

## **AWS Developer Course Content**

### **Course Description:**

AWS developer is a software developer who has responsibility in developing, deploying, and debugging cloud-based applications using AWS cloud services and products. AWS is a leading cloud platform because of its wide variety of features and services. AWS developer tools are a set of services designed to enable developers and IT operation professionals to deliver software quickly and securely. An AWS developer must possess the knowledge of AWS architecture best practices, core AWS services, and uses. The key responsibility of AWS certified developer is to design, deploy, maintain, and update the applications cloud infrastructure. This AWS Developer course is designed for software developers who want to learn how to develop cloud applications on the AWS platform.

At Hachion, we have experienced subject matter specialists who are also corporate professionals with 8 years of experience in handling real-time AWS projects and training on AWS certification courses. Hachion implements a blend of academic learning and practical sessions during the AWS training. The course will help you to learn all the fundamentals of AWS services to understand IT solutions, AWS SDK to develop cloud applications. Hachion AWS developer course helps the candidate to pass the AWS certified developer associate exam. So get started with Hachion to learn the course to become an AWS Certified Developer.

### **Course Content:**

#### **Introduction to Cloud**

- Introduction to cloud computing and its types
- Types of cloud models
- Various cloud vendors
- AWS overview
- Features and importance of AWS
- AWS services and security
- Use cases and career opportunities in cloud

#### **Best Practices in Cloud Platform**

- Cloud best practices
- Cloud security best practices
- Best practices in Database Service, Compute Service, Network Service, Application Service, Storage Service, Content Delivery Service, Deploy & Management Service

#### **Computing**

- Understanding Amazon Machine Image (AMI)
- Various network interfaces
- IP classification
- Instance and types of Instances, and creating, managing, and troubleshooting Instances
- Hands-on Exercise: Creating an EC2 instance on AWS Management Console and connecting to the system

## **Networking**

- Introduction to Virtual Private Cloud (VPC)
- Basics of cloud networking
- VPC components
- Custom route tables
- VPC peering
- Public and private subnets
- Configuring subnets
- Fundamentals of Network Address Translation (NAT)
- Route tables
- NAT high-availability design
- NAT server and NAT Gateway
- Hands-on Exercise: Creating a Virtual Private Cloud Ecosystem

## **Storage and Data Management in AWS**

- Overview of various storage services by AWS
- Storage limits, storage gateway and security
- Overview of Elastic Block Storage
- Glacier overview
- Principles of Amazon S3, encryption and S3, S3 CORS, Snowball, and Storage troubleshooting
- Hands-on Exercise: Uploading and downloading data from Amazon S3

## **Auto scaling and Load Balancing**

- Auto scaling
- Version updates using auto scaling
- Load balancing with AWS
- Classic Load Balancer
- Application Load Balancer
- Identifying and distinguishing high availability on AWS
- Hands-on Exercise: Scale out and scale in the number of servers with Auto Scaling

## **Security**

- Introduction to IAM, groups, user administration and permission
- Security of AWS account, MFA,
- Security and logging, and policies within the shared responsibility model
- Hands-on Exercise: Creating IAM users, role, group, and policies in AWS Management Console

## **Development with AWS Services**

- Procedure for Boto3 Python
- Writing code using AWS SDKs
- AWS API Gateway, and AWS CLI
- Coding for serverless applications

- Access AWS resources, and creating sample program through Boto3 Python
- Refactoring the current on-premise application code and move it to AWS
- Application optimization to get the best results from AWS features

### **Monitoring and Troubleshooting**

- Introduction to cloud monitoring
- Concepts of CloudWatch
- Logging basics
- Tracking API usage and user action with AWS CloudTrail, and with CloudWatch logs troubleshooting
- Hands-on Exercise: Allowing CloudTrail Log into S3 bucket and working

### **CI/CD and Containerization in AWS**

- What is Containerization
- Introduction to Docker
- Common Docker Commands
- Introduction to ECS
- What is CI/CD?
- CI/CD in AWS: AWS CodePipeline, AWS CodeDeploy, AWS CodeCommit