DEVELOPING ON AWS WITH AWS JAM

Course Code: 910009

Learn how to use the AWS SDK to develop secure and scalable cloud applications using multiple AWS services.

Design and build secure, reliable, and scalable AWS-based applications.

In this course, you learn how to use the AWS SDK to develop secure and scalable cloud applications using multiple AWS services such as Amazon DynamoDB, Amazon Simple Storage Service, and AWS Lambda. You explore how to interact with AWS using code and learn about key concepts, best practices, and troubleshooting tips.

The final day of this course is the Developing on AWS Jam, a gamified activity with teams competing to win by completing a series of hands-on challenges on the AWS platform over the course of the day. Participants will have the opportunity to develop, enhance, and validate skillsets in the AWS Cloud through real-world problem solving

What You'll Learn

- 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 Cognito for user authentication
- Use Amazon ElastiCache to improve application scalability
- Leverage the CI/CD pipeline to deploy applications on AWS
- Final Day of Developing on AWS Jam
    - ⬚ Hands-on format, putting learners in the driver's seat to make decisions and solve problems in an active AWS Cloud environment to amplify understanding
    - ⬚ Develop your skillsets in the AWS Cloud to advance your cloud adoption journey

Reinforce your learning while it's still fresh in your head

Who Needs to Attend

This course is intended for Software developers, Solution architects and IT professionals who want to improve their developing skills using AWS Services.

Prerequisites

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

- In-depth knowledge of at least one high-level programming language
- Working knowledge of core AWS services and public cloud implementation

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CLASSROOM LIVE	$2,665 CAD	4 Day

Classroom Live Outline

Day 1

Module 0: Course Overview

- Agenda
- Introductions
- Student resources

Module 1: Introduction to AWS

- Introduction to the AWS Cloud
- Cloud scenarios
- Infrastructure overview
- Introduction to AWS foundation services

Module 2: Introduction to Developing on AWS

- Getting started with developing on AWS
- Introduction to developer tools
- Introduction to management tools

Module 3: Introduction to AWS Identity and Access Management

- Shared responsibility model
- Introduction to IAM
- Use authentication and authorization

Module 4: Introduction to the Lab Environment

- Introduction to the lab environment

Module 5: Developing Storage Solutions with Amazon Simple Storage Service

- Overview of AWS storage options
- Amazon S3 key concepts
- Best practices
- Troubleshooting

- Scenario: Building a complete application

Day 2

Module 6: Developing Flexible NoSQL Solutions with Amazon DynamoDB

- Introduction to AWS database options
- Introduction to Amazon DynamoDB
- Developing with DynamoDB
- Best practices
- Troubleshooting
- Scenario: Building an end-to-end app

Module 7: Developing Event-Driven Solutions with AWS Lambda

- What is serverless computing?
- Introduction to AWS Lambda
- Key concepts
- How Lambda works
- Use cases
- Best practices
- Scenario: Build an end-to-end app

Module 8: Developing Solutions with Amazon API Gateway

- Introduction to Amazon API Gateway
- Developing with API Gateway
- Best practices
- Introduction to AWS Serverless Application Model
- Scenario: Building an end-to-end app

Module 9: Developing Solutions with AWS Step Functions

- Understanding the need for Step Functions
- Introduction to AWS Step Functions
- Use cases

Day 3

Module 10: Developing Solutions with Amazon Simple Queue Service and Amazon Simple Notification Service

- Why use a queueing service?
- Developing with Amazon Simple Queue Service
- Developing with Amazon Simple Notification Service
- Developing with Amazon MQ

Module 11: Caching Information with Amazon ElastiCache

- Caching overview
- Caching with Amazon ElastiCache
- Caching strategies

Module 12: Developing Secure Applications

- Securing your applications
- Authenticating your applications to AWS

- Authenticating your customers
- Scenario: Building an end-to-end app

Module 13: Deploying Applications

- Introduction to DevOps
- Introduction to deployment and testing strategies
- Deploying applications with AWS Elastic Beanstalk
- Scenario: Building an end-to-end app

Module 14: Course wrap-up

- Course overview
- AWS training courses
- Certifications

Day 4

Developing on AWS Jam

- Full day of challenges based on real-world scenarios so you can build practical skills
- Facilitated by an expert AWS instructor who can answer questions and give real time feedback
- Validate learning through reports on performance including benchmarks, completion times, and which challenges were the most difficult

Classroom Live Labs

- Lab 1: Getting started and working with IAM
- Lab 2: Developing storage solutions with Amazon S3
- Lab 3: Developing flexible NoSQL solutions with Amazon DynamoDB
- Lab 4: Developing event-driven solutions with AWS Lambda
- Lab 5: Developing messaging solutions with Amazon SQS and Amazon SNS
- Lab 6: Building an end-to-end app

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VIRTUAL CLASSROOM LIVE	$2,665 CAD	4 Day

Virtual Classroom Live Outline

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Day 2

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- Best practices
- Troubleshooting
- Scenario: Building an end-to-end app

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- Best practices
- Scenario: Build an end-to-end app

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- Best practices
- Introduction to AWS Serverless Application Model
- Scenario: Building an end-to-end app

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PRIVATE GROUP TRAINING	4 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.