

AWS EC2 Cost Estimation using Python:

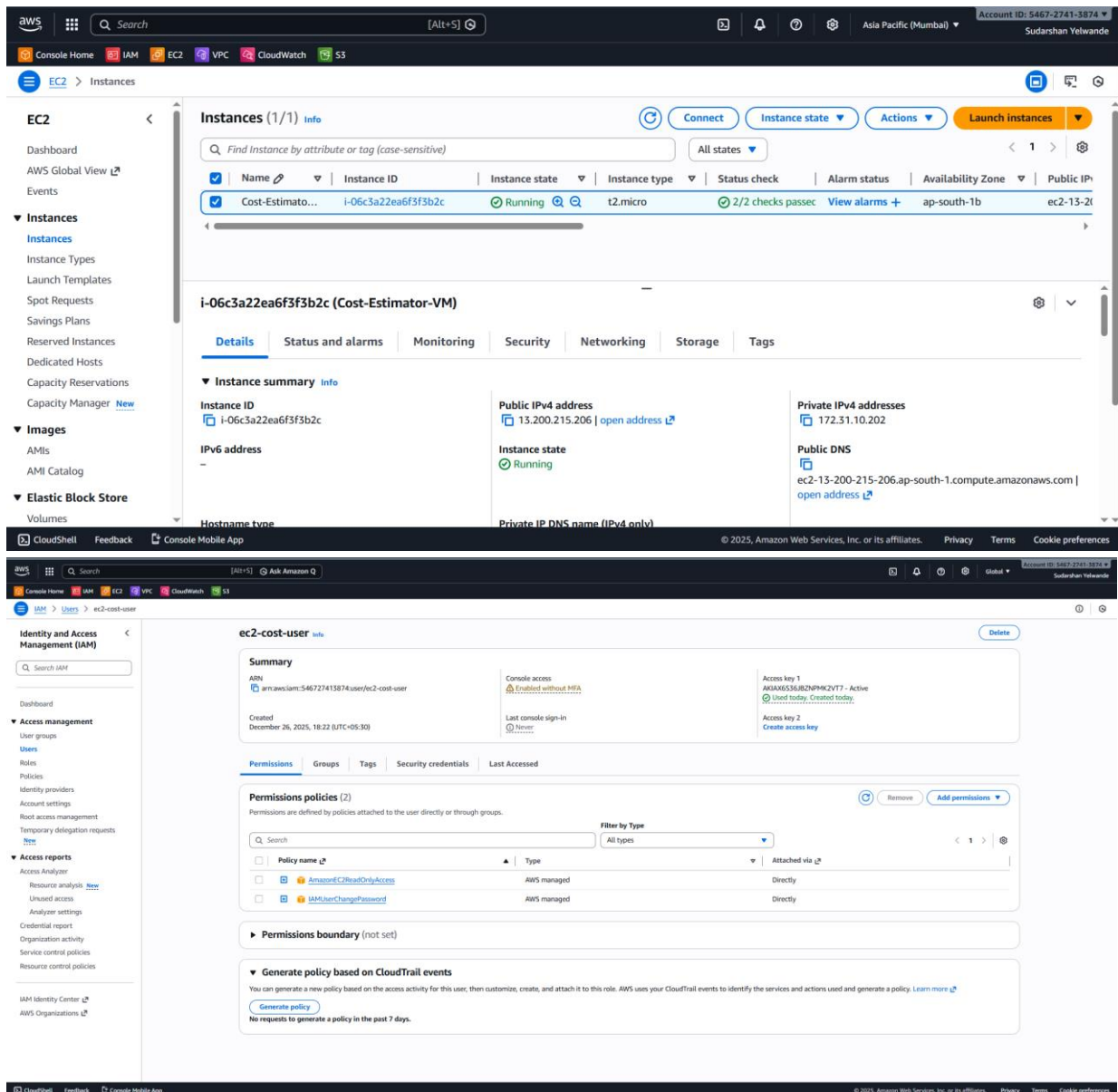
ec2_cost_estimator.py X

README.md

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You, 26 minutes ago | 1 author (You)

```
1 import boto3
2
3 region = "ap-south-1"
4 ec2 = boto3.client("ec2", region_name=region)
5
6 response = ec2.describe_instances()
7
8 for reservation in response["Reservations"]:
9     for instance in reservation["Instances"]:
10         print("Instance ID:", instance["InstanceId"])
11         print("Instance Type:", instance["InstanceType"])
12         print("State:", instance["State"]["Name"])
13         print("Launch Time:", instance["LaunchTime"])
14     pricing = {
15         "t2.micro": 0.0116,
16         "t2.small": 0.023,
17         "t2.medium": 0.0464
18     }
19     from datetime import datetime, timezone, timedelta
20
21     launch_time = instance["LaunchTime"]
22     ist = timezone(timedelta(hours=5, minutes=30))
23     current_time = datetime.now(ist)
24     running_hours = (current_time - launch_time).total_seconds() / 3600
25     instance_type = instance["InstanceType"]
26     hourly_rate = pricing.get(instance_type, 0)
27     usd_to_inr = 89.0
28     total_cost = running_hours * hourly_rate
29     monthly_estimate = hourly_rate * 24 * 30
30     total_seconds = running_hours * 3600
31     minutes = int(total_seconds // 60)
32     seconds = total_seconds % 60
33
34     print("\n--- COST REPORT ---")
35     print(f"Running Hours: {minutes} min {seconds:.0f} sec")
36     print(f"Hourly Rate: ₹{hourly_rate * usd_to_inr:.2f}")
37     print(f"Current Cost: ₹{total_cost * usd_to_inr:.2f}")
38     print(f"Estimated Monthly Cost: ₹{monthly_estimate * usd_to_inr:.2f}")
```



Outcome

This project demonstrates **real-time AWS cost estimation**, secure cloud access using IAM, and practical cost-optimization awareness—making it suitable for **cloud, DevOps, and entry-level AWS roles**.

```
DELL@DESKTOP-IUVS90A MINGW64 /d/Desktop/GIT/Cloud/Cloud-Projects/Real Life Projects/AWS EC2 Cost Estimation (main)
$ python ec2_cost_estimator.py
Instance ID: i-06c3a22ea6f3f3b2c
Instance Type: t2.micro
State: running
Launch Time: 2025-12-26 12:51:33+00:00

--- COST REPORT ---
Running Hours: 58 min 43 sec
Hourly Rate: ₹1.03
Current Cost: ₹1.01
Estimated Monthly Cost: ₹743.33
```