

Exercise: AWS SDK - Java

In this exercise you will write a Java program that uses the AWS SDK to copy a local file into an S3 bucket.

Assumptions

You have already configured your AWS credentials on your computer. This should have been done when you installed the AWS CLI on your computer.

IntelliJ is installed on your computer.

Steps

1. Create a directory for this exercise
2. Create a new IntelliJ project
3. In the new project, add dependencies on the AWS SDK Java library
 - a. Select the File -> Project Structure menu
 - b. Select "Modules" on the left side of the "Project Structure" dialog
 - c. Select the "Dependencies" tab
 - d. Click the "plus" icon in the top-right
 - e. Select "Library"
 - f. Select "From Maven"
 - g. Enter "com.amazonaws:aws-java-sdk-core:1.11.547", and click OK. This will add a dependency on the core AWS Java SDK library.
 - h. Using the same process, add a Maven dependency on "com.amazonaws:aws-java-sdk-s3:1.11.547". This will add a dependency on the S3 portion of the AWS Java SDK library.
4. Create a Java file containing the following code (you might need to change the AWS region value if you're using a region other than us-west-2):

```
import com.amazonaws.services.s3.AmazonS3;
import com.amazonaws.services.s3.AmazonS3ClientBuilder;

public class S3Copy {

    public static void main(String[] args) {
```

```

// Create AmazonS3 object for doing S3 operations
AmazonS3 s3 = AmazonS3ClientBuilder
    .standard()
    .withRegion("us-west-2")
    .build();

// Write code to do the following:
// 1. get name of file to be copied from the command line
// 2. get name of S3 bucket from the command line
// 3. copy file to the specified S3 bucket using the file name as the S3 key
}

```

***Note: When accessing an s3 bucket via the command line, the proper syntax is "s3://<name-of-bucket>". When accessing your bucket programmatically, only the name of your bucket is required (i.e. without the "s3://" prefix).

5. The online documentation for the AWS Java SDK can be found here:
 - a. <https://docs.aws.amazon.com/AWSJavaSDK/latest/javadoc/index.html>
 - b. Look at the documentation for the `com.amazonaws.services.s3.AmazonS3` class
6. Test your program by using it to copy some local files into an S3 bucket in your AWS account.
7. Submit your Java code through Canvas.

More Information

The full AWS SDK documentation can be found here in the SDKs section:

<https://aws.amazon.com/tools/>