

Homework Assignment 2

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Homework Tasks

Task 1: Log in to AWS

Log in to AWS, screenshot the AWS landing page (the page you see after login).

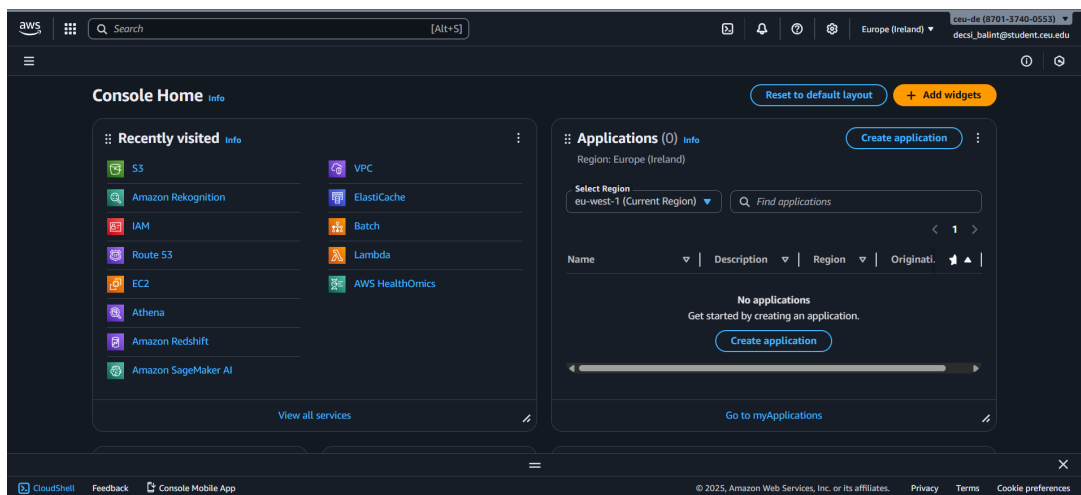


Figure 1: AWS Landing Page

Task 2: Create a Security Group

Create a Security Group and configure it (add SSH and HTTP ports). Call the group “secgroup-your student id-homework”.

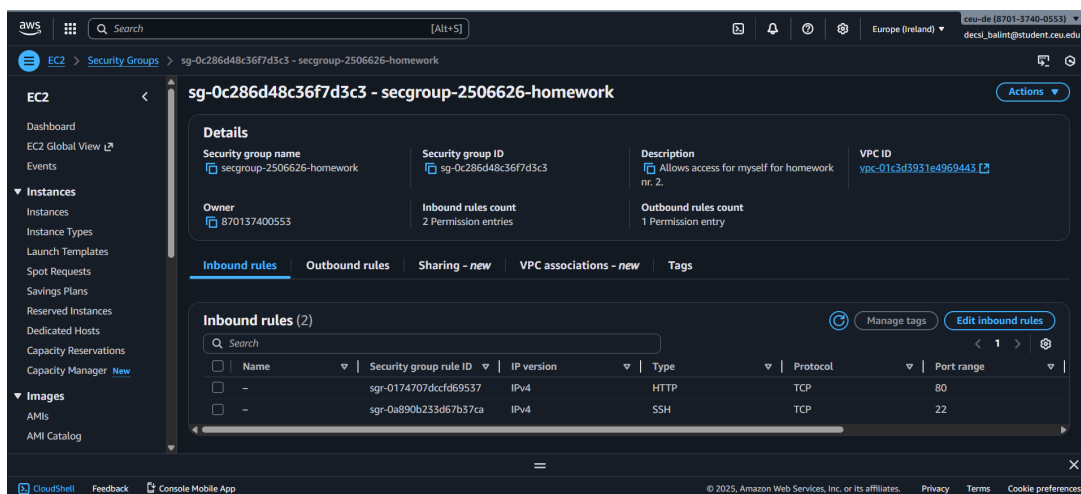


Figure 2: Security Group Configuration

Task 3: Upload your public key

Upload your public key.

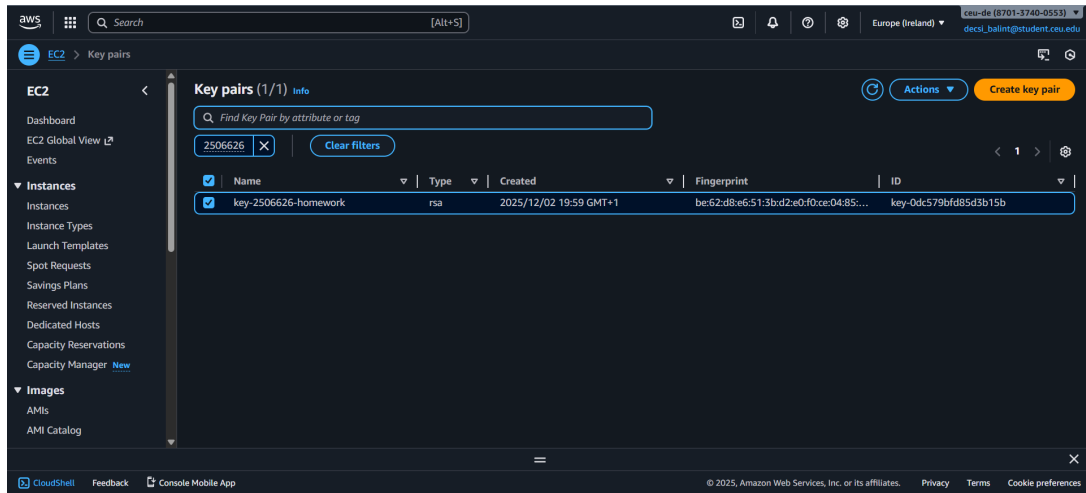


Figure 3: Uploaded Public Key

Task 4: Start creating a t4g.nano instance

Start creating a t4g.nano instance using the Ubuntu AMI we used in the class.

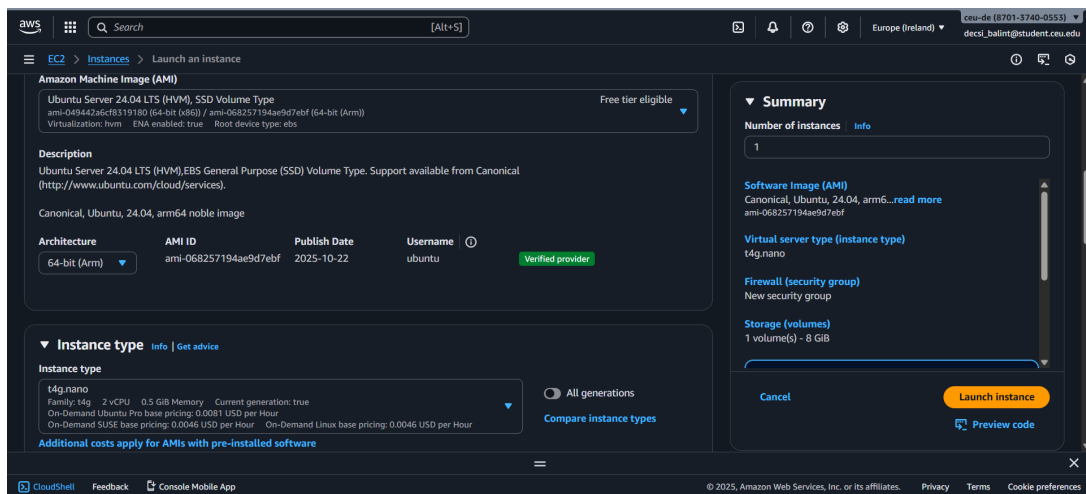


Figure 4: Creating t4g.nano Ubuntu Instance

Task 5: Check the price

Check the price of this instance on ec2instances.info.

t4g.nano	20,304.969	N/A	0.5 GiB	2 vCPUs	EBS only	Up to 5 Gigabit	\$0.0046 hourly	\$0.0029 hourly	\$0.0018 hourly
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Figure 5: Instance Price on ec2instances.info

Task 6: Select Security Group

On the Create Instance Page: Select your security group.

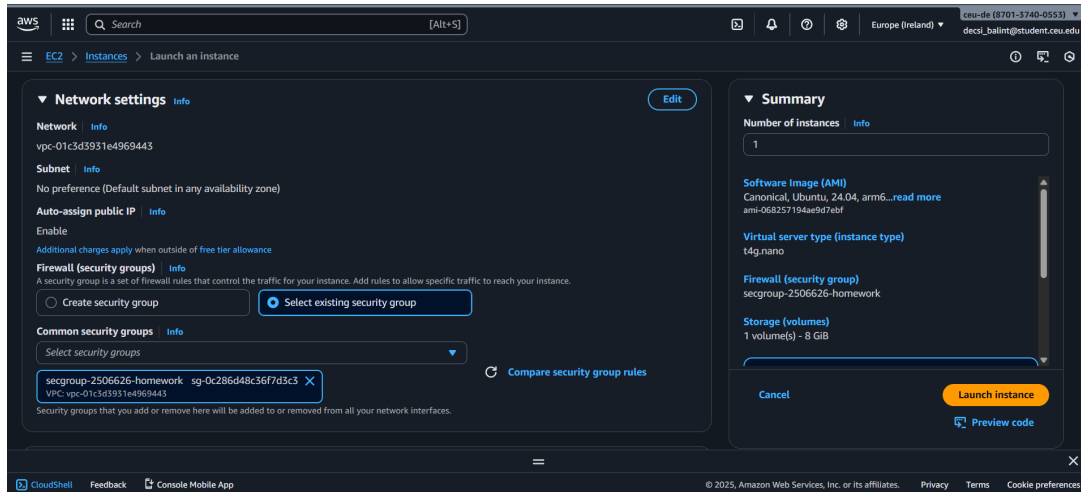


Figure 6: Selecting Security Group

Task 7: Select Key Pairs and Start

Create Instance Page: Select your key pairs and start the instance.

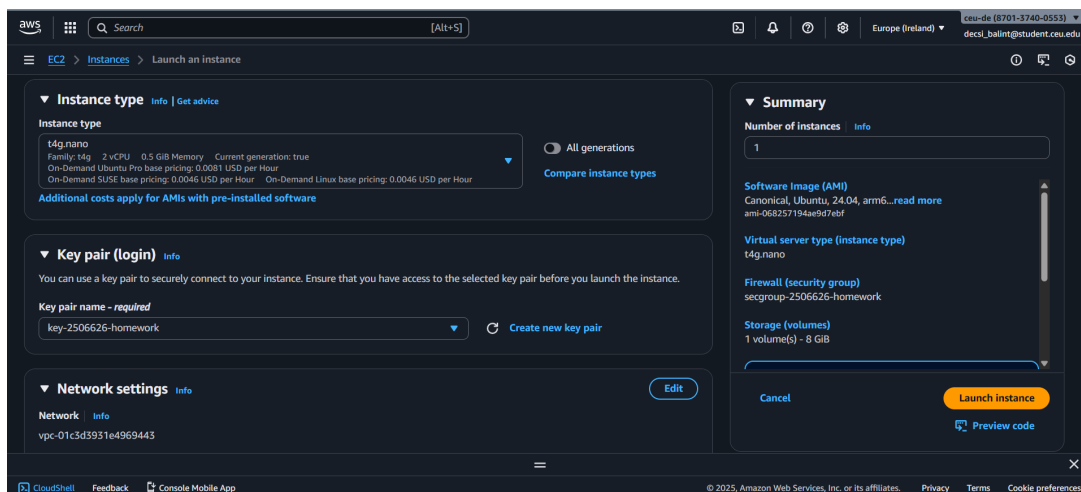


Figure 7: Selecting Key Pair and Starting Instance

Task 8: Instance Details

Go to the instance page of your instance (screenshot the page showing the instance's details).

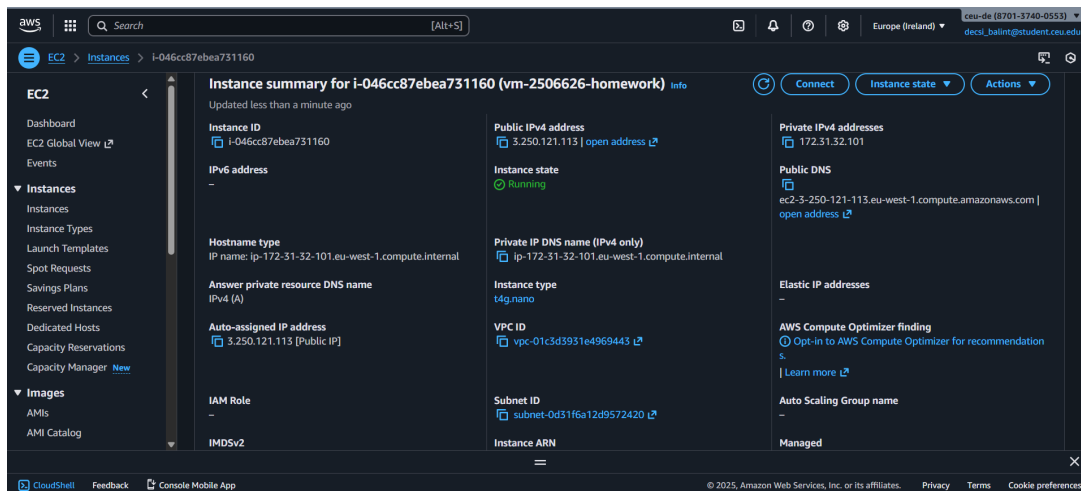


Figure 8: Instance Details Page

Task 9: SSH via Codespace

Use Codespace to SSH into your instance (create a screenshot of the Codespace terminal once you are logged in).

```

ubuntu@ip-172-31-32-101:~$ ssh -i "key-2506626-homework.pem" ubuntu@ec2-3-250-12
The authenticity of host 'ec2-3-250-121-113.eu-west-1.compute.amazonaws.com (3.250.121.113)' can't be established.
ED25519 key fingerprint is SHA256:05ihUapILRssS1etn3WUdIW3zJukCt0MdtlJwBeQM.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-250-121-113.eu-west-1.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1015-aws aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Tue Dec  2 19:05:58 UTC 2025

System load:  0.0          Temperature:   -273.1 C
Usage of /:   26.1% of 6.71GB    Processes:    152
Memory usage: 51%              Users logged in: 0
Swap usage:   0%               IPv4 address for ens5: 172.31.32.101

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-32-101:~$

```

Figure 9: SSH Session in Codespace

Task 10: Streamlit Execution

Update the system, install, and execute Streamlit. Screenshot the terminal (Codespace) once Streamlit has started.

```

ubuntu@ip-172-31-32-101:~$ sudo streamlit hello --server.port 80 --server.address 0.0.0.0
Collecting usage statistics. To deactivate, set browser.gatherUsageStats to false.

Welcome to Streamlit. Check out our demo in your browser.

URL: http://0.0.0.0:80

Ready to create your own Python apps super quickly?
Head over to https://docs.streamlit.io

May you create awesome apps!

```

Figure 10: Streamlit Running in Terminal

Task 11: Create Subdomain in Route 53

Create a subdomain for this website with your name or any other name you like (like zoltan.ceu-data.com), in Route 53.

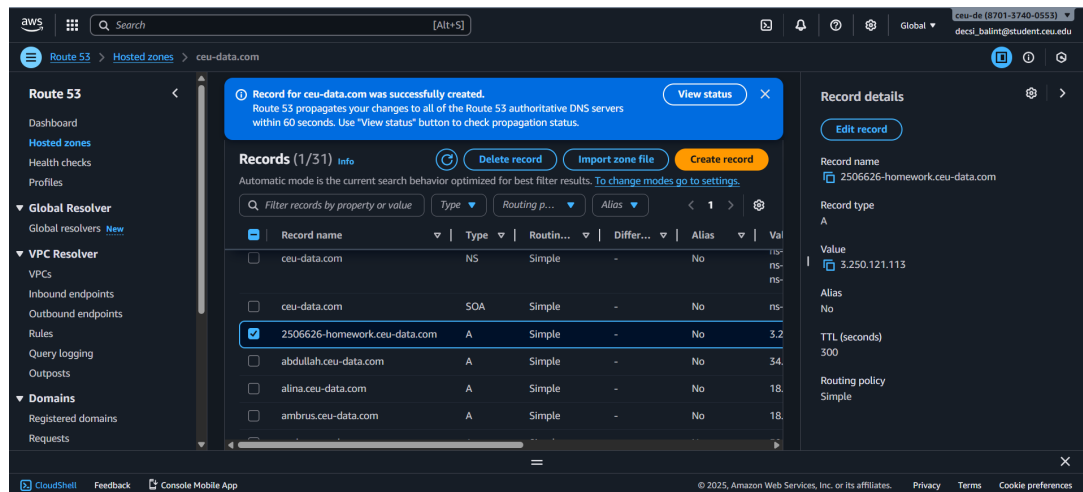


Figure 11: Route 53 Subdomain Creation

Task 12: Access via Domain

Open a browser and open your EC2 instance by connecting to its domain (the screenshot must show both the URL and the streamlit page).

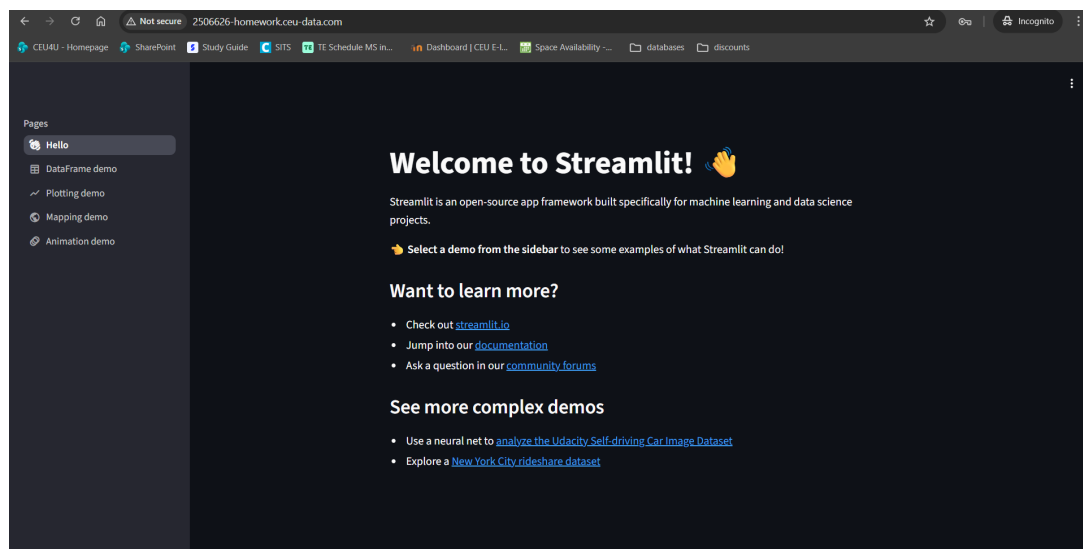


Figure 12: Streamlit App Accessed via Domain

Task 13: Delete Route 53 Record

Delete the record in Route 53.

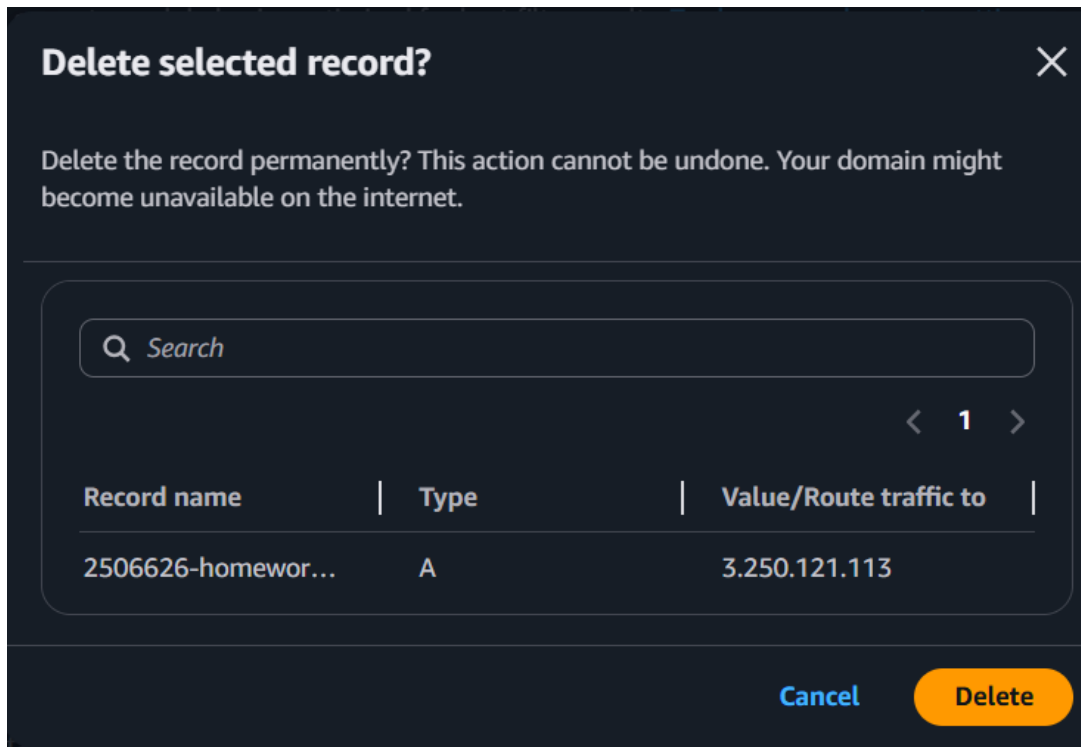


Figure 13: Route 53 Record Deletion

Task 14: Terminate Instance

Terminate the instance.

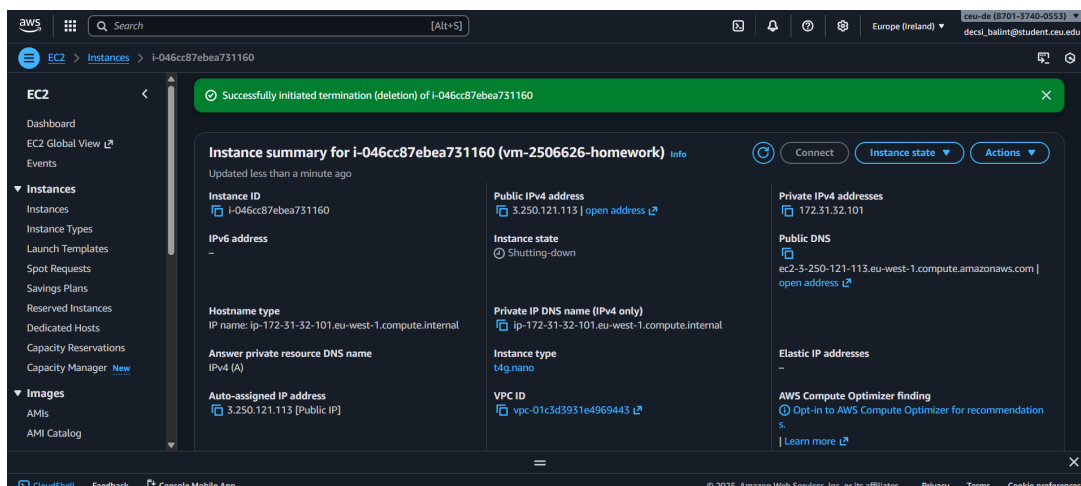


Figure 14: Instance Termination

Task 15: Delete Security Group

Delete the security group.

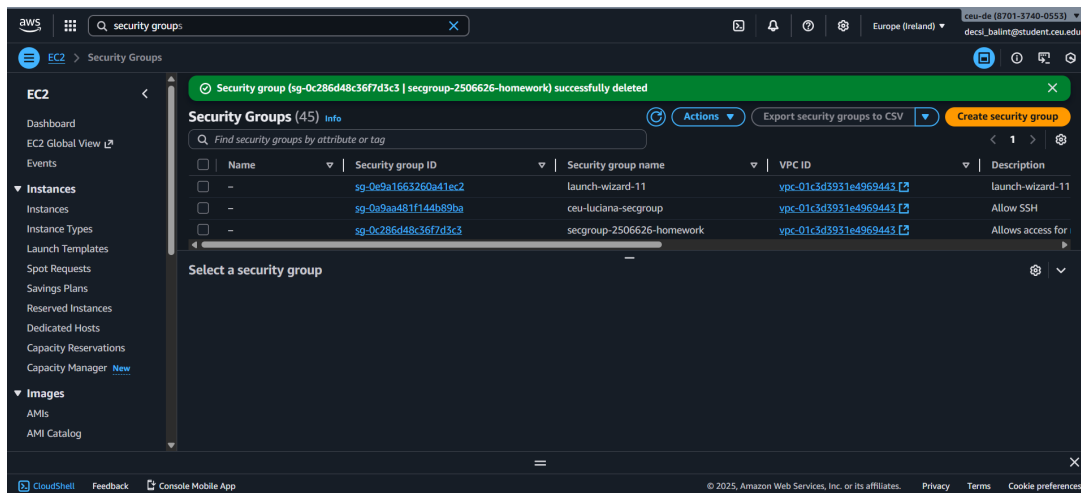


Figure 15: Security Group Deletion

Task 16: Delete Key Pair

Delete the key pair.

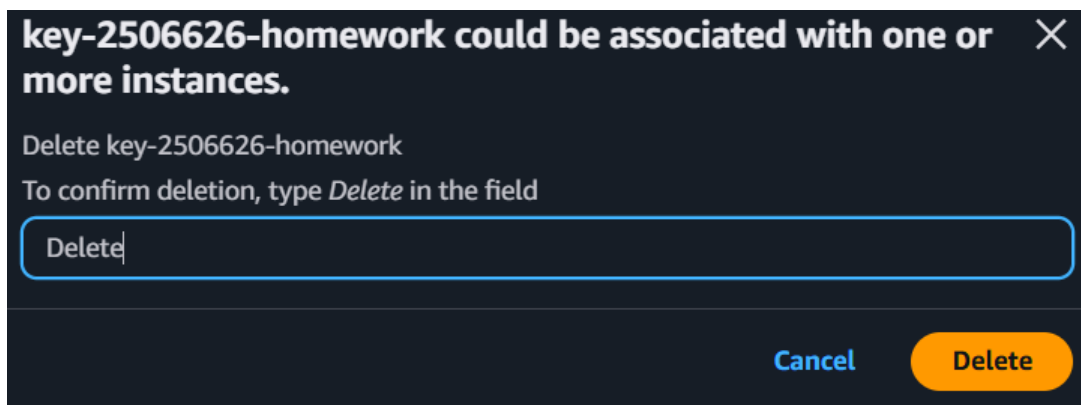


Figure 16: Key Pair Deletion