

# AWS-DEV (DEVELOPING ON AWS) 4.2.

## Objetivo

In this course, you will learn to:

- Build a simple end-to-end cloud application using AWS Software Development Kits (AWS SDKs), Command Line Interface (AWS CLI), and IDEs.
- Configure AWS Identity and Access Management (IAM) permissions to support a development environment.
- Use multiple programming patterns in your applications to access AWS services.
- Use AWS SDKs to perform CRUD (create, read, update, delete) operations on Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB resources.
- Build AWS Lambda functions with other service integrations for your web applications.
- Understand the benefits of microservices architectures and serverless applications to design.
- Develop API Gateway components and integrate with other AWS services.
- Explain how Amazon Cognito controls user access to AWS resources.
- Build a web application using Cognito to provide and control user access.
- Use DevOps methodology to reduce the risks associated with traditional application releases and identify AWS services that help in implementing DevOps practices.
- Use AWS Serverless Application Model (AWS SAM) to deploy an application.
- Observe your application build using Amazon X-Ray.

## Público Alvo

Intended audience This course is intended for experienced:

- Software developers
- Solution architects
- IT workers who want to improve their developing skills using AWS Services

## Pré-requisitos

We recommend that attendees of this course have:

- AWS Technical Essentials
- Working knowledge of AWS core services
- Programming experience in any one of the following languages: Java Python .NET

## Carga Horária

24 horas (3 dias).

## Conteúdo Programático

Course outline

Day 1

- Module 1: Course Overview
- Module 2: Building a Web Application on AWS
- Module 3: Getting Started with Development on AWS
- Module 4: Getting Started with Permissions
- Lab 1: Configure the Developer Environment
- Module 5: Getting Started with Storage
- Module 6: Processing Your Storage Operations

- Lab 2: Develop Solutions Using Amazon S3

#### Day 2

- Module 7: Getting Started with Databases
- Module 8: Processing Your Database Operations
- Lab 3: Develop Solutions Using Amazon DynamoDB
- Module 9: Processing Your Application Logic
- Lab 4: Develop Solutions Using AWS Lambda Functions
- Module 10: Managing the APIs
- Lab 5: Develop Solutions Using Amazon API Gateway

#### Day 3

- Module 11: Building a Modern Application
- Module 12: Granting Access to Your Application Users
- Lab 6: Capstone - Complete the Application Build
- Module 13: Deploying Your Application
- Module 14: Observing Your Application
- Lab 7: Observe the Application Using AWS X-Ray
- Module 15: Course Wrap-up