SET UP A CLOUD-BASED MONITORING SERVICE

(Enable basic cloud monitoring and view metrics like CPU usage and disk I/O for your cloud VM.)

INTRODUCTION:

Amazon **CloudWatch** is a **monitoring and observability** service provided by AWS. It collects and analyzes logs, metrics, and events from AWS resources, applications, and services to provide **real-time insights** into system performance and operational health. Amazon **CloudWatch** is a **monitoring and observability** service provided by AWS. It collects and analyzes logs, metrics, and events from AWS resources, applications, and services to provide **real-time insights** into system performance and operational health.

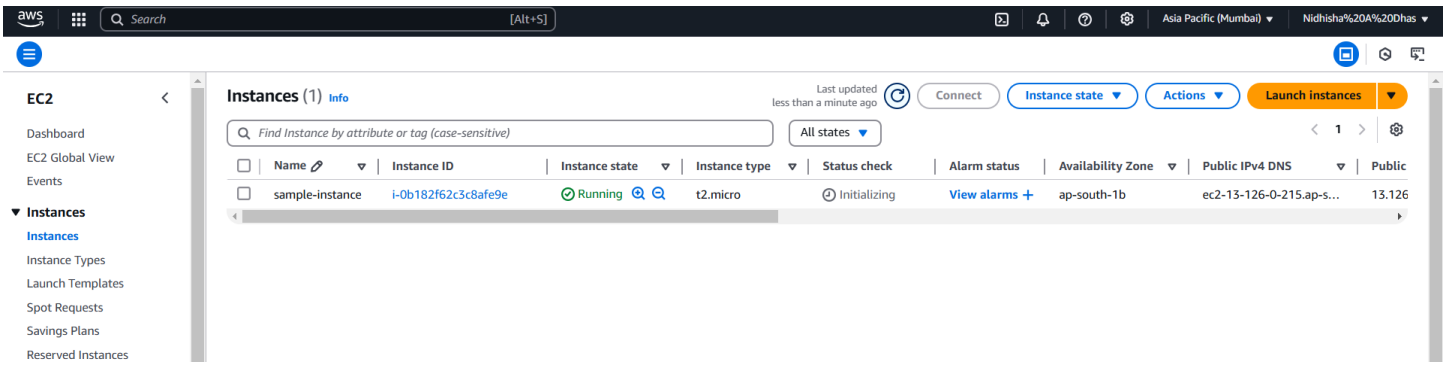
IMPORTANCE:

1. Metrics Monitoring: Collects and visualizes performance metrics (CPU, memory, disk I/O, network usage, etc.).
2. Logs Management: Captures and stores application/system logs using CloudWatch Logs.
3. Triggers alarms when thresholds are breached (e.g., CPU > 80%).
4. Detects state changes in AWS services and triggers automatic actions.
5. Monitors application endpoints using synthetic monitoring.

STEP BY STEP OVERVIEW:

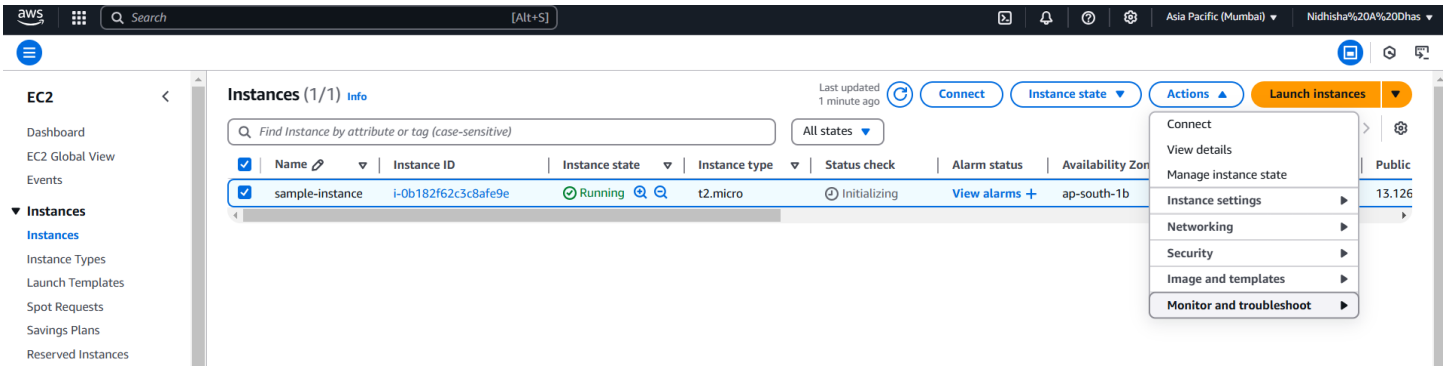
Step 1: CREATE AN EC2 INSTANCE

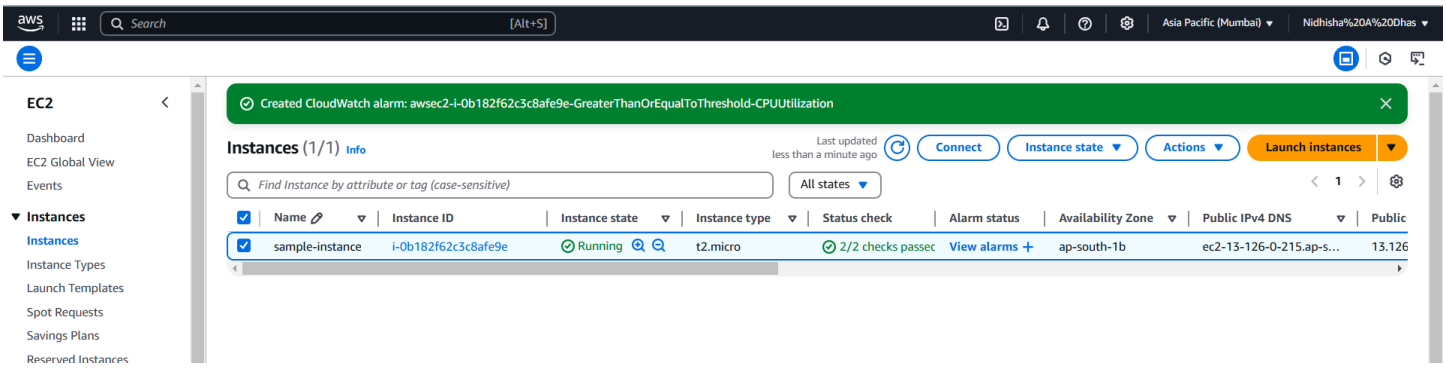
- Login into your AWS console.
- Navigate into EC2 dashboard, and create your own Instance.



Step 2: MANAGE CLOUDWATCH ALARMS

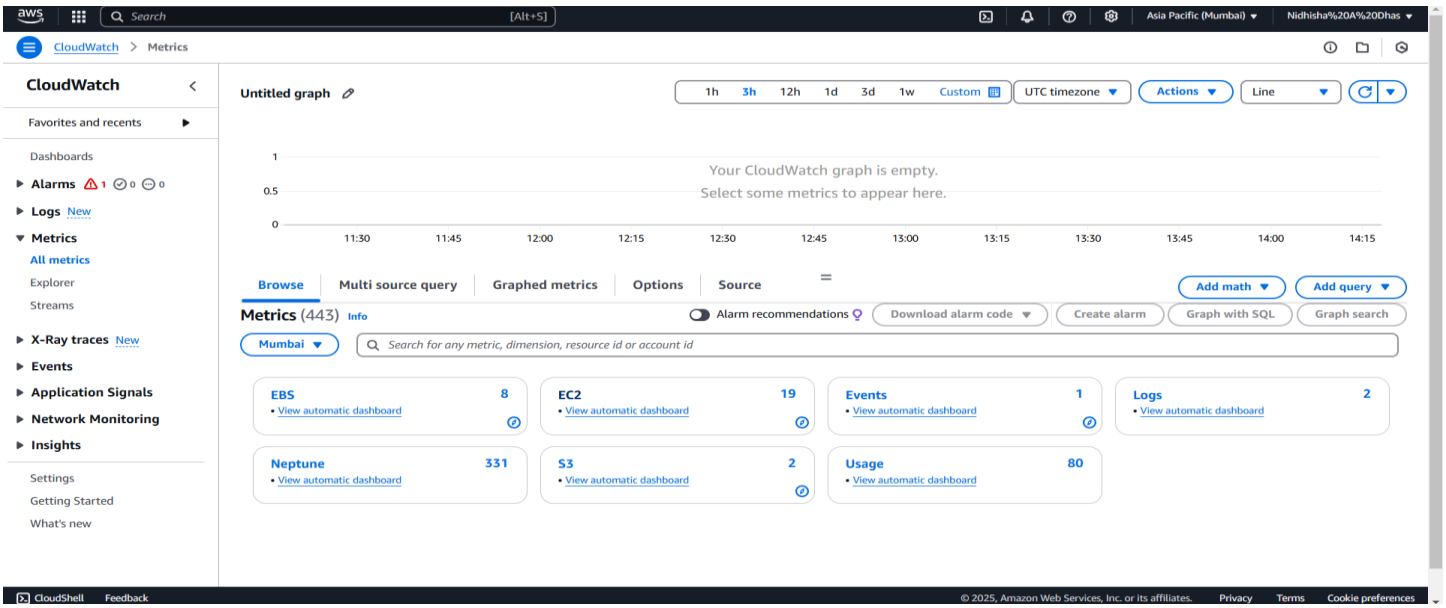
- Select your EC2 instance, go to ‘Actions > Monitor and troubleshoot’ and click on ‘Manage CloudWatch Alarms’



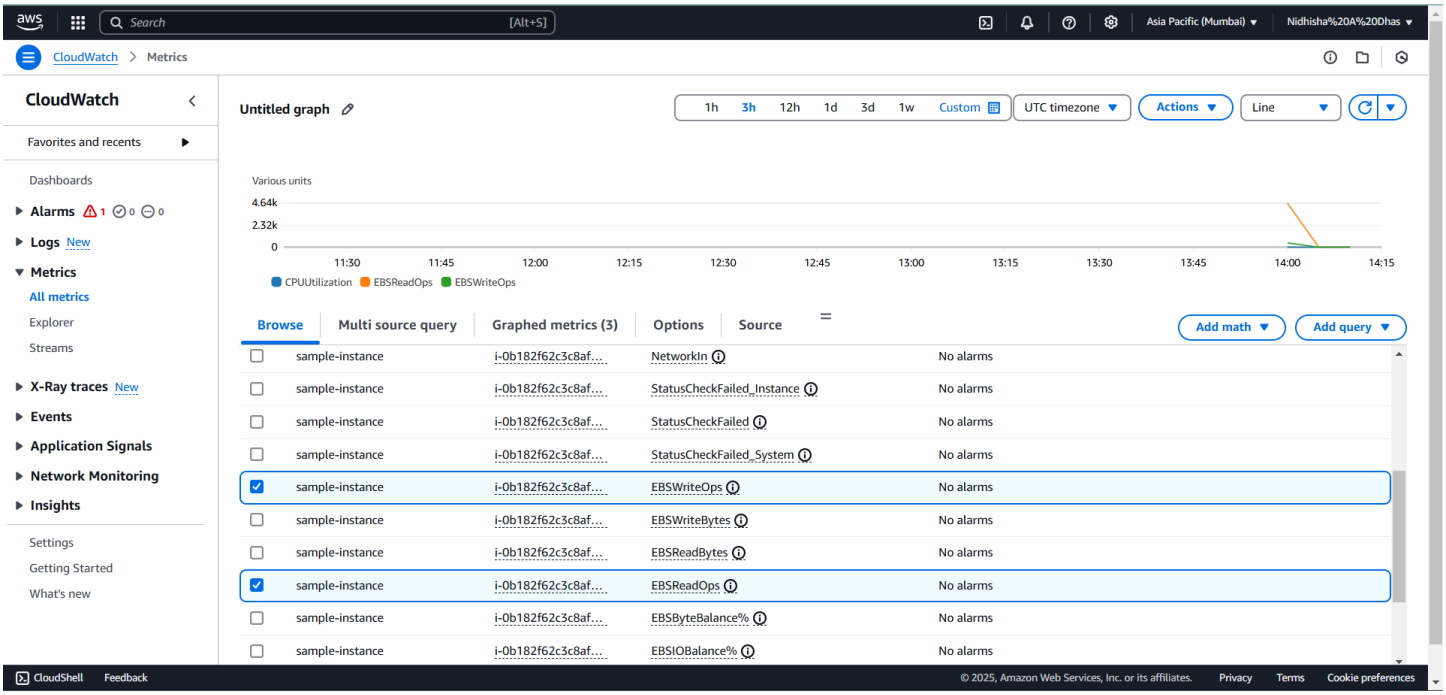


Step 3: VIEW CLOUDWATCH METRICS

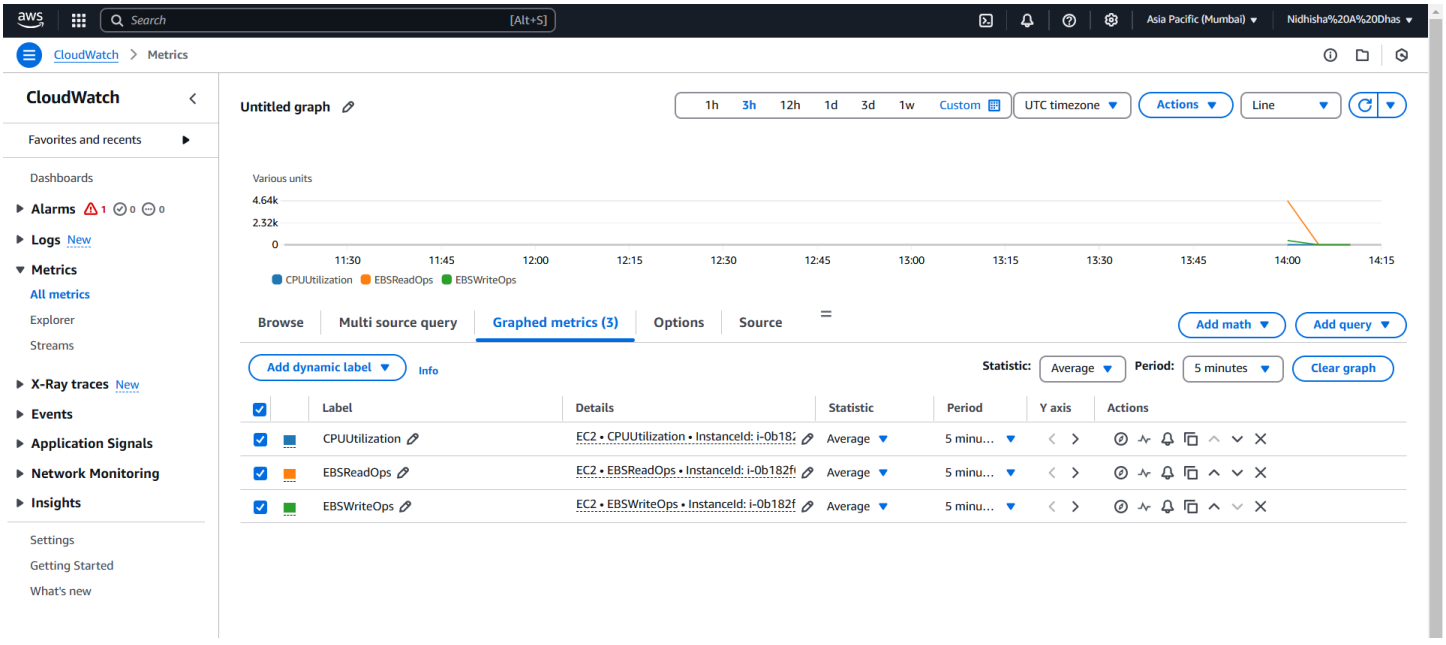
- Open CloudWatch on your AWS console and view your metrics.
- From metrics, select EC2 and then your instance.



- Browse to view metrics such as CPU utilization, EBSWriteOps, EBSReadOps etc.. and select them.



- Go to the Graphed metrics and view your graph.



CONCLUSION:

By completing this POC, we have learnt:

- To configure AWS CloudWatch to monitor EC2 instance metrics such as CPU utilization and Disk I/O.