**AWS PROJECT:**

**Text to speech convert using Amazon Polly and Java SDK.**

**Requirements:**

* AWS account
* AWS SDK for java
* Apache Maven

**Code:**

Dependencies to Add in Maven project(pom.xml):

<dependency>

<groupId>com.amazonaws</groupId>

<artifactId>aws-java-sdk-polly</artifactId>

<version>1.12.650</version> <!-- Use the latest version -->

</dependency>

<dependencyManagement>

<dependencies>

<dependency>

<groupId>software.amazon.awssdk</groupId>

<artifactId>bom</artifactId>

<version>2.21.20</version>

<type>pom</type>

<scope>import</scope>

</dependency>

</dependencies>

</dependencyManagement>

Java code to work on the text to speech conversion:

package com.example;

import java.io.FileOutputStream;

import java.io.IOException;

import java.util.Scanner;

import com.amazonaws.auth.AWSStaticCredentialsProvider;

import com.amazonaws.auth.BasicAWSCredentials;

import com.amazonaws.regions.Regions;

import com.amazonaws.services.polly.AmazonPolly;

import com.amazonaws.services.polly.AmazonPollyClientBuilder;

import com.amazonaws.services.polly.model.OutputFormat;

import com.amazonaws.services.polly.model.SynthesizeSpeechRequest;

import com.amazonaws.services.polly.model.SynthesizeSpeechResult;

public class pollyDemo {

// AWS credentials

private static final String ACCESS\_KEY = "AKIA4V5ES62UAGI6VVPP";

private static final String SECRET\_KEY = "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";

public static void main(String[] args) {

// Text to convert to speech

String text = "Hello sravni , how are you. welcome to the text-to-speech converter using AWS Polly and Java.";

// Set up AWS credentials

BasicAWSCredentials credentials = new BasicAWSCredentials(ACCESS\_KEY, SECRET\_KEY);

AmazonPolly polly = AmazonPollyClientBuilder.standard()

.withCredentials(new AWSStaticCredentialsProvider(credentials))

.withRegion(Regions.US\_EAST\_1) // Choose your desired AWS region

.build();

// Convert text to speech

SynthesizeSpeechRequest synthesizeSpeechRequest = new SynthesizeSpeechRequest()

.withText(text)

.withOutputFormat(OutputFormat.Mp3)

.withVoiceId("Joanna"); // Choose a voice (e.g., Joanna, Matthew, etc.)

try {

SynthesizeSpeechResult synthesizeSpeechResult = polly.synthesizeSpeech(synthesizeSpeechRequest);

byte[] audioBytes = synthesizeSpeechResult.getAudioStream().readAllBytes();

// Save the audio to a file

try (FileOutputStream outputStream = new FileOutputStream("output.mp3")) {

outputStream.write(audioBytes);

System.out.println("Speech synthesis complete. Audio saved to output.mp3");

}

} catch (IOException e) {

e.printStackTrace();

}

}

}

**Result:**

After running java code the ouput.mp3 file stored in project directory.

