

# CloudWatch Alarms Assignment

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## Problem Statement:

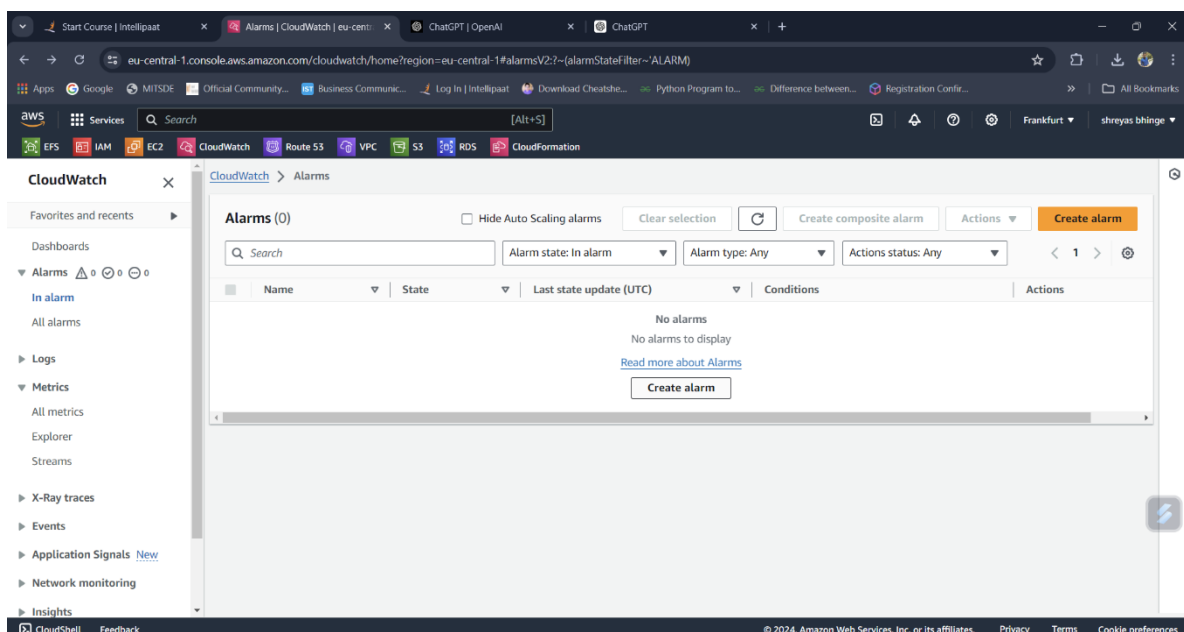
You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users. Also, you will be monitoring the machines created by these users for any errors or misconfigurations.

## Tasks To Be Performed:

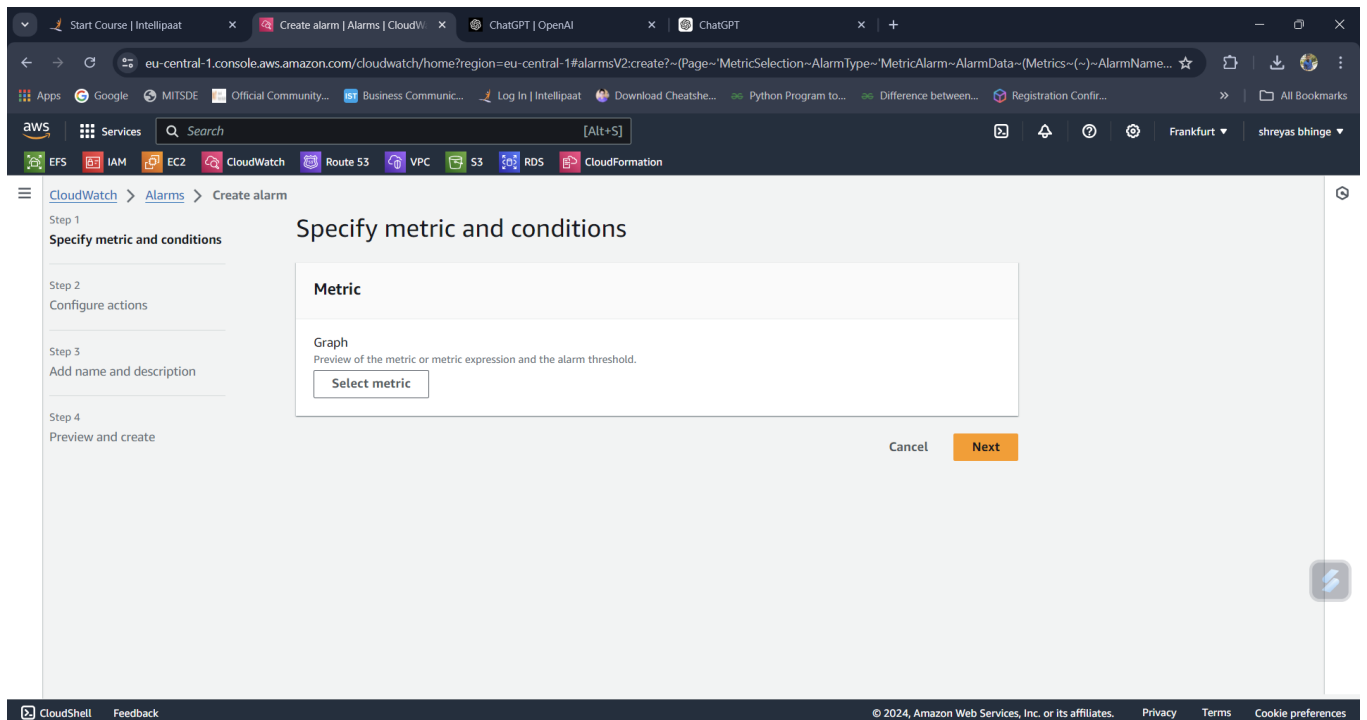
1. Create a CloudWatch billing alarm which goes off when the estimated charges go above \$500.
2. Create a CloudWatch alarm which goes off to an Alarm state when the CPU utilization of an EC2 instance goes above 65%. Also add an SNS topic so that it notifies the person when the threshold is crossed.

1. Create a CloudWatch billing alarm which goes off when the estimated charges go above \$500.

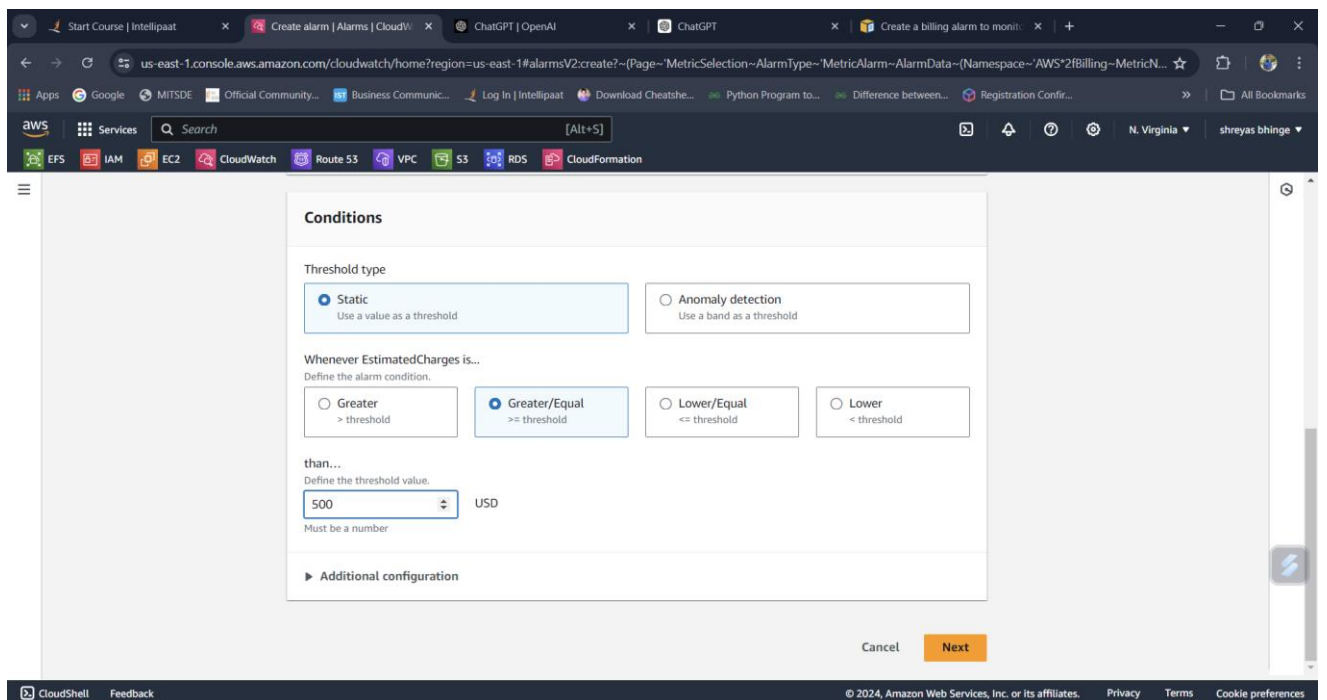
Step 1: Choose **Create alarm**.



Step 2 : Choose **Select metric**. In **Browse**, choose **Billing**, and then choose **Total Estimated Charge**.



Step 3 : Select threshold type



## Step 4 : Select Estimation charges \$500

The screenshot shows the AWS CloudWatch console with the 'Select metric' dialog box open. The dialog has a sidebar on the left with steps: Step 1: Specify, Step 2: Configure, Step 3: Add name, and Step 4: Preview. The main area shows a time series graph for 'Total Estimated Charge' in 'USD' for the 'N. Virginia' region. The graph shows a steady increase from 0.00 at 00:00 to 0.50 at 06:00. Below the graph, there are tabs for 'Browse', 'Multi source query', 'Graphed metrics (1)', 'Options', and 'Source'. The 'Graphed metrics (1)' tab is active, showing a table with one metric: 'EstimatedCharges' with a value of 'No alarms'. The table has columns for 'Currency 1/1', 'Metric name', and 'Alarms'. The 'Currency 1/1' column has a dropdown set to 'USD'. The 'Metric name' column has a dropdown set to 'EstimatedCharges'. The 'Alarms' column has a dropdown set to 'No alarms'. At the bottom right of the dialog are 'Cancel' and 'Select metric' buttons.

## Step 5 : Select In alarm and SNS topic

The screenshot shows the AWS CloudWatch console with the 'Notification' configuration screen. The screen has a sidebar on the left with steps: Step 2: Configure actions, Step 3: Add name and description, and Step 4: Preview and create. The main area is titled 'Notification' and has a 'Remove' button. Under 'Alarm state trigger', there are three radio buttons: 'In alarm' (selected), 'OK', and 'Insufficient data'. The 'In alarm' option has a description: 'The metric or expression is outside of the defined threshold.' Below this, there is a section 'Send a notification to the following SNS topic' with a dropdown set to 'Select an existing SNS topic'. There are also options for 'Create new topic' and 'Use topic ARN to notify other accounts'. At the bottom, there is a section 'Send a notification to...' with a search bar and a list of topics. The 'Add notification' button is at the bottom right.

## Step 6 : Add Billing name

The screenshot shows the 'Name and description' step in the AWS CloudWatch console. The 'Alarm name' field is filled with 'Billing Alarm'. The 'Alarm description - optional' field contains the following text: '# This is an H1', '\*\*double asterisks will produce strong character\*\*', and 'This is [an example](https://example.com/) inline link.' Below the description field, a note states: 'Markdown formatting is only applied when viewing your alarm in the console. The description will remain in plain text in the alarm notifications.' The 'Next' button is highlighted in orange.

Step 2  
Configure actions

Step 3  
Add name and description

Step 4  
Preview and create

**Name and description**

Alarm name  
Billing Alarm

Alarm description - optional [View formatting guidelines](#)

Edit Preview

# This is an H1  
\*\*double asterisks will produce strong character\*\*  
This is [an example](https://example.com/) inline link.

Up to 1024 characters (0/1024)

Markdown formatting is only applied when viewing your alarm in the console. The description will remain in plain text in the alarm notifications.

Cancel Previous Next

## Step 7 : Billing Alarm created

The screenshot shows the 'Alarms' page in the AWS CloudWatch console. The 'Billing Alarm' is listed with the state 'Insufficient data' and the last state update '2024-07-08 06:28:02'. The conditions are 'EstimatedCharges >= 500 for 1 datapoints within 6 hours'. The actions are 'Actions enabled' with a 'Warn' status.

CloudWatch > Alarms

Alarms (1) ☐ Hide Auto Scaling alarms Clear selection Create composite alarm Actions Create alarm

Search Alarm state: Any Alarm type: Any Actions status: Any < 1 >

<input type="checkbox"/>	Name	State	Last state update (UTC)	Conditions	Actions
<input type="checkbox"/>	Billing Alarm	Insufficient data	2024-07-08 06:28:02	EstimatedCharges >= 500 for 1 datapoints within 6 hours	Actions enabled Warn