AWS Hands-on Labs
OCTOBER 2020

Introduction to Amazon Simple Storage Service (S3)
This lab demonstrates how to use an Amazon S3 bucket and manage files, or object, that are stored in the bucket. You will practice how to create a bucket, add an object, view an object, move an object, and delete an object and bucket in the AWS Management Console.

Introduction to Amazon DynamoDB
This lab teaches you about Amazon DynamoDB and walks you through how to create, query, view and delete a table in the AWS Management Console.

Introduction to AWS Identity and Access Management (IAM)
This lab shows you how to manage access and permissions to your AWS services using AWS Identity and Access Management (IAM). Practice the steps to add users to groups, manage passwords, log in with IAM-created users, and see the effects of IAM policies on access to specific services.

Introduction to Amazon Lambda
This lab will give you the basic understanding of AWS Lambda. It will demonstrate the basic steps required to get started to create and deploy a Lambda function in an event-driven environment.

Introduction to Amazon API Gateway
In this lab, you will create a simple FAQ microservice. The microservice will return a JSON object containing a random question and answer pair using an API Gateway endpoint that invokes a Lambda function. Prerequisites: students should take the lab "Introduction to AWS Lambda" before taking this lab.

Introduction to AWS Device Farm
This lab provides the basic hands-on experience of AWS Device Farm Service, which provides a test harness for mobile app developers. It will demonstrate the basic steps required to load an example Android app and run a series of tests, using several common mobile device platforms from Samsung, LG, Amazon, and others.

Introduction to Amazon CloudFront
This lab introduces you to AWS CloudFront, a content delivery web service. In this lab you will create an Amazon CloudFront distribution that will use a CloudFront domain name in the URL to distribute a publicly accessible image file stored in an Amazon S3 bucket.

Introduction to AWS Key Management Service
This lab provides a basic understanding and hands-on experience of AWS Key Management Service. It will demonstrate the basic steps required to get started with Key Management Service, creating keys, assigning management and usage permissions for the keys, encrypting data and monitoring the access and usage of keys.

Introduction to Amazon Redshift
The lab will give you the basic understanding of Amazon Redshift data warehouse service. It will demonstrate the basic steps required to get started with Redshift: creating a cluster, loading data and performing queries against that data.

Image Insertion and Input Switching with AWS Elemental MediaLive
In this lab, you will insert static images (also referred to as graphic or video overlay) over a video stream, create multiple inputs and attach those inputs to a MediaLive channel, and switch between multiple inputs.

S3: Multi-region Storage Backup with Cross-Region Replication
This lab walks you through the process of enabling Cross-Region Replication on an S3 bucket. You will create source and destination buckets, enable versioning, then create various replication policies to demonstrate different methods of replicating objects.