

# **Developing on AWS**

**Modality: Virtual Classroom**

**Duration: 4 Days**

## **About this Course:**

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

## **Course Objectives:**

- 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 Amazon ElastiCache to improve application scalability
- Develop Secure Solutions

## **Audience:**

- Intermediate-level software developers

## **Prerequisites:**

We recommend that attendees of this course have the following prerequisites:

- In-depth knowledge of at least one high-level programming language (Java, C#, or Python)
- Working knowledge of core AWS services and public cloud implementation
- AWS Technical Essentials

## **Course Outline:**

This course is delivered through a mix of:

- Classroom training
- Demonstrations
- Hands-on labs

This course covers the following concepts:

- Introduction to AWS
- Introduction to Developing on AWS
- Introduction to AWS Identity and Access Management
- Developing Storage Solutions with Amazon S3
- Developing Flexible NoSQL Solutions with Amazon DynamoDB
- Developing Solutions with AWS Lambda
- Developing Solutions with Amazon API Gateway
- Developing Solutions with Amazon SQS and Amazon SNS
- Developing Event-Driven Solutions with AWS Step Functions
- Caching Information for Scalability
- Developing Secure Solutions
- Developing Applications