

## Developing on AWS (3 Days)

Developing on AWS helps developers understand how to use the AWS SDK to develop secure and scalable cloud applications. The course provides in-depth knowledge about how to interact with AWS using code and covers key concepts, best practices, and troubleshooting tips.

### Skills Gained

This course is designed to teach you how to:

- Set up the AWS SDK and developer credentials for Java, C#/.Net, Python, and JavaScript.
- Use the AWS SDK to interact with AWS services and develop solutions.
- Use Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as data stores.
- Integrate applications and data by using Amazon Kinesis, AWS Lambda, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and Amazon Simple Workflow Service Amazon SWF).
- Use AWS Identity and Access Management (IAM) for service authentication.
- Use Web Identity Framework and Amazon Cognito for user authentication.
- Use Amazon ElastiCache and Amazon CloudFront to improve application scalability.
- Deploy applications by using AWS Elastic Beanstalk and AWS CloudFormation.

### Who Can Benefit

This course is intended for:

- Intermediate-level software developers

### Prerequisites

Attendees should have the following prerequisites:

- Familiarity with AWS services
- A working knowledge of Java, C#/.Net, or Python

### Course Details

#### Day 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

**Day 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

**Day 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