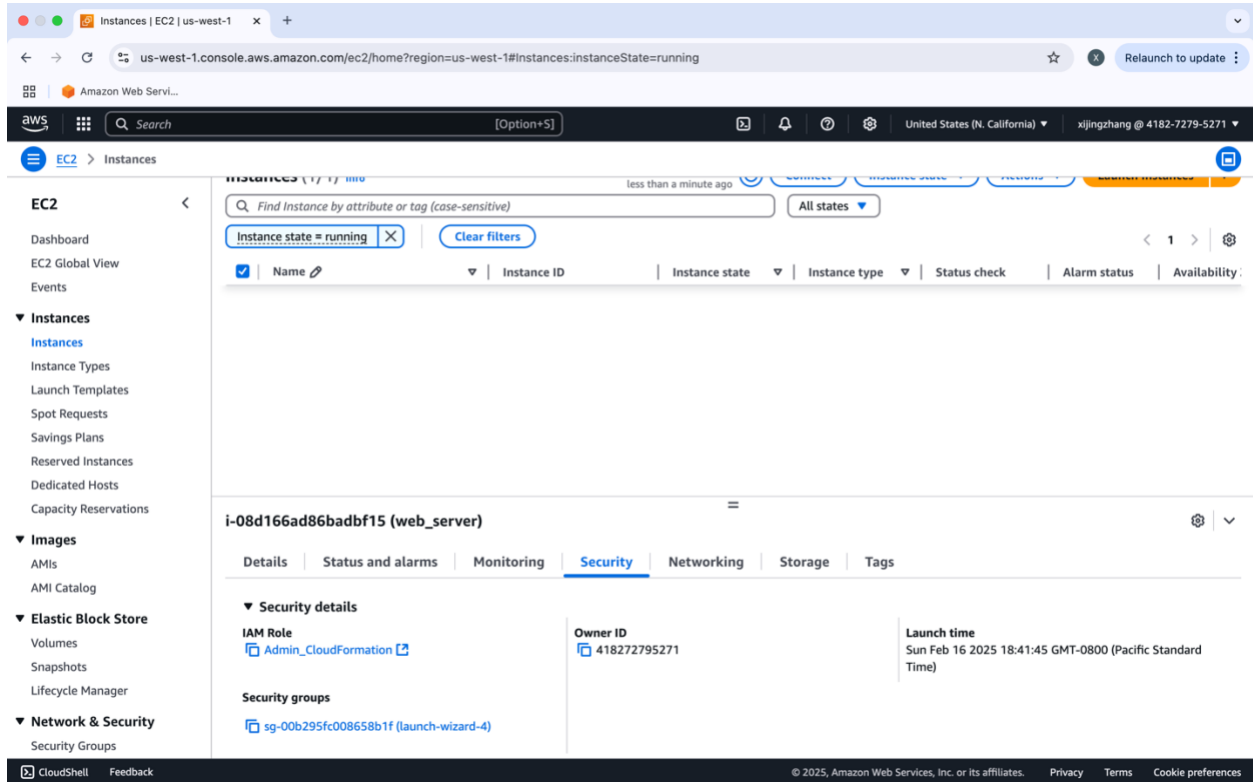


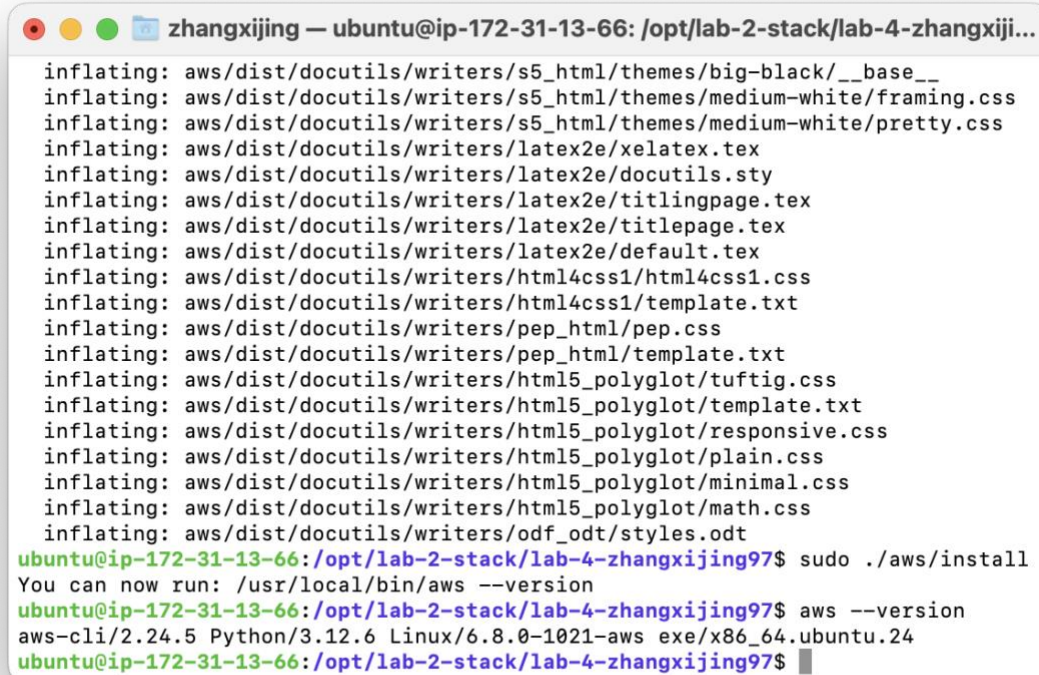
[Screen shot [#1]]



Screenshot #1: IAM Role Assignment to EC2 Instance

- This screenshot should display the EC2 instance settings page where the IAM role is attached. It demonstrates that the instance has the necessary permissions to interact with AWS services like S3, EC2, and CloudFormation. This step is essential for granting your EC2 instance access to required AWS resources.

[Screen shot [#2]]



```
zhangxijing — ubuntu@ip-172-31-13-66: /opt/lab-2-stack/lab-4-zhangxiji...
inflating: aws/dist/docutils/writers/s5_html/themes/big-black/__base__
inflating: aws/dist/docutils/writers/s5_html/themes/medium-white/framing.css
inflating: aws/dist/docutils/writers/s5_html/themes/medium-white/pretty.css
inflating: aws/dist/docutils/writers/latex2e/xelatex.tex
inflating: aws/dist/docutils/writers/latex2e/docutils.sty
inflating: aws/dist/docutils/writers/latex2e/titlingpage.tex
inflating: aws/dist/docutils/writers/latex2e/titlepage.tex
inflating: aws/dist/docutils/writers/latex2e/default.tex
inflating: aws/dist/docutils/writers/html4css1/html4css1.css
inflating: aws/dist/docutils/writers/html4css1/template.txt
inflating: aws/dist/docutils/writers/pep_html/pep.css
inflating: aws/dist/docutils/writers/pep_html/template.txt
inflating: aws/dist/docutils/writers/html5_polyglot/tuftig.css
inflating: aws/dist/docutils/writers/html5_polyglot/template.txt
inflating: aws/dist/docutils/writers/html5_polyglot/responsive.css
inflating: aws/dist/docutils/writers/html5_polyglot/plain.css
inflating: aws/dist/docutils/writers/html5_polyglot/minimal.css
inflating: aws/dist/docutils/writers/html5_polyglot/math.css
inflating: aws/dist/docutils/writers/odf_odt/styles.odt
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ sudo ./aws/install
You can now run: /usr/local/bin/aws --version
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ aws --version
aws-cli/2.24.5 Python/3.12.6 Linux/6.8.0-1021-aws exe/x86_64.ubuntu.24
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$
```

Screenshot #2: AWS CLI Installation Verification

- Capture the terminal after running the command `$ aws --version`. This confirms the successful installation of the AWS CLI on your EC2 instance, which is necessary for managing AWS services directly from the command line.

[Screen shot [#3]

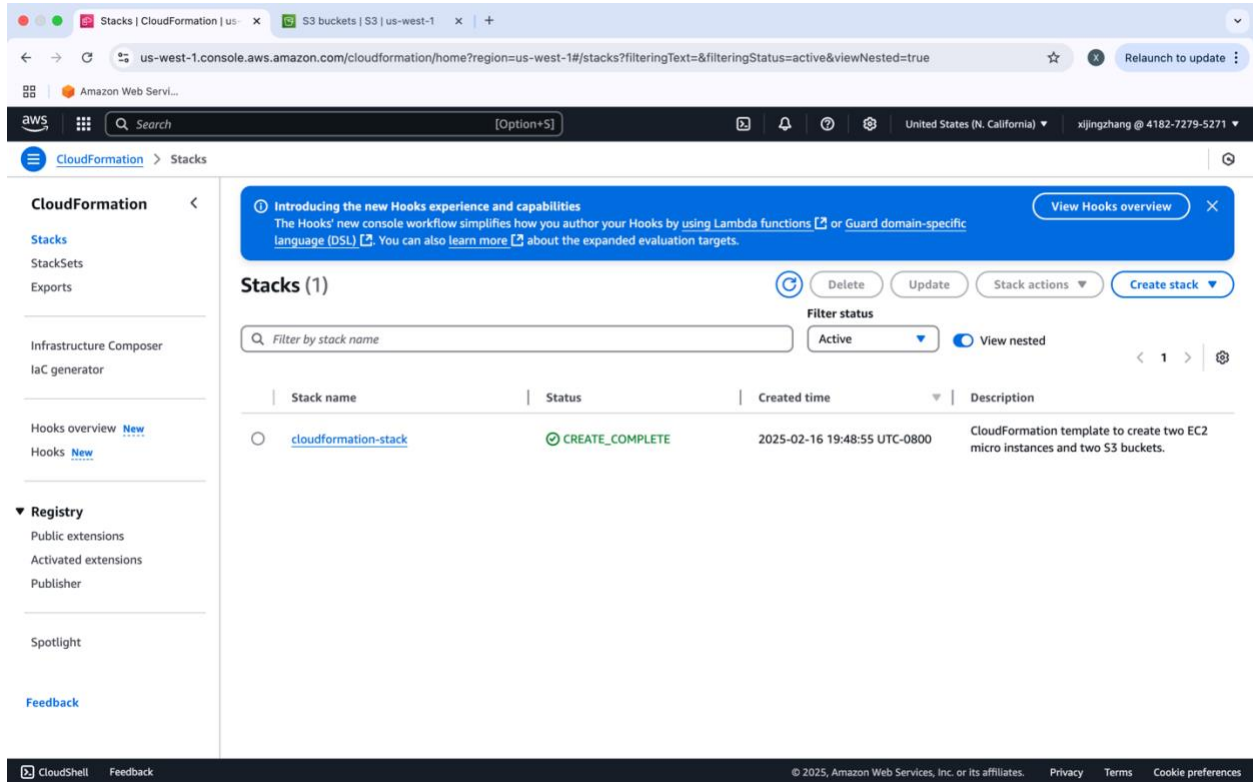


```
zhangxijing — ubuntu@ip-172-31-13-66: /opt/lab-2-stack — ssh -i EC2Ub...
[ubuntu@ip-172-31-13-66:~]$ cd /opt/lab-2-stack
[ubuntu@ip-172-31-13-66:/opt/lab-2-stack$ git clone git@github.com:clouderity/lab-4-zhangxijing97.git
fatal: could not create work tree dir 'lab-4-zhangxijing97': Permission denied
ubuntu@ip-172-31-13-66:/opt/lab-2-stack$ sudo chown -R ubuntu:ubuntu /opt/lab-2-stack
ubuntu@ip-172-31-13-66:/opt/lab-2-stack$ git clone git@github.com:clouderity/lab-4-zhangxijing97.git
Cloning into 'lab-4-zhangxijing97'...
remote: Enumerating objects: 11, done.
remote: Counting objects: 100% (11/11), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 11 (delta 2), reused 3 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (11/11), 15.31 KiB | 15.31 MiB/s, done.
Resolving deltas: 100% (2/2), done.
ubuntu@ip-172-31-13-66:/opt/lab-2-stack$
```

Screenshot #3: Repository Cloning Verification

- This screenshot should display the terminal output showing the creation of the `/opt/lab-2-stack` directory, navigating into it, and successfully cloning the GitHub repository using SSH. This ensures that your code repository has been set up correctly on the EC2 instance.

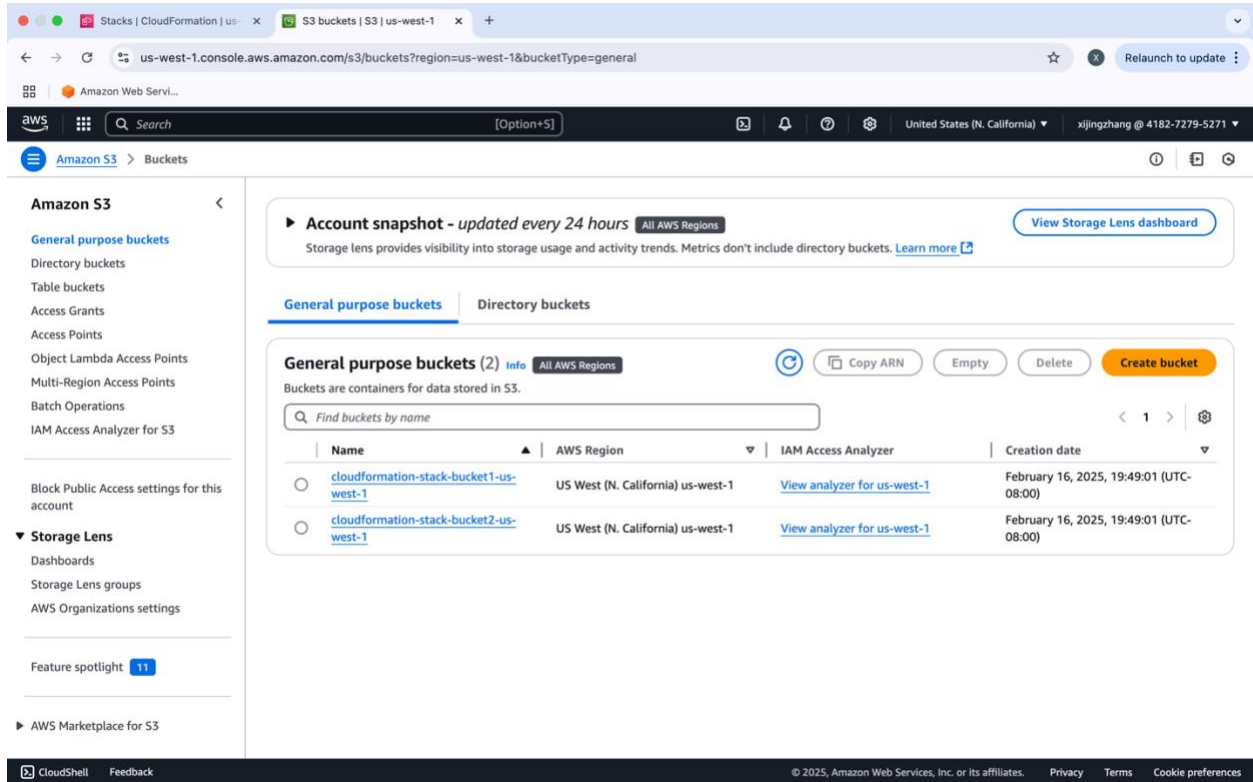
[Screen shot [#4]]



Screenshot #4: CloudFormation Stack Creation

- Capture the AWS CloudFormation dashboard displaying the newly created stack with a status of "CREATE_COMPLETE." This confirms that the deployment script ran successfully and provisioned the AWS resources defined in your CloudFormation template.

[Screen shot [#5]



Screenshot #5: Verification of Created S3 Buckets

- This screenshot should showcase the AWS S3 dashboard with the two newly created S3 buckets. It validates that the stack correctly created the resources specified in the CloudFormation template.

[Screen shot [#6]]

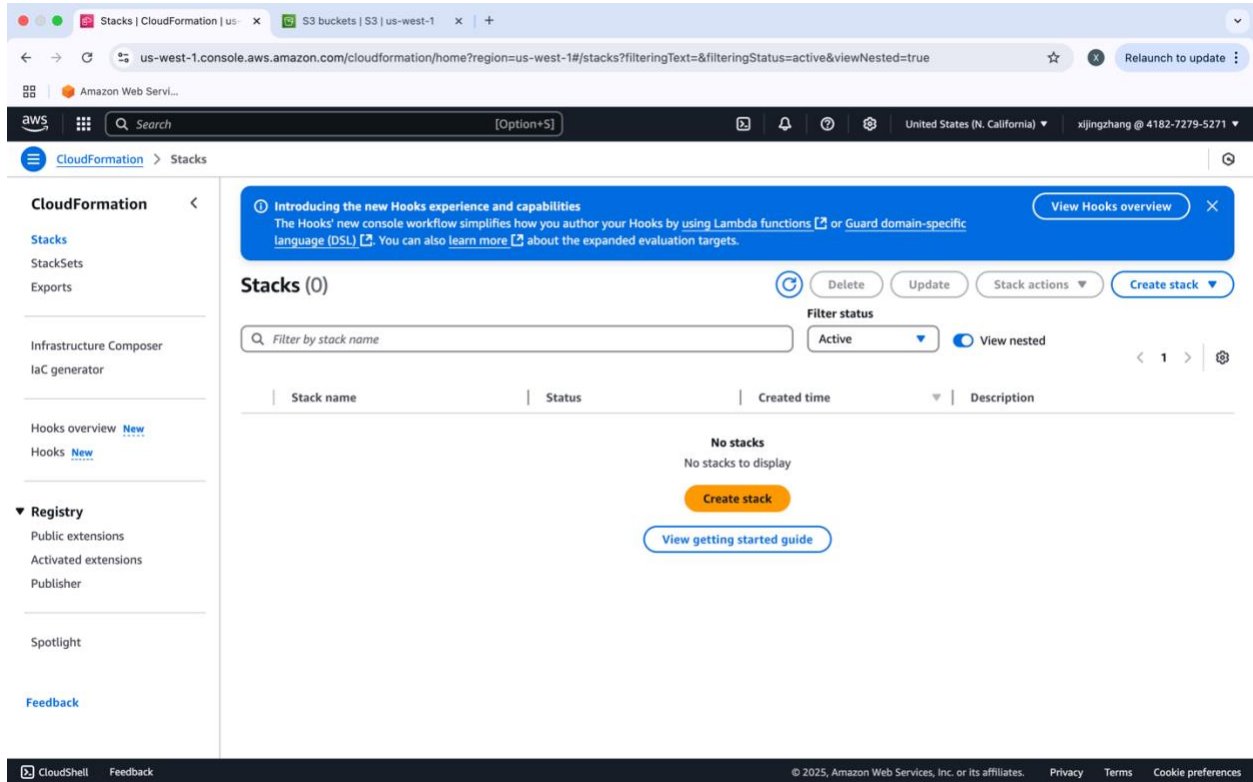


```
zhangxijing — ubuntu@ip-172-31-13-66: /opt/lab-2-stack/lab-4-zhangxiji...  
An error occurred (AlreadyExistsException) when calling the CreateStack operation: Stack [my-first-cloudformation-stack] already exists  
  
Waiter StackCreateComplete failed: Waiter encountered a terminal failure state:  
Matched expected service error code: ValidationError  
Stack my-first-cloudformation-stack has been created successfully.  
[ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ nano deploy.sh  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ chmod +x deploy.sh  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ ./deploy.sh  
{  
  "StackId": "arn:aws:cloudformation:us-west-1:418272795271:stack/cloudformati  
on-stack/1c4f2e50-ece2-11ef-9aa8-06355f7fa003"  
}  
Stack cloudformation-stack has been created successfully.  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ nano destroy.sh  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ chmod +x destroy.sh  
  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ ./destroy.sh  
Stack my-cloudformation-stack has been deleted successfully.  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ nano destroy.sh  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ chmod +x destroy.sh  
[ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$ ./destroy.sh  
Stack cloudformation-stack has been deleted successfully.  
ubuntu@ip-172-31-13-66:/opt/lab-2-stack/lab-4-zhangxijing97$
```

Screenshot #6: Destroy Script Execution

- Capture the terminal after running the `$./destroy.sh` script. This should display the script's output, confirming that the resources created by the CloudFormation stack are being deleted.

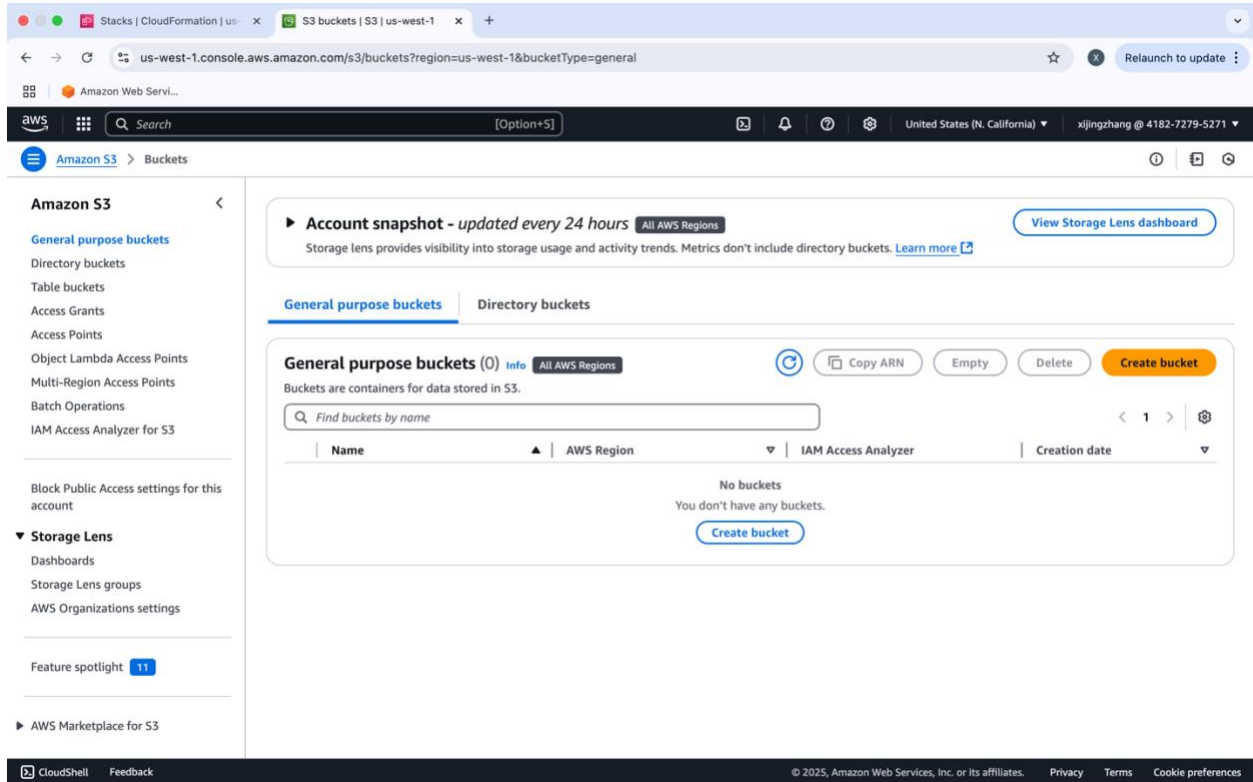
[Screen shot [#7]]



Screenshot #7: Stack Deletion Confirmation

- This screenshot should show the CloudFormation dashboard with the stack status marked as "DELETE_COMPLETE." This confirms that the destroy script successfully removed all the resources provisioned by the stack.

[Screen shot [#8]



Screenshot #8: S3 Dashboard Post Deletion

- Show the AWS S3 dashboard to verify that the previously created buckets no longer exist. This proves that the destroy script successfully deleted all associated S3 resources.