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SCOPE

FALL SEMESTER 2025-2026

LAB ASSESSMENT -1

Slot: L13+L14

Class: VL2025260105679

Programme Name & Branch: B.
Tech CSBS

Course code & Title: CBS3005-
CLOUD, MICROSERVICES AND
APPLICATIONS LAB BASED
COMPONENTS

Faculty Name: NITHYA K

SUBMITTED BY: -DIPANGSHU
KUNDU

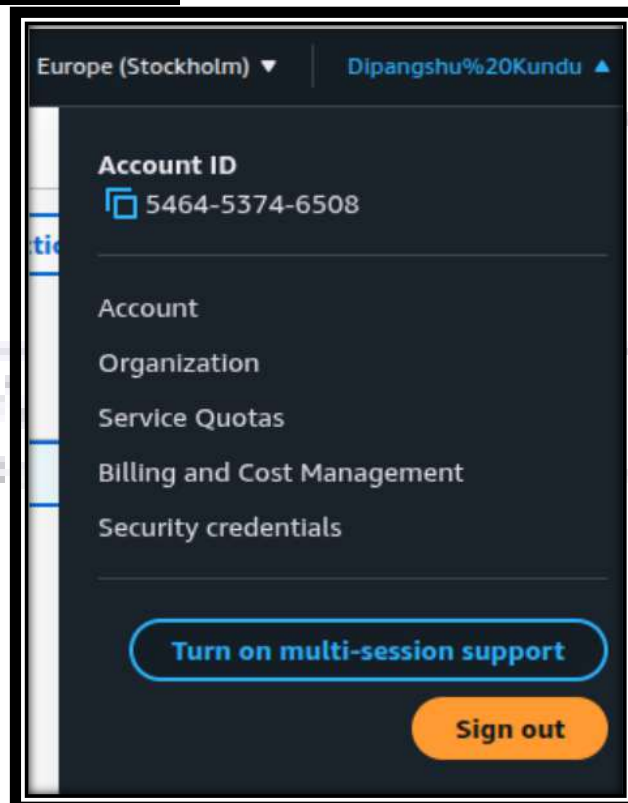
REGISTRATION NUMBER: -
22BBS0148

QUESTION 1:

- (i) Create and manage EC2 instances on AWS. Launch an application on an EC2 instance in one region and then migrate that instance to another region. Additionally, set up another EC2 instance to install MySQL, create a database (e.g., student or employee database), and perform basic SQL operations. **(5.0 marks)**

SOLUTION: -

1. ACCOUNT CREATION



The screenshot shows the AWS Management Console interface for EC2 instances. At the top, the region is set to 'Europe (Stockholm)' and the user is 'dipanghu@%20Kuntu'. The main heading is 'Instances (1) info'. Below this, there's a search bar with the text 'Find instance by attribute or tag (case-sensitive)' and a filter button 'All states'. To the right, there are buttons for 'Connect', 'Instance state', 'Actions', and 'Launch instances'. A notification says 'Last updated 2 minutes ago'. The table below lists the instance 'dipanghu' with ID 'i-0ca361c7361196aa1', state 'Running', type 't3.micro', and status '3/3 checks passed'. Other details include 'eu-north-1b' for availability zone, 'ec2-51-20-183-55.eu-n...' for public IP, and '51.20.183.55' for private IP.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
dipanghu	i-0ca361c7361196aa1	Running	t3.micro	3/3 checks passed	View alarms +	eu-north-1b	ec2-51-20-183-55.eu-n...	51.20.183.55	-

The screenshot shows the AWS Management Console interface for connecting to an EC2 instance. The breadcrumb navigation at the top reads: **EC2** > **Instances** > **i-0a561c7501196a4e1** > **Connect to instance**.

The main heading is **Connect** with a [View](#) link. Below it, a subtitle states: **Connect to an instance using the browser-based client.**

There are four tabs for connection methods: **EC2 Instance Connect** (selected), **Session Manager**, **SSH client**, and **EC2 serial console**.

Under the **EC2 Instance Connect** tab, the **Instance ID** is **i-0a561c7501196a4e1 (dlpangshi)**.

Two radio buttons are present:

- Connect using a Public IP** (selected): Connect using a public IP or IPv6 address.
- Connect using a Private IP**: Connect using a private IP address and a VPC subnetwork.

Below the radio buttons, the **Public IPv4 address** is **51.20.185.55**. There is also a section for **IPv6 address** which is currently empty.

The **Username** section states: **Enter the username defined in the AMI used to launch the instance. If you didn't define a custom operating system, use the default operating system.** The dropdown menu shows **ubuntu**.

A blue information box at the bottom states: **Note:** In most cases, the default username, **ubuntu**, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

At the bottom right, there are two buttons: **Cancel** and **Connect**.

```

Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 5.8.0-1029-aws x86_64)

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

System information as of Wed Jul 24 03:27:18 UTC 2025

System load: 0.0                Temperature: -229.1 C
Usage of /: 25.6% of 6.71GB      Processes: 100
Memory usage: 23%               Users logged in: 0
Dmep usage: 0%                  IP4 address for ens5: 172.31.40.41

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Install 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 ".
See "man sudo_root" for details.

ubuntu@ip-172-31-40-41:~$

```

[illegible]

```
shunt@ip-172-31-40-41:~$ sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
libacl1-fast-perl libacl2-fast-perl libc6-i386 perl libcdebconf-perl libcdebconf2 perl libcdebconf3 perl libevent-pthreads-2.1.7-st4 libfcgi-bin libfcgi-perl libfcgi0t64 libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
libhttp-date-perl libhttp-message-perl libio-html-perl libldap-mediatypes-perl libowcabi libprotobuff-lib32t64 libtimedate-perl liburi-perl libweb-ipadic libweb-ipadic-utf8 libweb-utils mysql-client-8.0
mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
libdata-dump-perl libdbi-shareddata-perl libio-compress-brotli-perl libbusiness-isbn-perl libregexp-ipw6-perl libwww-perl mailx tinymce
The following NEW packages will be installed:
libacl1-fast-perl libacl2-fast-perl libc6-i386 perl libcdebconf-perl libcdebconf2 perl libcdebconf3 perl libevent-pthreads-2.1.7-st4 libfcgi-bin libfcgi-perl libfcgi0t64 libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
libhttp-date-perl libhttp-message-perl libio-html-perl libldap-mediatypes-perl libowcabi libprotobuff-lib32t64 libtimedate-perl liburi-perl libweb-ipadic libweb-ipadic-utf8 libweb-utils mysql-client-8.0
mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
 upgraded, 28 newly installed, 0 to remove and 0 not upgraded.
Need to get 29.0 MB of archives.
After this operation, 243 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

I-OA361C7361196aa1(dipangshu)

Public IP: 51.20.185.55 Private IP: 172.31.40.41

```
ubuntu@ip-172-31-40-41:~$ sudo systemctl status mysql
* mysql.service - MySQL Community Server
   Loaded: loaded (/usr/lib/systemd/system/mysql.service; enabled; preset: enabled)
   Active: active (running) since Wed 2025-07-23 03:36:56 UTC; 1min 24s ago
   Process: 2629 ExecStartPre=/usr/share/mysql/mysql-systemd-start pre (code=exited, status=0/SUCCESS)
   Main PID: 2629 (mysqld)
   Status: "Service is operational"
   Tasks: 37 (limit: 1072)
   Memory: 351.0M (peak: 378.3M)
   CPU: 1.238s
   CGroup: /system.slice/mysql.service
           └─2629 /usr/sbin/mysqld

Jul 23 03:36:56 ip-172-31-40-41 systemd[1]: Starting mysql.service - MySQL Community Server...
Jul 23 03:36:56 ip-172-31-40-41 systemd[1]: Started mysql.service - MySQL Community Server.
ubuntu@ip-172-31-40-41:~$
```

```

ubuntu@ip-172-31-40-41:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.42-0ubuntu0.24.04.2 (Ubuntu)

Copyright (c) 2000, 2025, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

mysql>
i-Oca361c7361196aa1 (dipangshu)
PublicIP: 51.20.103.55   PrivateIP: 172.31.40.41

```

```
mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY 'r0vj7#2L$Y';
Query OK, 0 rows affected (0.02 sec)

mysql>
```

```
mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.01 sec)

mysql>

i-0ca361c7361196aa1 (dipangshu)
PublicPps: 51.20.163.55 PrivatePps: 172.31.40.41
```

BASIC SQL OPEATIONS:

CREATING DATABASE

```
mysql> CREATE DATABASE studentDB;
Query OK, 1 row affected (0.02 sec)
```

USING DATABASE:

```
mysql> USE studentDB;
Database changed
```

CREATING TABLE STUDENTS:

```
mysql> CREATE TABLE students (
->     id INT AUTO_INCREMENT PRIMARY KEY,
->     name VARCHAR(100),
->     email VARCHAR(100),
->     course VARCHAR(50),
->     age INT
-> );
Query OK, 0 rows affected (0.05 sec)

mysql> 
```

INSERT OPERATION:

```
mysql> INSERT INTO students (name, email, course, age) VALUES
-> ('dipangshu', 'dipangshu@example.com', 'Computer Science', 20),
-> ('pratyuh', 'pratyuh@example.com', 'Information Technology', 21),
-> ('mohit', 'mohit@example.com', 'Electronics', 22),
-> ('ambuj', 'ambuj@example.com', 'Mechanical', 23),
-> ('samarth', 'samarth@example.com', 'Civil', 24);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

SELECT OPERATION:

```
mysql> SELECT * FROM students;
+----+-----+-----+-----+-----+
| id | name      | email                      | course                | age |
+----+-----+-----+-----+-----+
| 1  | dipangshu | dipangshu@example.com     | Computer Science      | 20  |
| 2  | pratyuh   | pratyuh@example.com       | Information Technology | 21  |
| 3  | mohit     | mohit@example.com         | Electronics           | 22  |
| 4  | ambuj     | ambuj@example.com         | Mechanical            | 23  |
| 5  | samarth   | samarth@example.com       | Civil                 | 24  |
+----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

SELECT OPERATION WITH 'WHERE' CLAUSE:

```
mysql> SELECT * FROM students WHERE course = 'Computer Science';
+----+-----+-----+-----+-----+
| id | name      | email                      | course                | age |
+----+-----+-----+-----+-----+
| 1  | dipangshu | dipangshu@example.com     | Computer Science      | 20  |
+----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

UPDATE OPERATION:

```
mysql> UPDATE students SET age = 25 WHERE name = 'mohit';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> ^C
```

```
mysql> SELECT * FROM students;
```

id	name	email	course	age
1	dipangshu	dipangshu@example.com	Computer Science	20
2	pratyuh	pratyuh@example.com	Information Technology	21
3	mohit	mohit@example.com	Electronics	25
4	ambuj	ambuj@example.com	Mechanical	23
5	samarth	samarth@example.com	Civil	24

5 rows in set (0.00 sec)

DELETE OPERATION:

```
mysql> DELETE FROM students WHERE name = 'samarth';
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM students;
```

id	name	email	course	age
1	dipangshu	dipangshu@example.com	Computer Science	20
2	pratyuh	pratyuh@example.com	Information Technology	21
3	mohit	mohit@example.com	Electronics	25
4	ambuj	ambuj@example.com	Mechanical	23

4 rows in set (0.00 sec)

LAUNCHING A STATIC WEBSITE USING EC2 INSTANCE:

```
/m/'
[ec2-user@ip-172-31-30-210 ~]$ sudo su -
[root@ip-172-31-30-210 ~]# yum update -y
Amazon Linux 2023 Kernel Livepatch repository 180 kB/s | 19 kB 00:00

WARNING:
  A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.8.20250804:
  Run the following command to upgrade to 2023.8.20250804:

    dnf upgrade --releasever=2023.8.20250804

Release notes:
  https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.8.20250804.html

Dependencies resolved.
Nothing to do.
Complete!
```

```
[root@ip-172-31-30-210 ~]# yum install -y httpd
Last metadata expiration check: 0:01:11 ago on Tue Aug 5 21:11:47 2025.
Dependencies resolved.

Package Architecture Version Repository Size
Installing:
httpd x86_64 2.4.62-1.amzn2023 amazonlinux 48 k
Installing dependencies:
apr x86_64 1.7.5-1.amzn2023.0.4 amazonlinux 129 k
apr-util x86_64 1.6.3-1.amzn2023.0.1 amazonlinux 98 k
generic-logos-httpd noarch 18.0.0-12.amzn2023.0.3 amazonlinux 19 k
httpd-coore x86_64 2.4.62-1.amzn2023 amazonlinux 1.4 M
httpd-filesystem noarch 2.4.62-1.amzn2023 amazonlinux 14 k
httpd-tools x86_64 2.4.62-1.amzn2023 amazonlinux 81 k
libbrotli x86_64 1.0.9-4.amzn2023.0.2 amazonlinux 315 k
mailcap noarch 2.1.49-3.amzn2023.0.3 amazonlinux 33 k
Installing weak dependencies:
apr-util-openssl x86_64 1.6.3-1.amzn2023.0.1 amazonlinux 17 k
mod_http2 x86_64 2.0.27-1.amzn2023.0.3 amazonlinux 166 k
mod_lua x86_64 2.4.62-1.amzn2023 amazonlinux 61 k

Transaction Summary

i-0b1e088692cda506c (static_website)
```

PublicIPs: 13.62.56.69 PrivateIPs: 172.31.30.210

```
[root@ip-172-31-30-210 ~]# systemctl status httpd
○ httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: inactive (dead)
     Docs: man:httpd.service(8)
[root@ip-172-31-30-210 ~]#
```

i-0b1e088692cda506c (static_website)

PublicIPs: 13.62.56.69 PrivateIPs: 172.31.30.210

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```
[root@ip-172-31-30-210 ~]# mkdir temp
[root@ip-172-31-30-210 ~]# cd temp/
[root@ip-172-31-30-210 temp]#
```

i-0b1e088692cda506c (static_website)

PublicIPs: 13.62.56.69 PrivateIPs: 172.31.30.210

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```

Administrator: Windows Powe
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purpo
ses. If you want to re-enable it, run 'Import-Module PSReadLine'.

PS C:\Users\91700> icacls "D:\Downloads\static_website.pem" /inheritance:r
processed file: D:\Downloads\static_website.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\Users\91700> icacls "D:\Downloads\static_website.pem" /grant:r "$($env:USERNAME):(R)"
processed file: D:\Downloads\static_website.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\Users\91700> scp -i "D:\Downloads\static_website.pem" "C:\Users\91700\OneDrive\Desktop\WINTER SEMESTER 2024-2025\W
EB APPLICATIONS\lab_programs\ec2_website.zip" ec2-user@13.62.56.69:/home/ec2-user/
ec2_website.zip                               100% 156KB 142.7KB/s   00:01
PS C:\Users\91700>

```

```

PS C:\Users\91700> ssh -i "D:\Downloads\static_website.pem" ec2-user@13.62.56.69

#_
~\_ #####_      Amazon Linux 2023
nn \_#####\
nn  \###|
nn   \#/  --->  https://aws.amazon.com/linux/amazon-linux-2023
nn    V~'  '--->
nnn
nn  _.'
nn _.'
nn _/m/'

Last login: Tue Aug 5 21:09:01 2025 from 13.48.4.203
[ec2-user@ip-172-31-30-210 ~]$

```

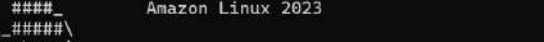
```

ec2-user@ip-172-31-30-210:~
processed file: D:\Downloads\static_website.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\Users\91700> icacls "D:\Downloads\static_website.pem" /grant:r "$($env:USERNAME):(R)"
processed file: D:\Downloads\static_website.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\Users\91700> scp -i "D:\Downloads\static_website.pem" "C:\Users\91700\OneDrive\Desktop\WINTER SEMESTER 2024-2025\W
EB APPLICATIONS\lab_programs\ec2_website.zip" ec2-user@13.62.56.69:/home/ec2-user/
ec2_website.zip                               100% 156KB 142.7KB/s   00:01
PS C:\Users\91700> ssh -i "D:\Downloads\static_website.pem" ec2-user@13.62.56.69

#_
~\_ #####_      Amazon Linux 2023
nn \_#####\
nn  \###|
nn   \#/  --->  https://aws.amazon.com/linux/amazon-linux-2023
nn    V~'  '--->
nnn
nn  _.'
nn _.'
nn _/m/'

Last login: Tue Aug 5 21:09:01 2025 from 13.48.4.203
[ec2-user@ip-172-31-30-210 ~]$ unzip ec2_website.zip
Archive:  ec2_website.zip
  creating: experiment2/
  inflating: experiment2/1984.jpeg
  inflating: experiment2/bookstore.jpeg
  inflating: experiment2/experiment2.html
  inflating: experiment2/gatsby.jpg
  inflating: experiment2/mockingbird.jpg
  inflating: experiment2/style.css
[ec2-user@ip-172-31-30-210 ~]$

```



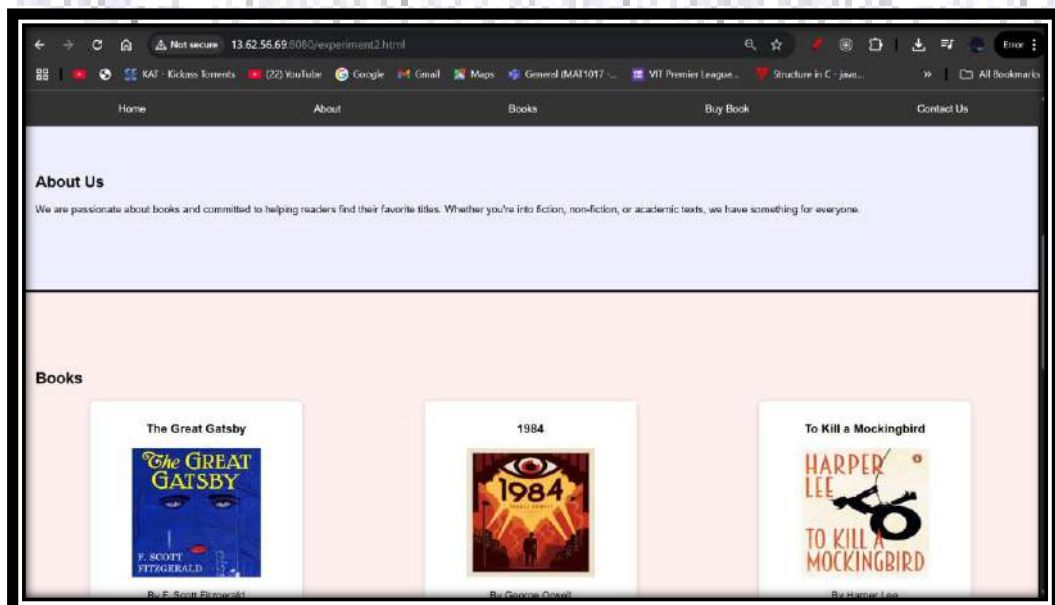
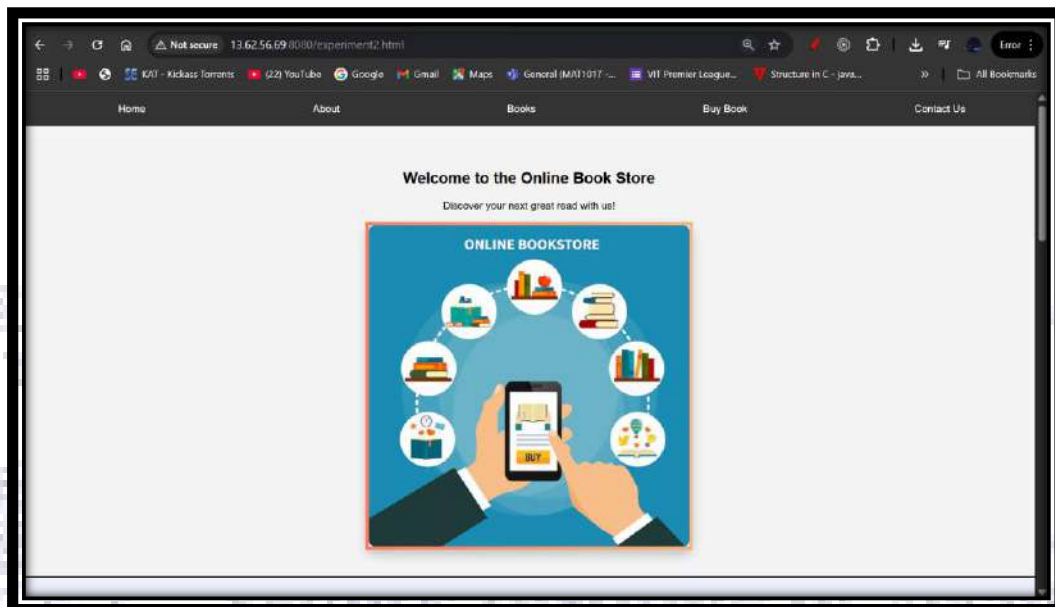
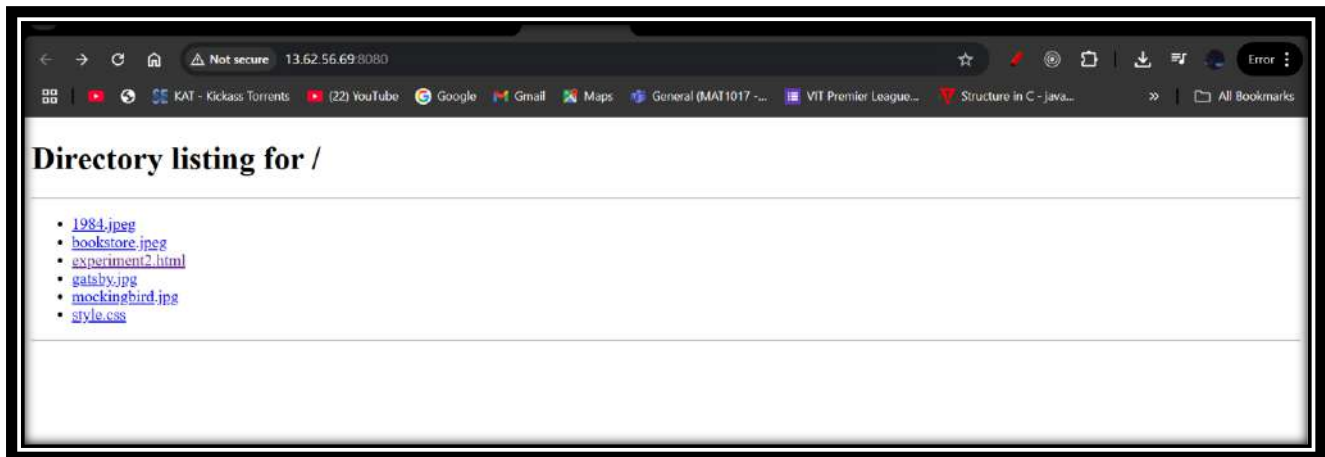
Amazon Linux 2023

<https://aws.amazon.com/linux/amazon-linux-2023>

The screenshot shows the AWS Management Console interface for a security group. At the top, a green notification banner states: "Inbound security group rules successfully modified on security group (sg-097ef2d71e80c099d | launch-wizard-4)". Below this, the "Inbound rules" tab is selected, showing a table of four rules:

<input type="checkbox"/>	Name	Security group rule ID	IP version	Type	Protocol
<input type="checkbox"/>	-	sgr-075bbb2389ac282b6	IPv4	Custom TCP	TCP
<input type="checkbox"/>	-	sgr-0a9b4e80667309c86	IPv4	SSH	TCP
<input type="checkbox"/>	-	sgr-0bcd4f238515722b1	IPv4	HTTPS	TCP
<input type="checkbox"/>	-	sgr-0bbe0a2f1f11c4bde	IPv4	HTTP	TCP

The interface also includes a left-hand navigation menu with options like "Dashboard", "EC2 Global View", "Events", "Instances", and "Images". The top of the console shows the AWS logo, a search bar, and the current region (Europe (Stockholm)).






Europe (Stockholm) ▼

Dipangshu Kundu ▲

Account ID

 5464-5374-6508

Account

Organization

Service Quotas

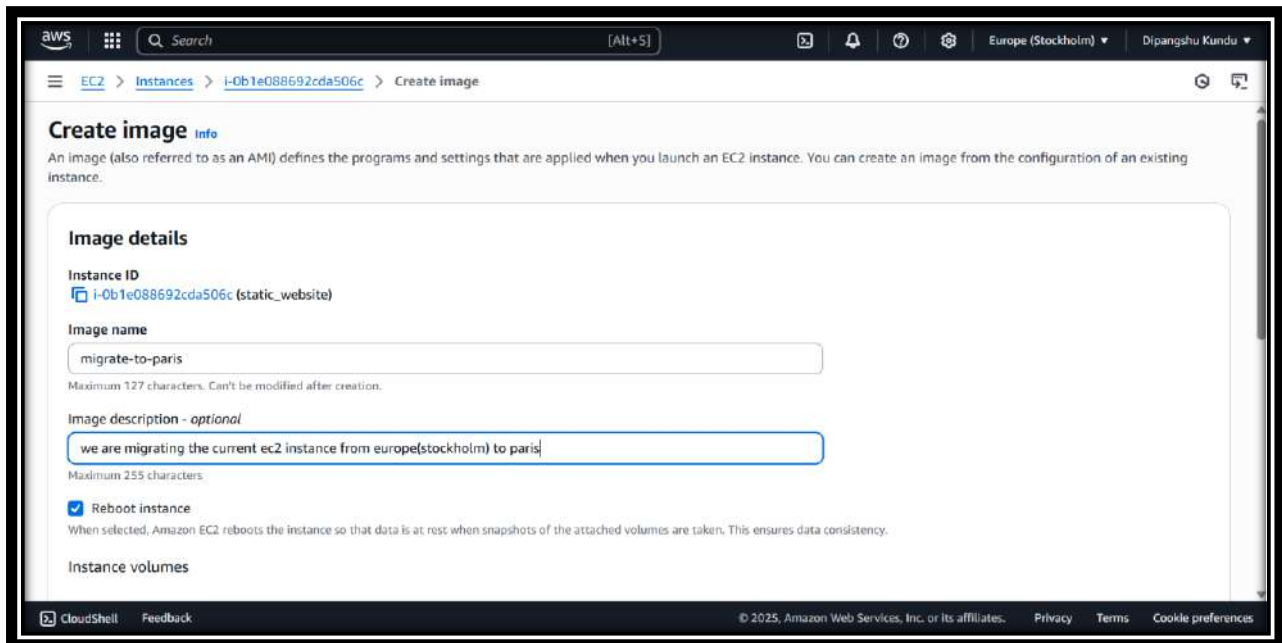
Billing and Cost Management

Security credentials

Turn on multi-session support

Sign out

STEPS TO BE FOLLOWED:



The screenshot shows the 'Create image' page in the AWS Management Console. The breadcrumb navigation is 'EC2 > Instances > i-0b1e088692cda506c > Create image'. The page title is 'Create image' with an 'Info' link. A descriptive paragraph explains that an image (AMI) defines programs and settings for EC2 instances. The 'Image details' section includes: 'Instance ID' (i-0b1e088692cda506c (static_website)), 'Image name' (migrate-to-paris), and 'Image description - optional' (we are migrating the current ec2 instance from europe(stockholm) to paris). The 'Reboot instance' checkbox is checked. The 'Instance volumes' section is partially visible. The footer shows 'CloudShell', 'Feedback', and copyright information for Amazon Web Services, Inc.

Create image [Info](#)

An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.

Image details

Instance ID
i-0b1e088692cda506c (static_website)

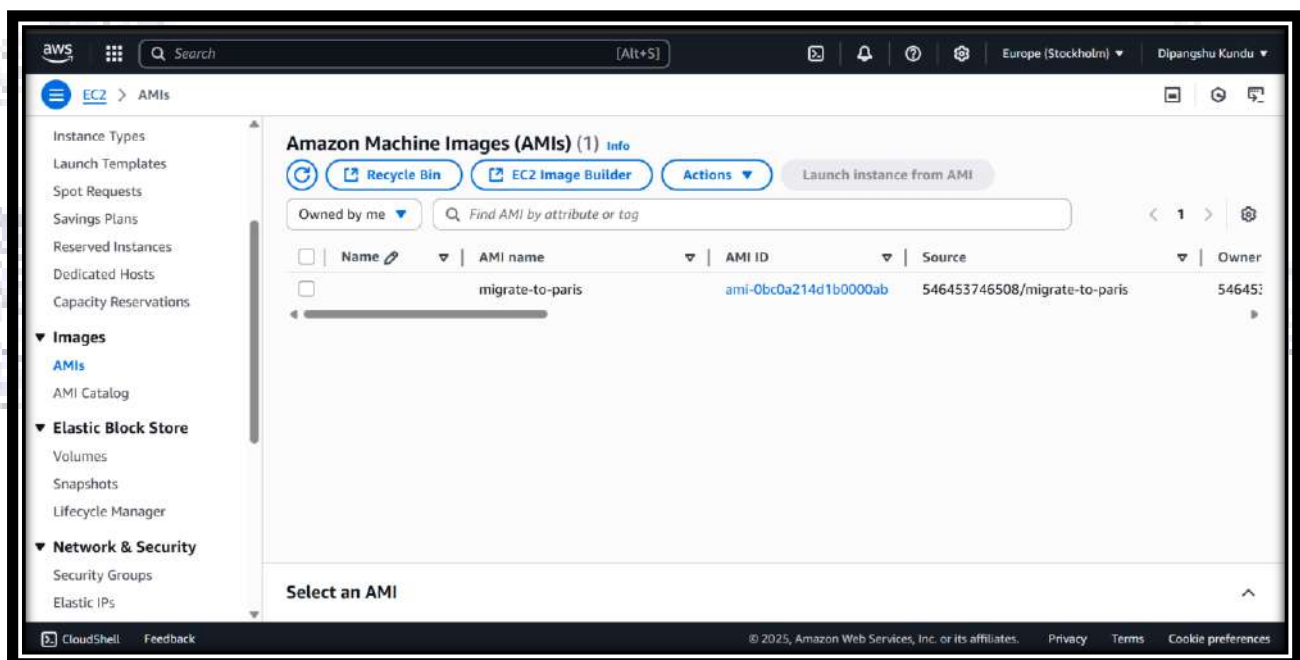
Image name
migrate-to-paris
Maximum 127 characters. Can't be modified after creation.

Image description - optional
we are migrating the current ec2 instance from europe(stockholm) to paris
Maximum 255 characters.

☒ **Reboot instance**
When selected, Amazon EC2 reboots the instance so that data is at rest when snapshots of the attached volumes are taken. This ensures data consistency.

Instance volumes

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The screenshot shows the 'Amazon Machine Images (AMIs)' page in the AWS Management Console. The breadcrumb navigation is 'EC2 > AMIs'. The left sidebar contains navigation links for Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images (with AMIs selected), Elastic Block Store, and Network & Security. The main content area shows 'Amazon Machine Images (AMIs) (1)' with buttons for 'Recycle Bin', 'EC2 Image Builder', 'Actions', and 'Launch instance from AMI'. A table lists the AMIs, with one entry visible: 'migrate-to-paris' with AMI ID 'ami-0bc0a214d1b0000ab' and Source '546453746508/migrate-to-paris'. The footer shows 'CloudShell', 'Feedback', and copyright information for Amazon Web Services, Inc.

Amazon Machine Images (AMIs) (1) [Info](#)

[Recycle Bin](#) [EC2 Image Builder](#) [Actions](#) [Launch instance from AMI](#)

Owned by me Find AMI by attribute or tag

<input type="checkbox"/>	Name	AMI name	AMI ID	Source	Owner
<input type="checkbox"/>	migrate-to-paris		ami-0bc0a214d1b0000ab	546453746508/migrate-to-paris	546453746508

Select an AMI

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Copy AMI Info

Create a copy of an Amazon Machine Image in a Region.

Copy Amazon Machine Image (AMI)

Original AMI ID
ami-0bc0a214d1b0000ab

AMI copy name
migrate-to-paris

AMI copy description
[Copied ami-0bc0a214d1b0000ab from eu-north-1] migrate-to-paris

Destination Region
A copy of the original AMI will be created in the destination Region.
Europe (Paris)

☐ **Copy tags**
Includes your user-defined AMI tags when copying the AMI.

Instances (1/1) Info

Last updated less than a minute ago

Find Instance by attribute or tag (case-sensitive)

All states

Name	Instance ID	Instance state	Instance type	Status check	Alarm status
migrated_inst...	i-0319b599e232e24d4	Pending	t2.micro	-	View alarms +


i-0319b599e232e24d4 (migrated_instance)


Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary Info

Instance ID i-0319b599e232e24d4	Public IPv4 address 15.188.57.160 open address	Private IPv4 addresses 172.31.43.124
IPv6 address -	Instance state Pending	Public DNS -

DESTINATION REGION:

 Europe (Paris) ▼ | Dipangshu Kundu ▲

Account ID
 5464-5374-6508

Account

Organization

Service Quotas

Billing and Cost Management

Security credentials

[Turn on multi-session support](#)

[Sign out](#)



QUESTION 2:

- (ii) Set up an S3 bucket in AWS, ensuring the name is globally unique. Upload your static website files (HTML, CSS, JavaScript, etc.) to this bucket. Enable static website hosting in the S3 bucket properties and configure the documents. Apply the necessary bucket policy to make your site publicly accessible. Also, enable versioning on the bucket to maintain previous versions of your website files. (5.0 marks)

SOLUTION: -

CREATING AND SETTING UP S3 BUCKET:

The screenshot shows the AWS Management Console interface for creating a new S3 bucket. The breadcrumb navigation at the top indicates the path: Amazon S3 > Buckets > Create bucket. The main heading is 'Create bucket' with an 'Info' link. Below this, a note states 'Buckets are containers for data stored in S3.' The 'General configuration' section is expanded, showing the 'AWS Region' as 'Europe (Stockholm) eu-north-1'. Under 'Bucket type', the 'General purpose' option is selected, which is recommended for most use cases. The 'Directory' option is also visible but not selected. The 'Bucket name' field contains the text 'dipangshu'. Below the name field, there is a note about bucket naming rules and a 'Learn More' link. At the bottom of the configuration section, there is a 'Choose bucket' button. The footer of the console shows '© 2025, Amazon Web Services, Inc. or its affiliates.' and links for 'Privacy', 'Terms', and 'Cookie preferences'.

The screenshot shows the 'Create bucket' page in the AWS console. The top navigation bar includes the AWS logo, a search bar, and account information for 'Europe (Stockholm)' and 'Account ID: 5464-5374-6508'. The breadcrumb trail is 'Amazon S3 > Buckets > Create bucket'. The main content area is divided into two sections. The first section, 'Object Ownership', explains that it controls ownership of objects and the use of ACLs. It has two radio button options: 'ACLs disabled (recommended)' (selected) and 'ACLs enabled'. The second section, 'Block Public Access settings for this bucket', explains that public access is granted through ACLs, bucket policies, and access point policies. It has a checkbox for 'Block all public access' which is currently unchecked. Below this, there are two sub-sections: 'Block public access to buckets and objects granted through new access control lists (ACLs)' and 'Block public access to buckets and objects granted through any access control lists (ACLs)', both of which are also unchecked. The footer of the console shows 'CloudShell', 'Feedback', and copyright information for 2025.

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Amazon S3 > Buckets > Create bucket

Object Ownership Info

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☒ **ACLs disabled (recommended)**
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

☐ **ACLs enabled**
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership
Bucket owner enforced

Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

☐ **Block all public access.**
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

☐ **Block public access to buckets and objects granted through new access control lists (ACLs)**
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

☐ **Block public access to buckets and objects granted through any access control lists (ACLs)**

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The screenshot shows the 'Create bucket' page in the AWS console, continuing from the previous one. The top navigation bar is identical. The breadcrumb trail is 'Amazon S3 > Buckets > Create bucket'. A yellow warning box at the top states: 'Turning off block all public access might result in this bucket and the objects within becoming public. AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.' Below this, there is a checkbox 'I acknowledge that the current settings might result in this bucket and the objects within becoming public.' which is checked. The next section is 'Bucket Versioning', which explains that versioning keeps multiple variants of an object. It has two radio button options: 'Disable' (selected) and 'Enable'. The final section is 'Tags - optional (0)', which explains that bucket tags can be used to track storage costs and organize buckets. It shows 'No tags associated with this bucket.' and an 'Add new tag' button. The footer of the console is the same as the previous screenshot.

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Amazon S3 > Buckets > Create bucket

Turning off block all public access might result in this bucket and the objects within becoming public
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

☒ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

Bucket Versioning

☒ **Disable**

☐ **Enable**

Tags - optional (0)

You can use bucket tags to track storage costs and organize buckets. [Learn more](#)

No tags associated with this bucket.

[Add new tag](#)

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The screenshot shows the 'Create bucket' page in the AWS Management Console. The breadcrumb navigation is 'Amazon S3 > Buckets > Create bucket'. The page title is 'Default encryption'. A sub-header states: 'Server-side encryption is automatically applied to new objects stored in this bucket.' Under 'Encryption type', three options are listed: 'Server-side encryption with Amazon S3 managed keys (SSE-S3)' (selected), 'Server-side encryption with AWS Key Management Service keys (SSE-KMS)', and 'Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)'. A note for DSSE-KMS mentions pricing. Under 'Bucket Key', 'Enable' is selected. An 'Advanced settings' section is collapsed. A blue box at the bottom states: 'After creating the bucket, you can upload files and folders to the bucket, and configure additional bucket settings.' Buttons for 'Cancel' and 'Create bucket' are at the bottom right.

Default encryption [Info](#)

Server-side encryption is automatically applied to new objects stored in this bucket.

Encryption type [Info](#)

- ☒ Server-side encryption with Amazon S3 managed keys (SSE-S3)
- ☐ Server-side encryption with AWS Key Management Service keys (SSE-KMS)
- ☐ Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)
Secure your objects with two separate layers of encryption. For details on pricing, see [DSSE-KMS pricing](#) on the [Storage](#) tab of the [Amazon S3 pricing page](#).

Bucket Key

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. [Learn more](#)

☐ Disable

☒ Enable

► Advanced settings

After creating the bucket, you can upload files and folders to the bucket, and configure additional bucket settings.

Cancel Create bucket

The screenshot shows the 'Buckets' page in the AWS Management Console. A green banner at the top states: 'Successfully created bucket "dipangshu". To upload files and folders, or to configure additional bucket settings, choose View details.' The 'General purpose buckets' tab is selected. A table lists the bucket 'dipangshu' in the 'Europe (Stockholm) eu-north-1' region, created on 'August 6, 2025, 11:57:35 (UTC+05:30)'. The table has columns for Name, AWS Region, and Creation date. On the right, there are sections for 'Account snapshot' and 'External access summary - new'.

Successfully created bucket "dipangshu"

To upload files and folders, or to configure additional bucket settings, choose [View details](#).

General purpose buckets [All AWS Regions](#) Directory buckets

General purpose buckets (1) [Info](#)

[Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Buckets are containers for data stored in S3.

Find buckets by name

Name	AWS Region	Creation date
dipangshu	Europe (Stockholm) eu-north-1	August 6, 2025, 11:57:35 (UTC+05:30)

Account snapshot [Info](#)

Updated daily

[View dashboard](#)

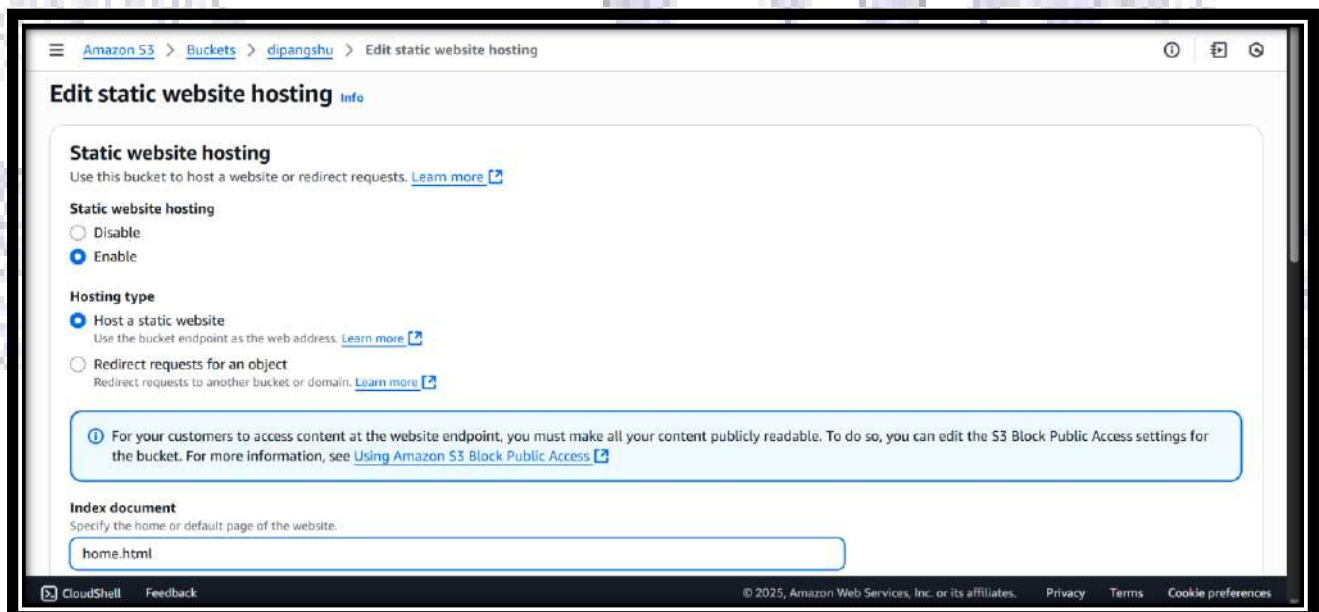
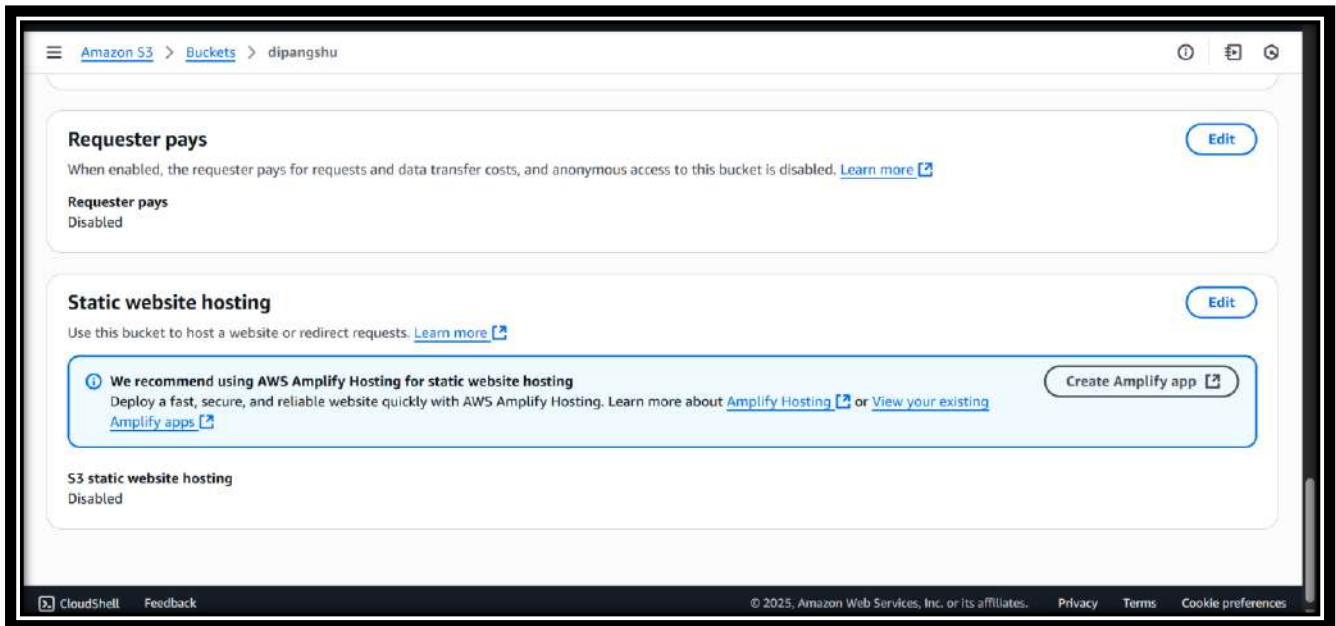
Storage Lens provides visibility into storage usage and activity trends.

External access summary - new [Info](#)

Updated daily

External access findings help you identify bucket permissions that allow public access or access from other AWS accounts.

ENABLING STATIC WEBSITE HOSTING:



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Amazon S3 > Buckets > dipangshu

Successfully edited static website hosting.

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

We recommend using AWS Amplify Hosting for static website hosting
Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. [Learn more about Amplify Hosting](#) or [View your existing Amplify apps](#). [Create Amplify app](#)

S3 static website hosting
Enabled

Hosting type
Bucket hosting

Bucket website endpoint
When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)
<http://dipangshu.s3-website.eu-north-1.amazonaws.com>

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Amazon S3 > Buckets > dipangshu > Edit bucket policy

Edit bucket policy

Bucket policy [Info](#)

[Policy examples](#) [Policy generator](#)

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

Bucket ARN
[arn:aws:s3:::dipangshu](#)

Policy

```
1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Sid": "PublicReadGetObject",
6       "Effect": "Allow",
7       "Principal": "*",
8       "Action": "s3:GetObject",
9       "Resource": "arn:aws:s3:::dipangshu/*"
10    }
11  ]
12 }
```

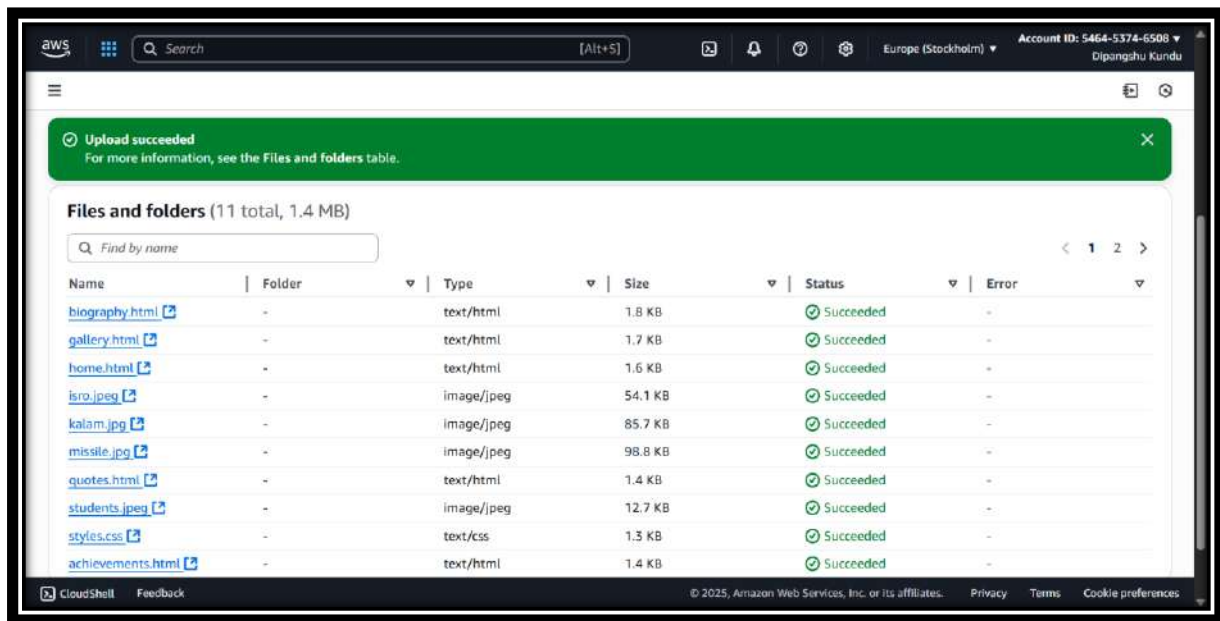
Edit statement

Select a statement

Select an existing statement in the policy or add a new statement.

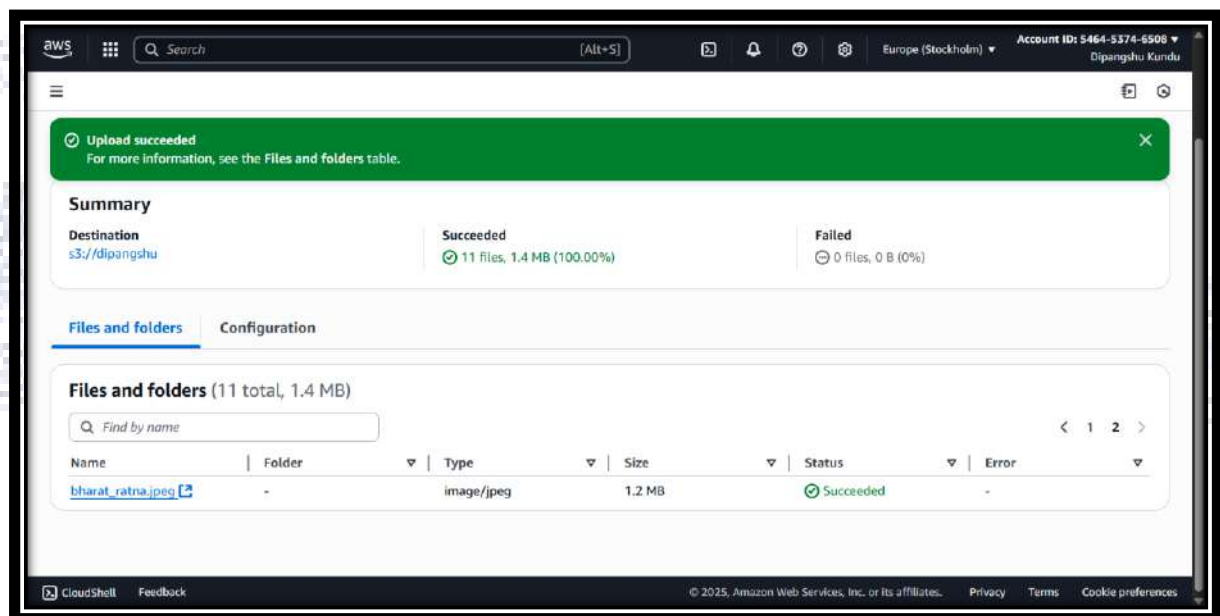
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STATIC WEBSITE'S FILES UPLOADED:



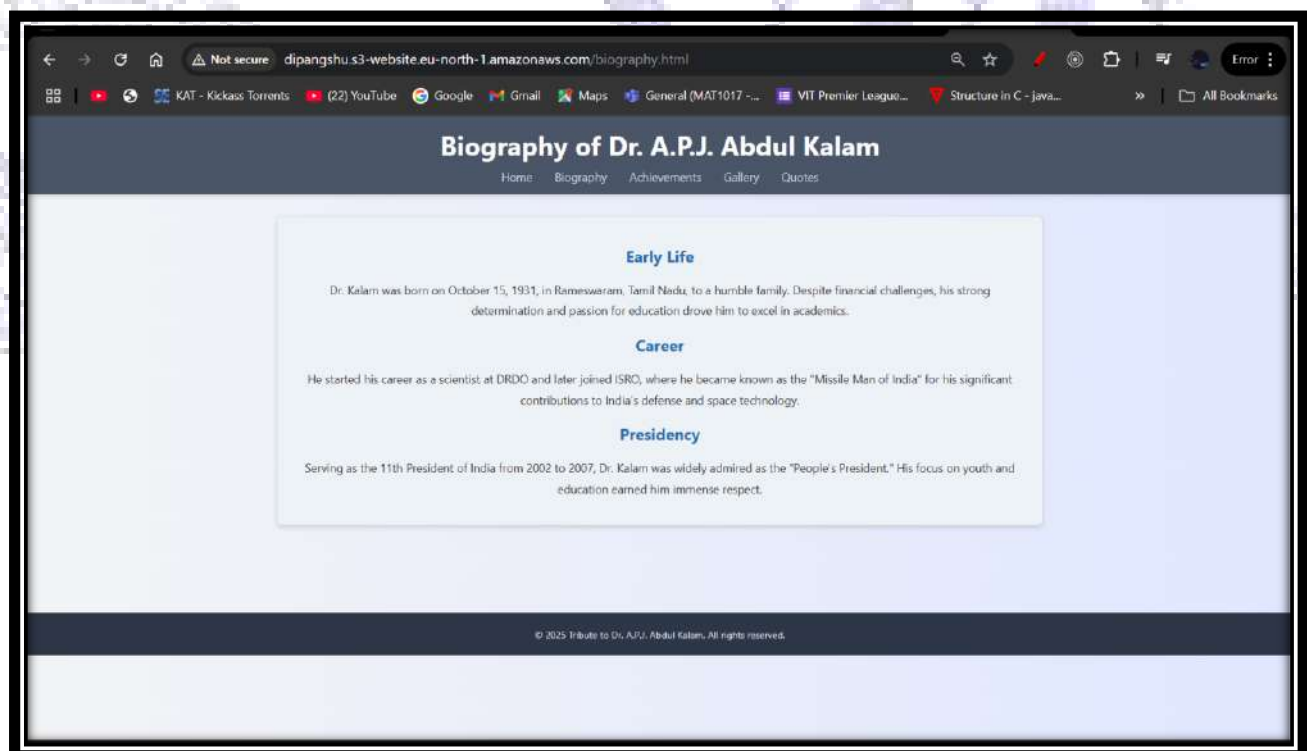
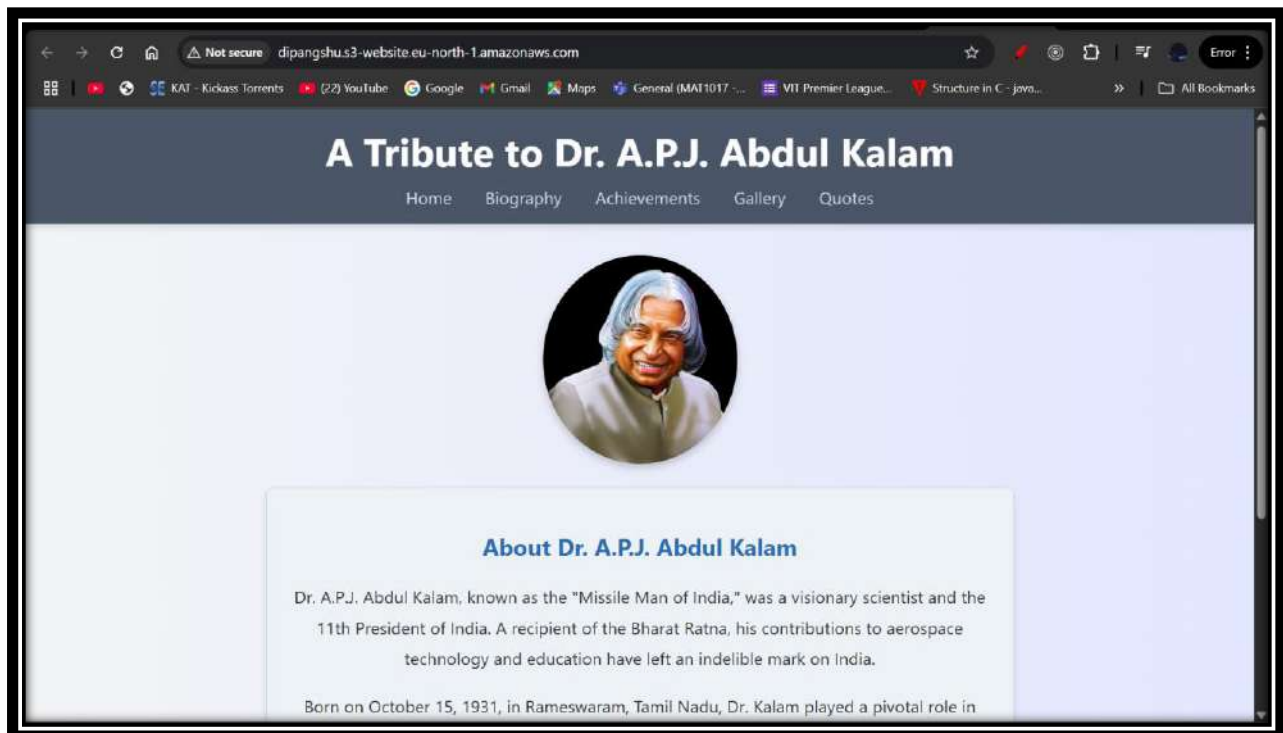
The screenshot shows the AWS CloudShell interface with a green notification bar at the top stating "Upload succeeded" and "For more information, see the Files and folders table." Below this, the "Files and folders (11 total, 1.4 MB)" table is displayed. The table lists 11 files, all with a status of "Succeeded".

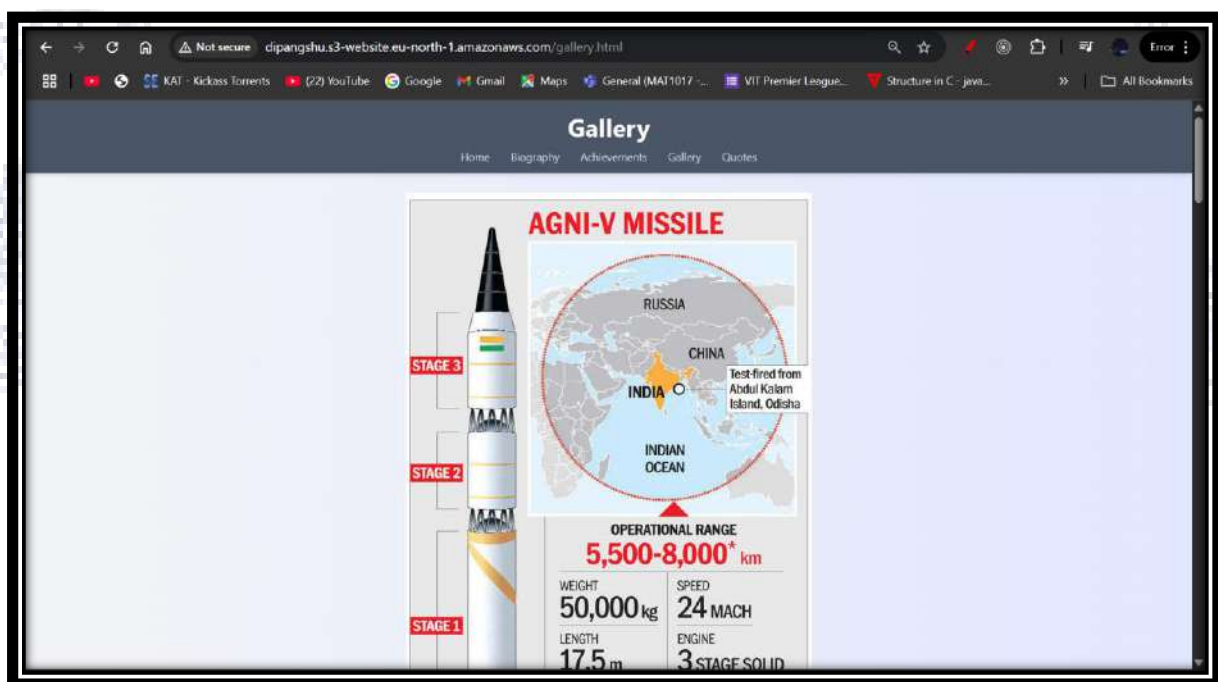
Name	Folder	Type	Size	Status	Error
biography.html	-	text/html	1.8 KB	Succeeded	-
gallery.html	-	text/html	1.7 KB	Succeeded	-
home.html	-	text/html	1.6 KB	Succeeded	-
isro.jpeg	-	image/jpeg	54.1 KB	Succeeded	-
kalam.jpg	-	image/jpeg	85.7 KB	Succeeded	-
missile.jpg	-	image/jpeg	98.8 KB	Succeeded	-
quotes.html	-	text/html	1.4 KB	Succeeded	-
students.jpeg	-	image/jpeg	12.7 KB	Succeeded	-
styles.css	-	text/css	1.3 KB	Succeeded	-
achievements.html	-	text/html	1.4 KB	Succeeded	-

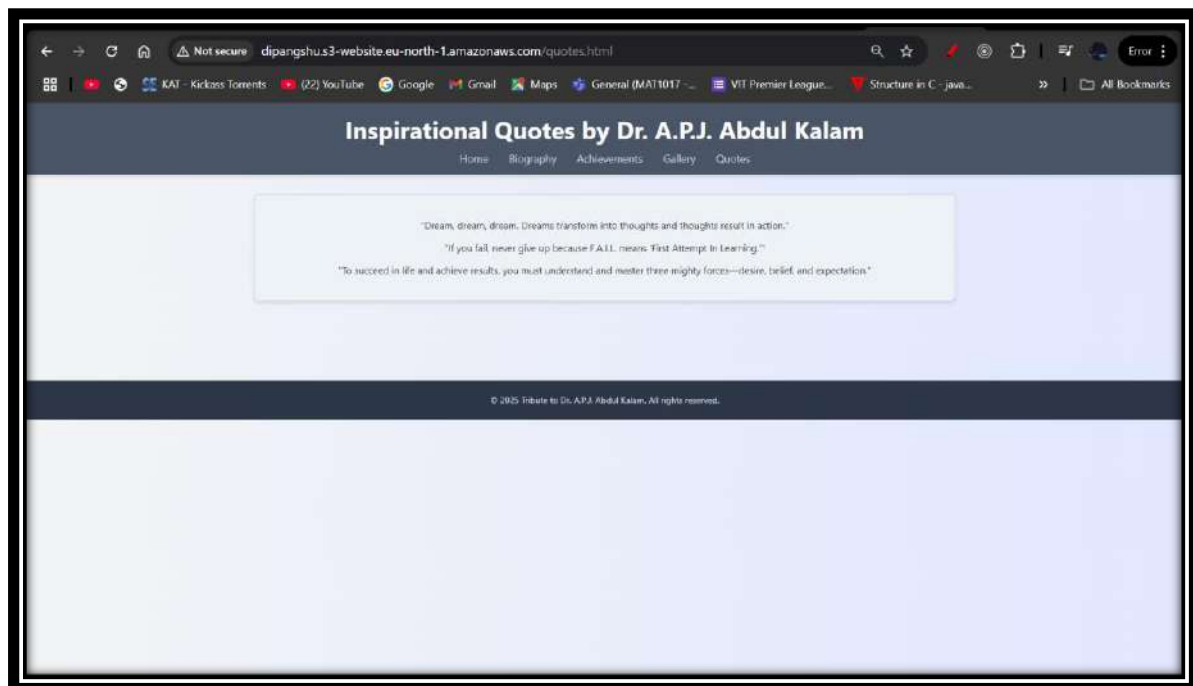


The screenshot shows the AWS CloudShell interface with a green notification bar at the top stating "Upload succeeded" and "For more information, see the Files and folders table." Below this, the "Summary" section shows the destination as "s3://dipangshu" and the upload status as "Succeeded" (11 files, 1.4 MB (100.00%)) and "Failed" (0 files, 0 B (0%)). The "Files and folders" tab is selected, showing the "Files and folders (11 total, 1.4 MB)" table. The table lists 11 files, all with a status of "Succeeded".

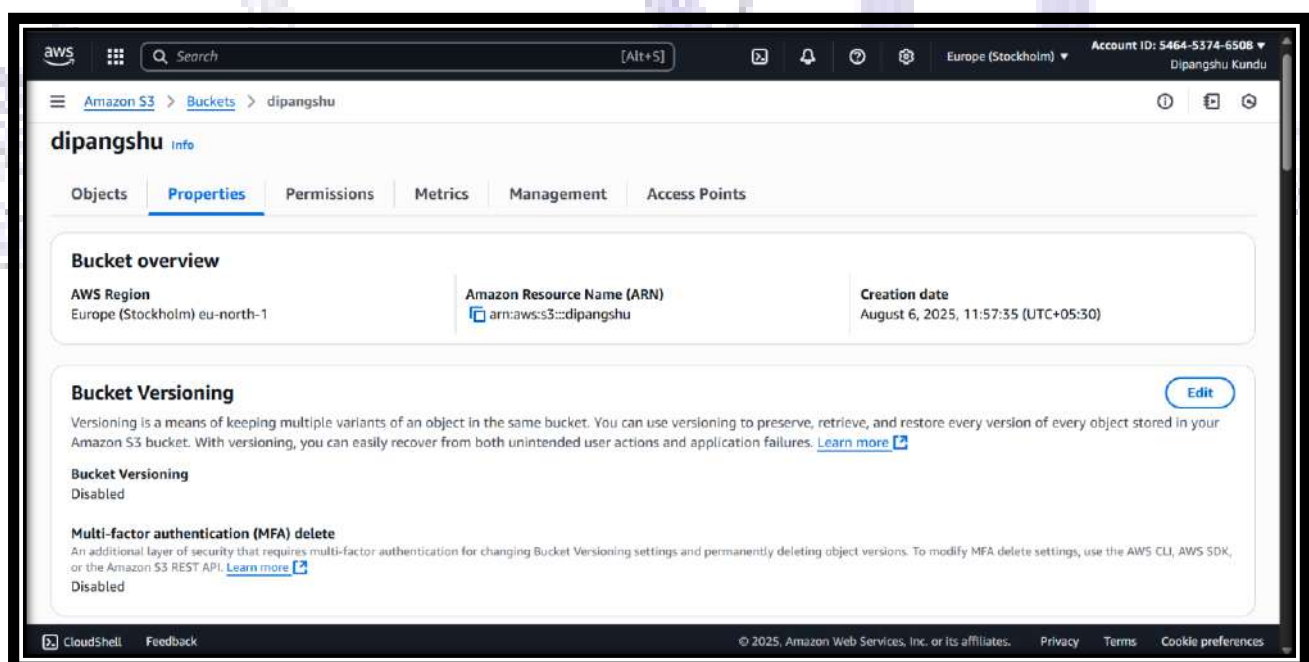
Name	Folder	Type	Size	Status	Error
bharat_ratna.jpeg	-	image/jpeg	1.2 MB	Succeeded	-

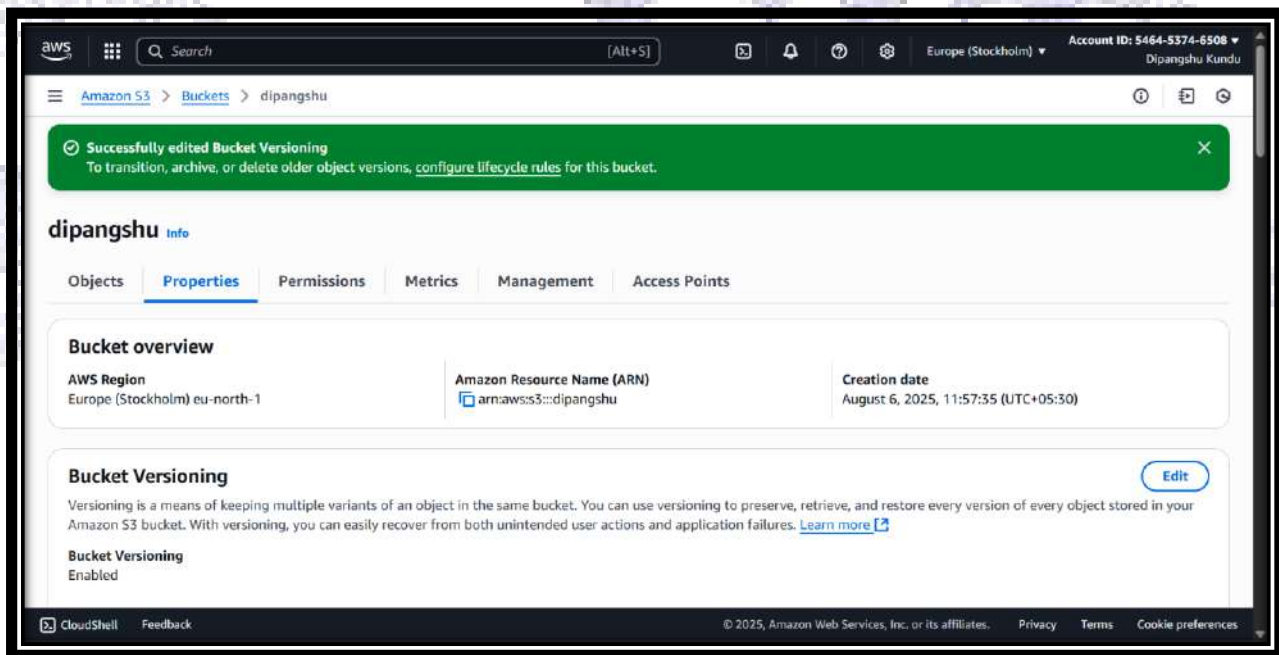
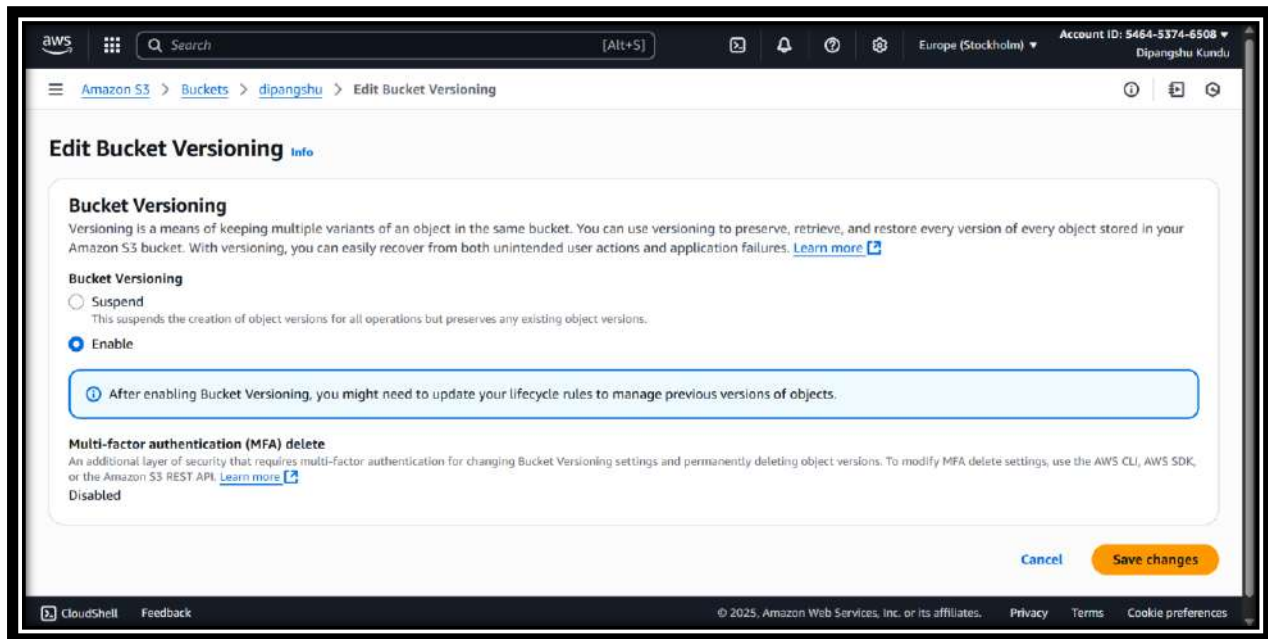






ENABLING BUCKET VERSIONING:





PUBLIC ACCESS LINK:

<http://dipangshu.s3-website.eu-north-1.amazonaws.com/>
(please open in 'http' not 'https' if by chance it opens in 'https')