



# **Developing on Aws**

### **Description**

In this course, you will learn how to use the AWS SDK to develop secure and scalable cloud applications. We will explore how to interact with AWS using code and discuss key concepts, best practices, and troubleshooting tips.

### **Course Objectives**

In this course, you will learn to:

- Set up the AWS SDK and developer credentials for Java, C#/.NET, Python, and JavaScript
- Interact with AWS services and develop solutions by using the AWS SDK
- Use AWS Identity and Access Management (IAM) for service authentication
- Use Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as data stores
- Integrate applications and data by using AWS Lambda, Amazon API Gateway, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and AWS Step Functions
- Use Web Identity Framework and Amazon Cognito for user authentication
- Use Amazon ElastiCache to improve application scalability
- Use containers in the development process
- Leverage the CI/CD pipeline to deploy applications on AWS

### **Course Content**

#### 1. Building the Foundation

• Introduction to Developing on AWS





- Choosing a Data Store
- Developing Storage Solutions with Amazon S3
- Developing Flexible NoSQL Solutions with Amazon DynamoDB

#### 2. Connecting Applications and Data with Event-Driven Processing Working with Events

- Developing Event-Driven Solutions with Amazon Kinesis Streams
- Developing Event-Driven Solutions with Amazon SWF, Amazon SQS, and Amazon SNS
- Developing Event-Driven Solutions with AWS Lambda

#### 3. Developing and Deploying Secure, Scalable Applications

- Developing Secure Applications
- Caching Information for Scalability
- Monitoring Your Application and AWS Resources with Amazon CloudWatch
- Deploying Applications with AWS Elastic Beanstalk and AWS CloudFormation

# LABS

• You will spend approximately 50% of class time completing hands-on labs

# **Pre-Requisites**

- familiarity with Aws services
- A working knowledge of java, c#/.Net, or python
- Aws Technical Essentials





### **RELATED CERTIFICATIONS**

• AWS Certified Developer - Associate

# FOLLOW-ON COURSES

- DevOps Engineering on AWS
- Advanced Developing on AWS