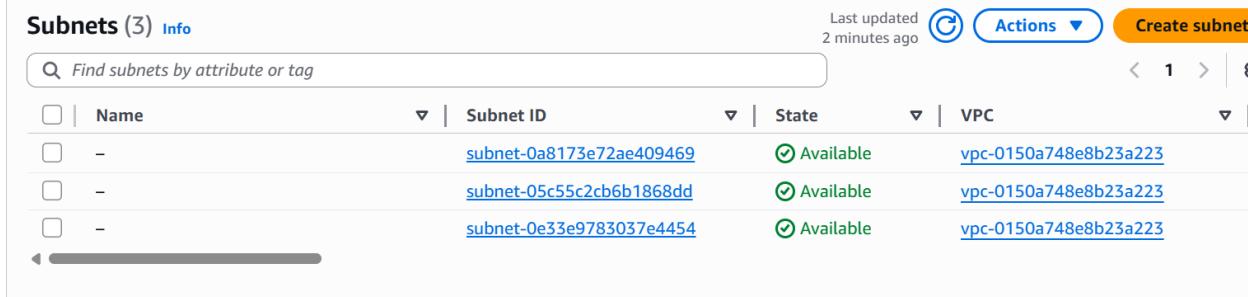
task3_subnets_list.png

Subnets (3) Info   Last updated 2 minutes ago   ↻   Actions ▼   **Create subnet**

🔍 Find subnets by attribute or tag   ‹ 1 › ⚙

	Name ▽	Subnet ID ▽	State ▽	VPC ▽
☐	–	subnet-0a8173e72ae409469	⊘ Available	vpc-0150a748e8b23a223
☐	–	subnet-05c55c2cb6b1868dd	⊘ Available	vpc-0150a748e8b23a223
☐	–	subnet-0e33e9783037e4454	⊘ Available	vpc-0150a748e8b23a223
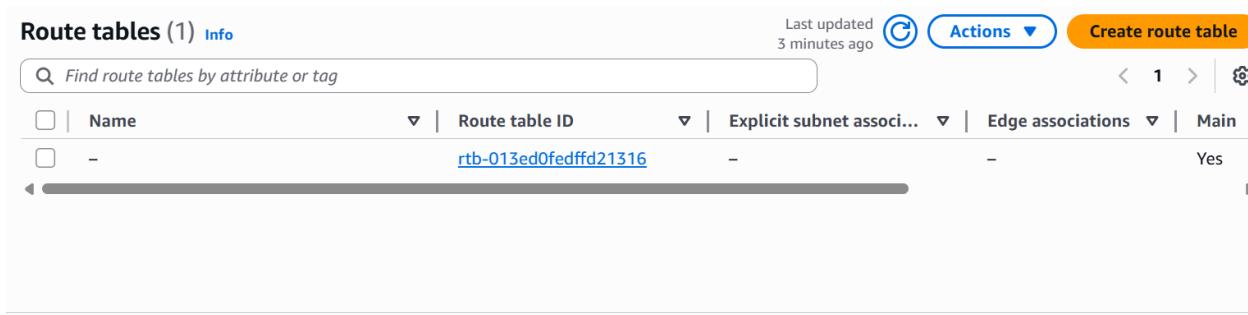
task3_route_tables_list.png

Route tables (1) Info   Last updated 3 minutes ago   ↻   Actions ▼   **Create route table**

🔍 Find route tables by attribute or tag   ‹ 1 › ⚙

	Name ▽	Route table ID ▽	Explicit subnet associ... ▽	Edge associations ▽	Main
☐	–	rtb-013ed0fedffd21316	–	–	Yes
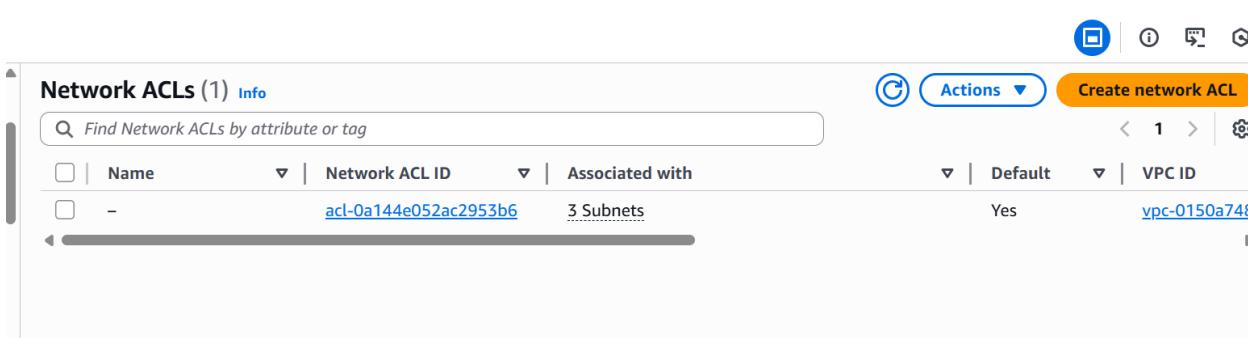
task3_network_acls_list.png

🔲 ⓘ 🖥 ◷

Network ACLs (1) Info   ↻   Actions ▼   **Create network ACL**
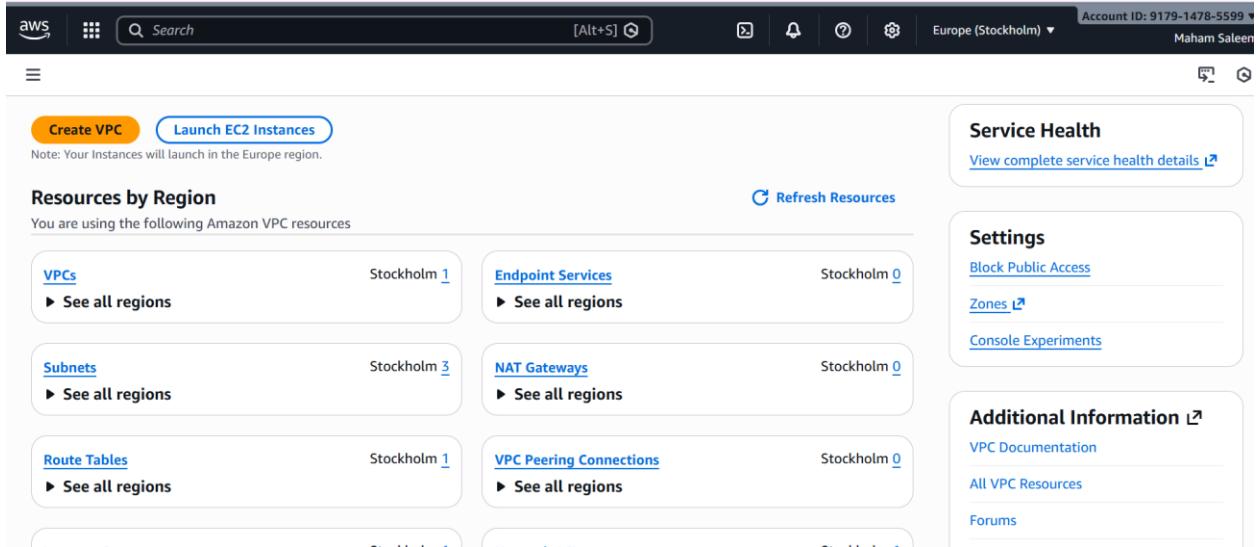
🔍 Find Network ACLs by attribute or tag   ‹ 1 › ⚙

	Name ▽	Network ACL ID ▽	Associated with	Default ▽	VPC ID
☐	–	acl-0a144e052ac2953b6	3 Subnets	Yes	vpc-0150a748
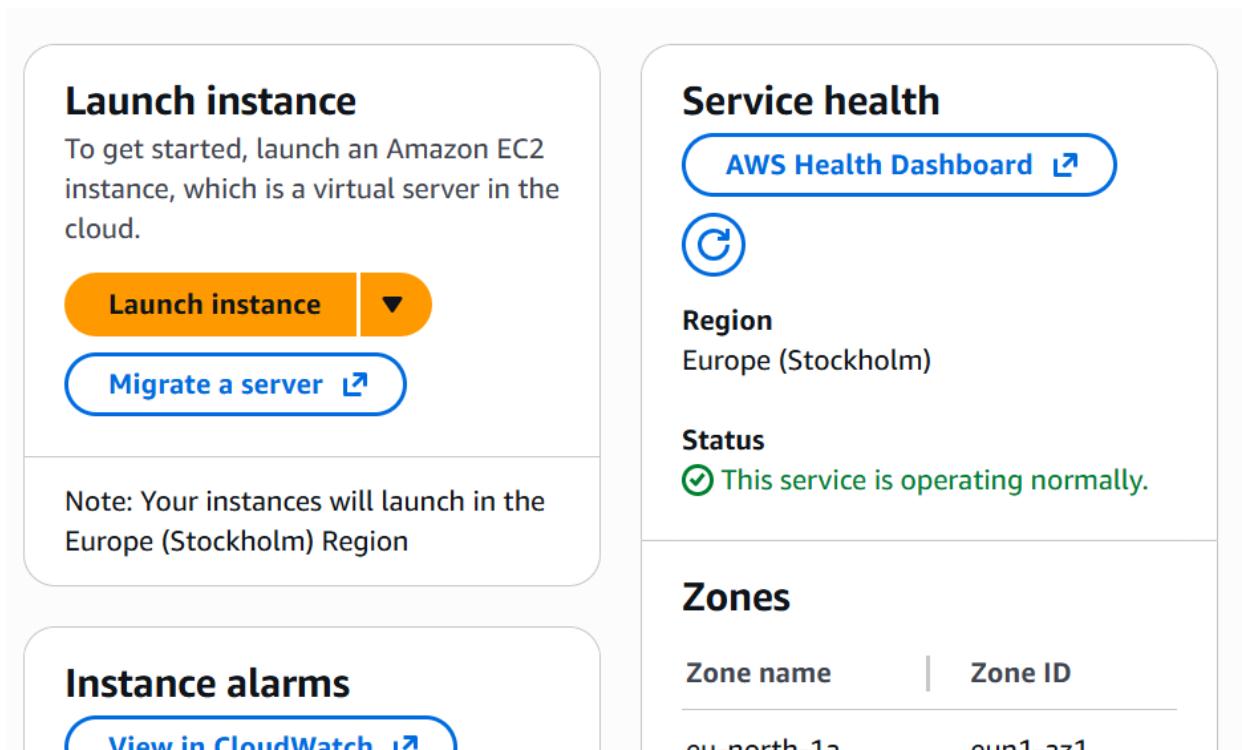
task3_summary.png
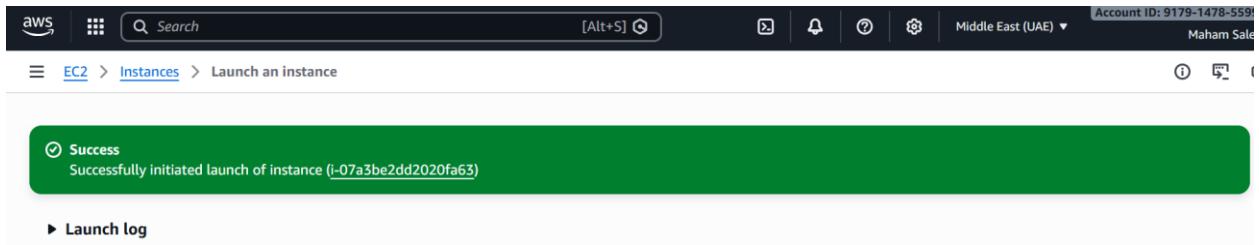
Task 4 — Launch EC2, SSH, install Docker & Docker Compose, deploy Gitea
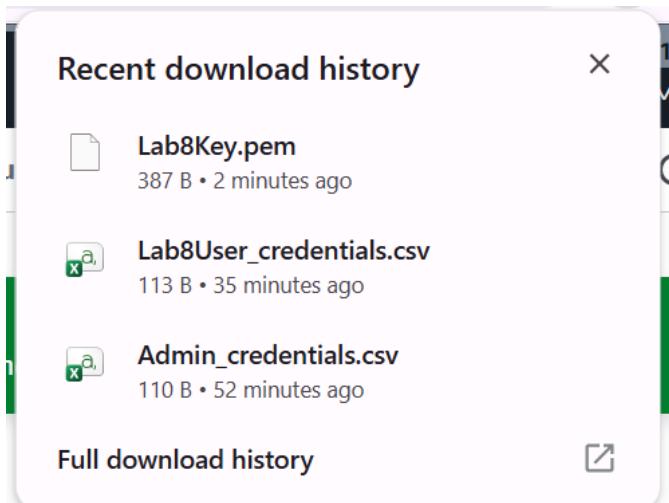
task4_open_ec2_console.png
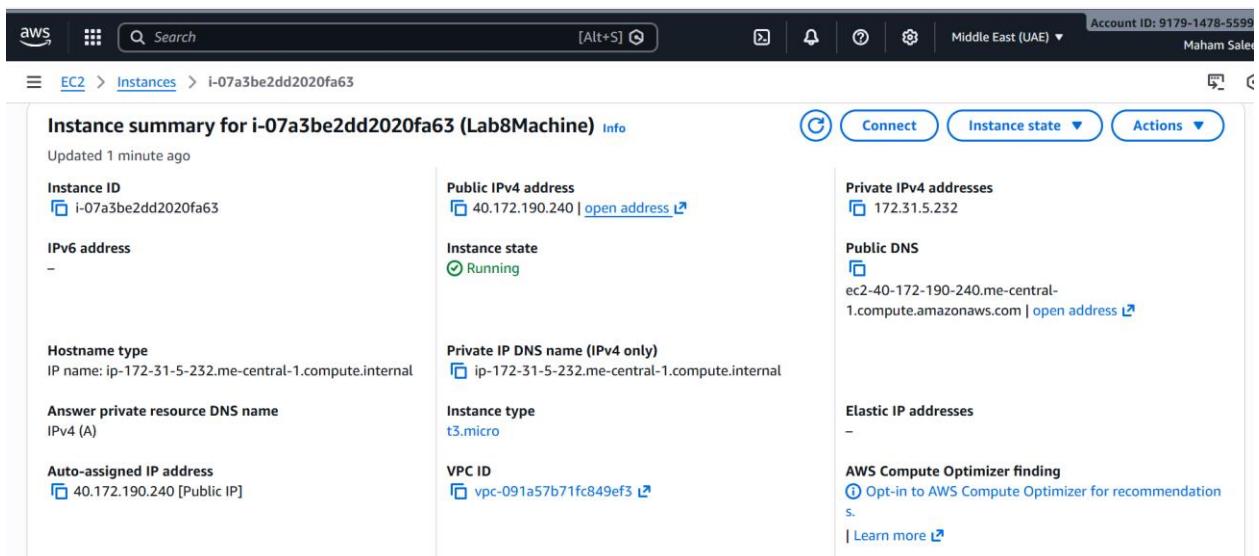
task4_launch_instance_config.png


task4_keypair_download.png

task4_instance_running_console.png

task4_ssh_from_windows_to_ec2.png

task4_ec2_install_docker_compose_started.png

task4_vim_compose_yaml_paste.png
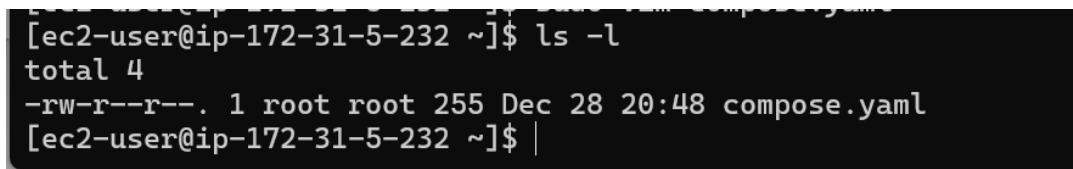

```yaml
version: "3"

services:
  gitea:
    image: gitea/gitea:latest
    container_name: gitea
    restart: always
    ports:
      - "3000:3000"
      - "222:22"
    volumes:
      - ./gitea:/data
    environment:
      - USER_UID=1000
      - USER_GID=1000
```
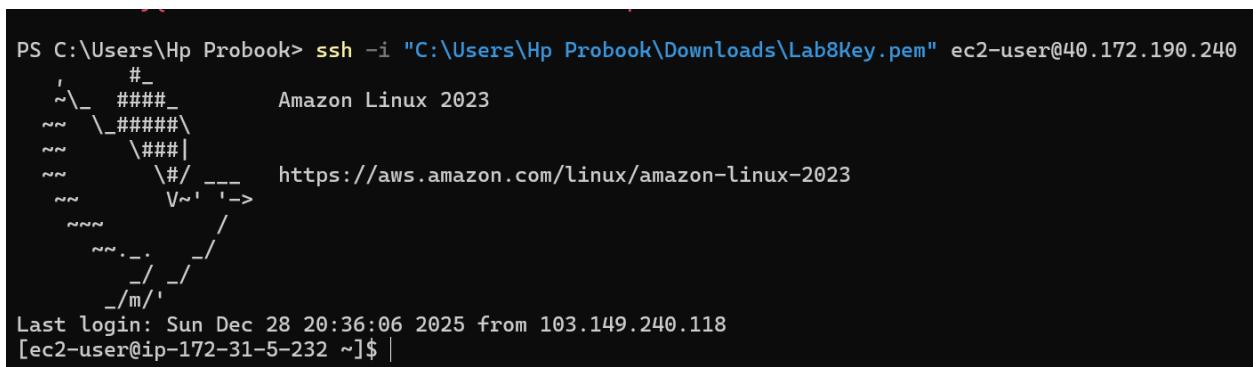
task4_compose_yaml_saved_ls.png


```
[ec2-user@ip-172-31-5-232 ~]$ ls -l
total 4
-rw-r--r--. 1 root root 255 Dec 28 20:48 compose.yaml
[ec2-user@ip-172-31-5-232 ~]$
```

task4_usermod_and_groups_before_after.png


```
PS C:\Users\Hp Probook> ssh -i "C:\Users\Hp Probook\Downloads\Lab8Key.pem" ec2-user@40.172.190.240

       #_
   ~\_  ####_           Amazon Linux 2023
  ~~     \_#####\
  ~~        \###|
  ~~          \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~          V~' '->
    ~~~         /
     ~~._.   _/
        _/ _/
       _/m/'
Last login: Sun Dec 28 20:36:06 2025 from 103.149.240.118
[ec2-user@ip-172-31-5-232 ~]$
```

task4_docker_compose_up.png

```
[+] up 4/7itea/gitea:latest [######_#]  40.9MB / 75.48MB Pulling 4.7
[+] up 5/7itea/gitea:latest [######_#]  51.89MB / 75.48MB Pulling 4.8
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 4.9
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.0
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.1
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.2
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.3
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.4
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.5
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.6
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.7
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.8
[+] up 5/7itea/gitea:latest [#######]  63.79MB / 75.48MB Pulling 5.9
[+] up 6/7itea/gitea:latest [#######]  68.79MB / 75.48MB Pulling 6.0
* Image gitea/gitea:latest [#######]  75.48MB / 75.48MB Pulling 6.1[+] up 9/9bdb57d9          Pull complete              0.9s
✔Image gitea/gitea:latest Pulled                         6.1s
  ✔2d35ebdb57d9          Pull complete          0.9s
  ✔9f4e672c1f34          Pull complete          1.7s
  ✔4da94b3cc809          Pull complete          1.8s
  ✔8e016ece0bd3          Pull complete          1.8s
  ✔346e493cb6cb          Pull complete          2.8s
  ✔95215379f1d1          Pull complete          2.9s
✔Network ec2-user_default Created               0.2s
✔Container gitea          Created               0.2s
[ec2-user@ip-172-31-5-232 ~]$
```

task4_security_group_allow_3000.png

sg-0d0473a0740de73e5 - Lab8SecurityGroup

Name	Security group rule ID	IP version	Type	Protocol	Port range
–	sgr-05cc4dd0c7e992df0	IPv4	SSH	TCP	22
–	sgr-0425fa45ac38d4c69	IPv4	Custom TCP	TCP	3000

task4_gitea_install_page.png

Sign In

Username or Email Address *

Maham Saleem

Password   Forgot password?

••••••••••••

☐ Remember This Device

Sign In

or

Sign in with OpenID

task4_gitea_create_repo.png

task4_summary.png

Cleanup — Remove resources to avoid charges

cleanup_terminate_instance.png

cleanup_delete_volumes_snapshots.png

cleanup_delete_security_group_and_keypair.png

cleanup_iam_users_deleted.png

cleanup_summary.png