



# **PRAGMATIC** **AI**

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Cloud-Native Machine Learning and AI

**AWS Cloud Practitioner Exam Labs**

**Year: 2020**

**Version 1.0.1**

# Getting Started with AWS Labs

## Overview

At this point you should have enough knowledge of AWS to use a real environment to practice your skills and take your knowledge to the next level. There are several methods of using AWS:

- Free Tier, available to anyone: <https://aws.amazon.com/free/>
- [AWS Educate](#), available to students and faculty.
- [AWS Academy](#), available to students and faculty.
- Your own personal account
- Your organization's AWS account

These labs are meant to be challenging, and if you completely get through them on your own, not only will you most likely do well on the AWS Cloud Practitioner Exam, but you are ready to study for the more advanced AWS Solutions Architect exam. If you get stuck refer back to lessons that covered these topics.

# Lab 1: Getting started with AWS Cloud9

## Overview

This lab introduces the AWS Cloud 9 environment.

## Tasks to perform

Perform the following tasks:

- Configure and launch a Cloud9 development environment
- Create files and scripts using Cloud9 IDE
- Upload and download files to Cloud9 workspace
- Create, test and deploy AWS Lambda function

# Lab 2: Getting started with AWS Storage

## Overview

This lab introduces common AWS Storage services.

## Tasks to perform

Perform the following tasks:

- Create, mount, use and snapshot EBS volumes
- Create, use and synchronize S3 buckets
- Create, mount, and use EFS (Elastic File System)

# Lab 3: Getting started with Amazon EC2

## Overview

This lab introduces common AWS Storage services.

## Tasks to perform

Perform the following tasks:

- Create and use on-demand EC2 Instances and install software
- Create and use spot EC2 Instances and install software
- Use AWS Cloud9 and ssh to manage and configure EC2 instances
- Terminate spot instances requests and associated instances

# Lab 4: Getting started with Amazon VPC

## Overview

This lab introduces Amazon VPC (Virtual Private Cloud)

## Tasks to perform

Perform the following tasks:

- Create a VPC
- Configure a security group
- Launch a web service into a VPC

# Lab 5: Getting started with AWS Databases

## Overview

This lab introduces AWS Databases

## Tasks to perform

Perform the following tasks:

- Create and use a serverless Aurora MySQL compatible database
- Create and use Amazon DynamoDB database

# Lab 6: Getting started with AWS Containers

## Overview

This lab introduces AWS Container Services

## Tasks to perform

Perform the following tasks:

- Create and use a Fargate application
- Create an Amazon ECR (Elastic Container Registry)
- Push a container to Amazon ECR