Task: custom exception handler which catches exception from api and logs to aws insights using aws lambda ,Cloudwatch & S3 Bucket using java.

Requirement:

1. Java Custom Exception Handling Code
2. Lambda function where we will upload the java script
3. S3 Bucket To store the code(If Required)
4. CloudWatch triggered with the Lambda Function

AWS Services

**Lambda**: AWS Lambda is an event-driven , serverless, computing platform provided by AWS .

It is a computing service that runs code in response to events and automatically manages the computing resources required by the code.

Lambda is an ideal compute service for many application scenarios, as long as you can run your application code using the Lambda [standard runtime environment](https://docs.aws.amazon.com/lambda/latest/dg/runtimes-context.html) and within the resources that Lambda provides. Lambda is best suited for shorter, event-driven workloads, since Lambda functions run for up to 15 minutes per invocation.

**Amazon Cloudwatch:** Amazon CloudWatch is a monitoring and observability service built for DevOps engineers, developers, site reliability engineers (SREs), IT managers, and product owners.

CloudWatch provides you with data and actionable insights to monitor your applications, respond to system-wide performance changes, and optimize resource utilization. CloudWatch collects monitoring and operational data in the form of logs, metrics, and events.

AWS Lambda automatically monitors Lambda functions on your behalf, reporting metrics through Amazon CloudWatch.

To help you troubleshoot failures in a function, after you set up permissions, Lambda logs all requests handled by your function and also automatically stores logs generated by your code through Amazon CloudWatch Logs.

**S3Bucket:**

Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance.

In theory, you can use one bucket for all your needs. However, there are specific bucket level properties that you can use to make buckets special.

Process:

1. First Create a java application for custom Exception Handling.
2. Then create a Lambda Function and put the java code there .
3. Trigger the Lambda Function with Amazon Cloudwatch.