**Technical Architecture**

The scope of the project is to implement REST API using AWS.

REST API’s are written on SPRING BOOT using JAVA 8 and Maven.

**![Diagram

Description automatically generated]()**

**Spring Boot**

Spring Boot makes it easy to create stand-alone, production-grade Spring based Applications that you can "just run". Spring data is used to connect to Amazon Dynamo Database to store data in Customer table. Rest Controller is used to created Restful services using Spring MVC. Exception handling is done using Controller Advice. Further logging can also be implemented using Log4j(skipped due to time constraint).

Alternatively, we could also use spring cloud functions to for the implementation of business logic via functions.

**Dynamo DB**

Amazon Dynamo DB is a NoSQL Database service that supports key value and documents data structure. It is being used for storing Customer data.

**AWS Elastic Beanstalk**

AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed using Java etc. It can be classified as PAAS.

AWS Lambda is grouped under serverless service and is cheap, quick and stateless.

The spring boot REST API developed here can also be deployed on AWS Lambda by adding Maven dependency for aws-lambda and by creating a LambdaHandler that would implement RequestStreamHandler.

**Amazon API Gateway**

Amazon API Gateway is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale. APIs act as the "front door" for applications to access data, business logic, or functionality from your backend services.