

Resource Document for AWS Lambda: Developing Serverless Applications with Java

Us / Symphonia

- Twitter for John, Mike and our company, Symphonia - [@johnchapin](#), [@mikebroberts](#), [@symphoniacloud](#)
- Email us at john@symphonia.io and mike@symphonia.io
- <https://www.symphonia.io/>
- <https://blog.symphonia.io/> - our articles, talks, etc.
- Our newsletter - <http://bit.ly/symph-news-subs>
- Our open source content - <https://github.com/symphoniacloud>
- Our free E-Book / O'Reilly Report - 'What is Serverless?' - <http://www.oreilly.com/programming/free/what-is-serverless.csp>

Lesson 1

- Amazon Web Services - <https://aws.amazon.com/>
- Microsoft Azure - <https://azure.microsoft.com/>
- Google Cloud Platform - <https://cloud.google.com/>
- Heroku - <https://www.heroku.com/>
- Docker - <https://www.docker.com/>
- Google Firebase - <https://firebase.google.com/>
- Auth0 - <https://auth0.com/>
- Amazon S3 - <https://aws.amazon.com/s3/>
- Amazon DynamoDB - <https://aws.amazon.com/dynamodb/>
- Amazon Lambda - <https://aws.amazon.com/lambda/>
- Adrian Cockcroft: Shrinking Microservices to Functions (source of quote "We're starting to see applications be built in ridiculously short time periods") - <https://www.youtube.com/watch?v=ZgxZCXouBkY>
- The Twelve-Factor App - <https://12factor.net/>

Lesson 2

- AWS Console - <https://console.aws.amazon.com/>
- List of AWS regions where Lambda is available - http://docs.aws.amazon.com/general/latest/gr/rande.html#lambda_region
- Steve Yegge - "Stevey's Google Platforms Rant" (source of quotes about Amazon APIs) - <https://plus.google.com/+RipRowan/posts/eVeouesvaVX>
- Homebrew - <https://brew.sh/>
- AWS CLI Installation Guide - <http://docs.aws.amazon.com/cli/latest/userguide/installing.html>
- AWS Windows CLI Installation Guide - <http://docs.aws.amazon.com/cli/latest/userguide/awscli-install-windows.html>
- List of AWS regions where Lambda is available - http://docs.aws.amazon.com/general/latest/gr/rande.html#lambda_region
- JDK 8 Downloads - <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>
- Maven - <https://maven.apache.org/>
- Maven installation instructions - <https://maven.apache.org/install.html>
- IntelliJ - <https://www.jetbrains.com/idea/download>

Lesson 3

- Example Maven POM file - <https://drive.google.com/file/d/0B1XX8jViOyqOSnZuWkRXUFIIfSDg/view?usp=sharing>
- Base64 decoding - <https://www.base64decode.org>

Lesson 4

- Symphonia's lambda-logging library - <https://github.com/symphoniacloud/lambda-monitoring/tree/master/lambda-logging>
- A in-depth article about this is at <https://blog.symphonia.io/a-love-letter-to-lambda-logging-974b0eb49273>
- Symphonia's write-up of using Cloudwatch Metrics with Java AWS Lambdas - <https://blog.symphonia.io/the-danger-in-the-details-scalable-cloudwatch-metrics-for-aws-lambda-b6c2910cb09c>
- AWS documentation on Input/Output in Java Lambdas - <http://docs.aws.amazon.com/lambda/latest/dg/java-programming-model-req-resp.html>
- AWS Lambda Java Events library - <https://github.com/aws/aws-lambda-java-libs/tree/master/aws-lambda-java-events>

Lesson 5

- Amazon API Gateway - <https://aws.amazon.com/api-gateway/>
- Amazon CloudFormation - <https://aws.amazon.com/cloudformation/>
- Serverless Application Model - <https://github.com/awslabs/serverless-application-model/blob/master/HOWTO.md>
- Swagger - <https://swagger.io/>

Lesson 6

- The Twelve-Factor App - <https://12factor.net/>
- Amazon Key Management Service (KMS) - <https://aws.amazon.com/kms/>

Lesson 7

- Amazon Web Services - <https://aws.amazon.com/>
- Amazon Lambda - <https://aws.amazon.com/lambda/>
- Amazon API Gateway - <https://aws.amazon.com/api-gateway/>
- Amazon Cognito - <https://aws.amazon.com/cognito/>
- Amazon CloudFront - <https://aws.amazon.com/cloudfront/>
- Amazon Lambda@Edge - <https://aws.amazon.com/lambda/edge/>
- Amazon S3 - <https://aws.amazon.com/s3/>
- Amazon DynamoDB - <https://aws.amazon.com/dynamodb/>
- Amazon RDS - <https://aws.amazon.com/rds/>
- Amazon ElastiCache - <https://aws.amazon.com/elasticache/>
- Amazon SQS - <https://aws.amazon.com/sqs/>
- Amazon SNS - <https://aws.amazon.com/sns/>
- Amazon Kinesis - <https://aws.amazon.com/kinesis/>
- Amazon Batch - <https://aws.amazon.com/batch/>
- Amazon Step Functions - <https://aws.amazon.com/step-functions/>
- Amazon CodePipeline - <https://aws.amazon.com/codepipeline/>
- Amazon CodeBuild - <https://aws.amazon.com/codebuild/>

- Amazon CloudFormation - <https://aws.amazon.com/cloudformation/>
- Amazon CloudWatch - <https://aws.amazon.com/cloudwatch/>
- Amazon X-Ray - <https://aws.amazon.com/xray/>
- Amazon Athena - <https://aws.amazon.com/athena/>
- Amazon Machine Learning service - <https://aws.amazon.com/machine-learning/>
- Amazon IoT - <https://aws.amazon.com/iot/>
- Microsoft Azure Functions - <https://azure.microsoft.com/en-us/services/functions/>
- Google Cloud Functions - <https://cloud.google.com/functions/>
- IBM OpenWhisk - <https://www.ibm.com/cloud-computing/bluemix/openwhisk>
- Auth0 Webtask - <https://webtask.io/>
- Twilio Functions - <https://www.twilio.com/functions>
- Auth0 Extend - <https://auth0.com/extend/>
- Google Firebase - <https://firebase.google.com/>
- Microsoft Logic Apps - <https://azure.microsoft.com/en-us/services/logic-apps/>
- Auth0 - <https://auth0.com/>
- Mailgun - <https://www.mailgun.com/>
- Pagerduty - <https://www.pagerduty.com/>
- Bustle - <https://www.bustle.com/> , Case Study - <https://aws.amazon.com/solutions/case-studies/bustle/>
- Amazon Redshift - <https://aws.amazon.com/redshift/>
- Amazon Kinesis Firehose - <https://aws.amazon.com/kinesis/firehose/>
- Serverless Artillery from Nordstrom - <https://github.com/Nordstrom/serverless-artillery>

