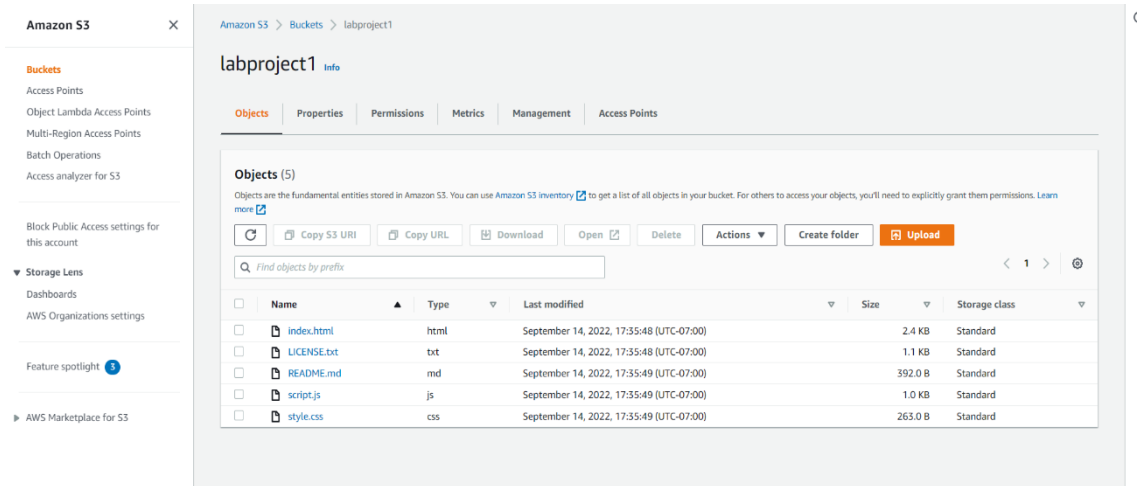


Lab #1 Assignment

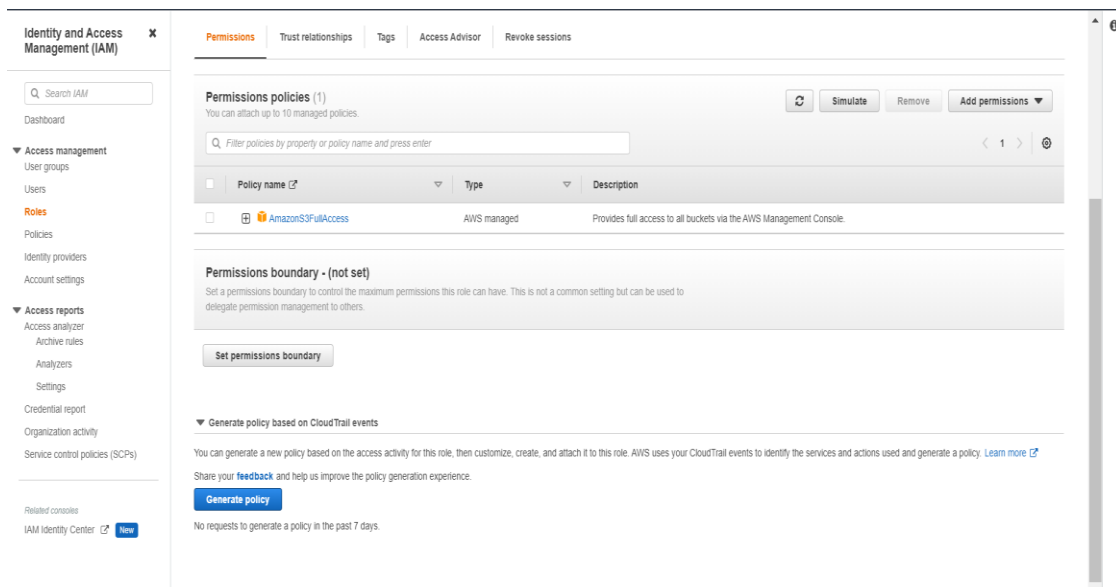
1) Creation of S3 bucket and storing all my files:



The screenshot shows the Amazon S3 console interface. On the left is a navigation sidebar with options like Buckets, Access Points, and Storage Lens. The main area displays the 'labproject1' bucket. Below the bucket name are tabs for Objects, Properties, Permissions, Metrics, Management, and Access Points. The 'Objects' tab is active, showing a list of five objects:

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	index.html	html	September 14, 2022, 17:35:48 (UTC-07:00)	2.4 KB	Standard
<input type="checkbox"/>	LICENSE.txt	txt	September 14, 2022, 17:35:48 (UTC-07:00)	1.1 KB	Standard
<input type="checkbox"/>	README.md	md	September 14, 2022, 17:35:49 (UTC-07:00)	392.0 B	Standard
<input type="checkbox"/>	script.js	js	September 14, 2022, 17:35:49 (UTC-07:00)	1.0 KB	Standard
<input type="checkbox"/>	style.css	css	September 14, 2022, 17:35:49 (UTC-07:00)	263.0 B	Standard

2) Creation of IAM role to connect my S3 bucket with the EC2 instance:



The screenshot shows the AWS IAM console 'Permissions' tab for a role. The left sidebar shows navigation options like Dashboard, Access management, Roles, and Access reports. The main area shows 'Permissions policies (1)' with a search bar and a table of attached policies:

<input type="checkbox"/>	Policy name	Type	Description
<input type="checkbox"/>	AmazonS3FullAccess	AWS managed	Provides full access to all buckets via the AWS Management Console.

Below the policies table, there is a section for 'Permissions boundary - (not set)' with a 'Set permissions boundary' button. At the bottom, there is a 'Generate policy based on CloudTrail events' section with a 'Generate policy' button.

3) Adding Security groups for my EC2 instance:

Details | **Security** | Networking | Storage | Status checks | Monitoring | Tags

▼ Security details

IAM Role s3bucketaccess	Owner ID 427215805706	Launch time Wed Sep 14 2022 18:08:11 GMT-0700 (Pacific Daylight Time)
--	--------------------------	--

Security groups
[sg-0dffa13a55990f31](#) (lab1project)

▼ Inbound rules

Security group rule ID	Port range	Protocol	Source	Security groups
sg-0cb94583fa2c91e9a	443	TCP	0.0.0.0/0	lab1project
sg-00a685cc794a9357b	22	TCP	0.0.0.0/0	lab1project
sg-0589d35ddcd2eda0b	80	TCP	0.0.0.0/0	lab1project

▼ Outbound rules

Security group rule ID	Port range	Protocol	Destination	Security groups
sg-0970e55cc2fe71888	All	All	0.0.0.0/0	lab1project

4) Creating Key pair:

New EC2 Experience

EC2 Dashboard | EC2 Global View | Events | Tags | Limits

▼ Instances

- Instances **New**
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances **New**
- Dedicated Hosts
- Capacity Reservations

▼ Images

- AMIs **New**
- AMI Catalog

Successfully deleted 1 key pairs

Key pairs (1) Info

Search

Name	Type	Created	Fingerprint	ID
lab1project	rsa	2022/09/14 17:42 GMT-7	ee:7b:2e:67:eb:95:af:18:df:d4:b1:edab:...	key-011f919c7a4d6de2c

5) Launching my EC2 instance:

EC2 > Instances > i-0b897fb2e56f37279

Instance summary for i-0b897fb2e56f37279 (lab1project) Info

Updated less than a minute ago

[Refresh](#) [Connect](#) [Instance state ▼](#) [Actions ▼](#)

Instance ID i-0b897fb2e56f37279 (lab1project)	Public IPv4 address 13.52.78.148 open address	Private IPv4 addresses 172.31.14.4
IPv6 address -	Instance state Pending	Public IPv4 DNS ec2-13-52-78-148.us-west-1.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-14-4.us-west-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-14-4.us-west-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 13.52.78.148 [Public IP]	VPC ID vpc-0aeef2452bb6d932	Auto Scaling Group name -
IAM Role s3bucketaccess	Subnet ID subnet-0008711a88a99baf5	

[Details](#) [Security](#) [Networking](#) [Storage](#) [Status checks](#) [Monitoring](#) [Tags](#)

▼ Instance details Info

Platform Amazon Linux (Inferred)	AMI ID ami-018d291ca9ffc002f	Monitoring detailed
Platform details Linux/UNIX	AMI name amzn2-ami-kernel-5.10-hvm-2.0.20220805.0-x86_64-gp2	Termination protection Disabled
Stop protection Disabled	Launch time Wed Sep 14 2022 18:08:11 GMT-0700 (Pacific Daylight Time) (less than a minute)	AMI location amazon/amzn2-ami-kernel-5.10-hvm-2.0.20220805.0-x86_64-gp2

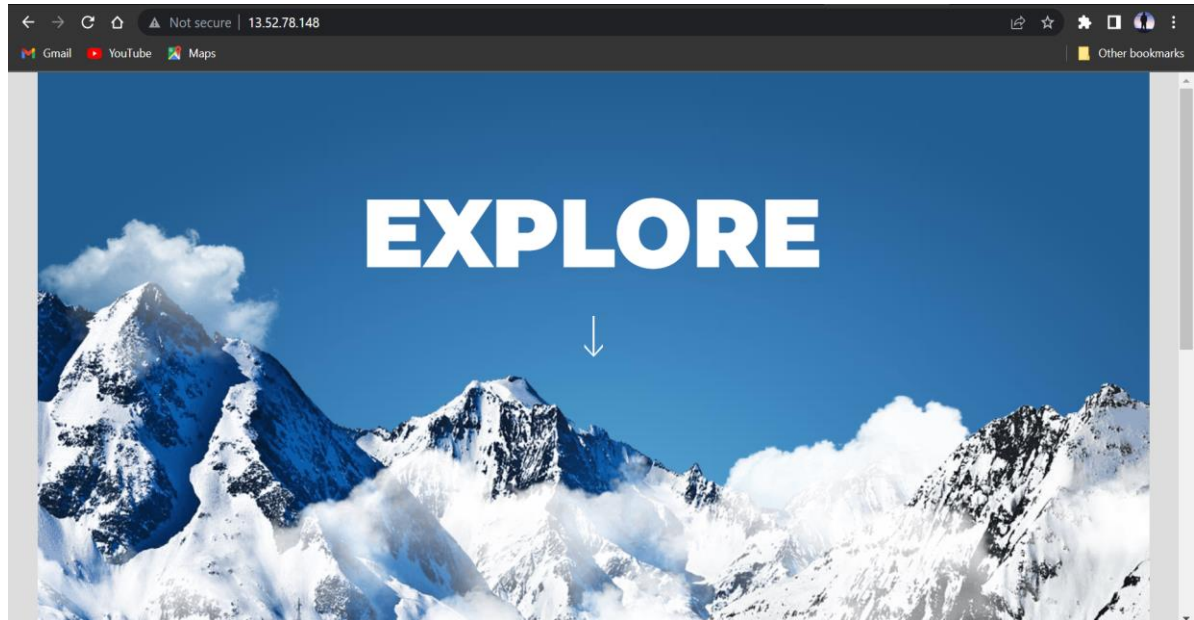
6) Connect to SSH using Putty (for Windows):

```
root@ip-172-31-14-4:/var/www/html
# Using username "ec2-user".
# Authenticating with public key "lab1project" from agent
Last login: Thu Sep 15 00:46:42 2022 from 130.65.254.17

 _ _ _ _ _
|_| ( _ _ _ )
 _ _ _ _ _ Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-14-4 ~]$ sudo su
[root@ip-172-31-14-4 ec2-user]# yum update -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core | 3.7 kB 00:00
No packages marked for update
[root@ip-172-31-14-4 ec2-user]# yum install httpd -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Package httpd-2.4.54-1.amzn2.x86_64 already installed and latest version
Nothing to do
[root@ip-172-31-14-4 ec2-user]# chkconfig httpd on
Note: Forwarding request to 'systemctl enable httpd.service'.
[root@ip-172-31-14-4 ec2-user]# cd /var/www/html
[root@ip-172-31-14-4 html]# aws s3 sync s3://labproject1 var/www/html
download: s3://labproject1/index.html to var/www/html/index.html
download: s3://labproject1/README.md to var/www/html/README.md
download: s3://labproject1/LICENSE.txt to var/www/html/LICENSE.txt
download: s3://labproject1/script.js to var/www/html/script.js
download: s3://labproject1/style.css to var/www/html/style.css
[root@ip-172-31-14-4 html]# ls
index.html LICENSE.txt README.md script.js style.css var
[root@ip-172-31-14-4 html]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-172-31-14-4 html]#
```

7) Deploying my EC2 instance using its IP address:



8) Cloud Watch Monitoring:

