TechyEdz Solutions

A Blended Learning Approach



AWS Developer Associate









AWS Certified Developer – Associate (DVA-C01)

Course Overview:

This AWS Certified Developer - Associate (DVA-C01) examination is intended for individuals who perform a developer role. This course for intermediate-level students begins with an overview of the fundamentals of Cloud computing, then moves you through an in-depth curriculum on developing, deploying, and maintaining applications — especially Serverless ones — on AWS.

Lesson Course Outline:

Cloud Basics

- > IAAS(Infrastructure As A Service)
- > PAAS(Platform As A Service)
- > SAAS(Software As A Service)

Introduction to AWS

- > Compute
- > Storage
- Database
- Networking
- Security
- > Applications

Deployment

- ➤ Deploy written code in AWS using existing CI/CD pipelines, processes, and patterns
- Deploy applications using Elastic Beanstalk
- Prepare the application deployment package to be deployed to AWS
- Deploy serverless applications

Security

- Make authenticated calls to AWS services.
- Implement encryption using AWS services

> Implement application authentication, and authorization

Development with AWS Services

- Write code for serverless applications
- > Translate functional requirements into application design
- > Implement application design into application code
- Write code that interacts with AWS services by using APIs, SDKs, and AWS CLI

Refactoring

- Optimize application to best use AWS services and features
- Migrate existing application code to run on AWS

Virtual Private Cloud

- > VPC
- > Subnets
- > Route Tables
- > Internet gateway

EC2

- > On-demand
- Reserved
- > Spot Instance
- > Scheduled instance

Storage

- > Standard
- > Standard Infrequent Access
- > Standard Intelligent Tier
- > S3 Glacier
- > S3 Glacier Deep

Load balancing and Autoscaling

- Classic Load balancer
- > Application Load balancer

> Network Load balancer

Route 53

- > Simple
- > Weighted
- > Geological
- Latency
- > Failover

Cloud Front

- > Origins and Origin groups
- > Behaviors
- > Restrictions
- > Invalidations

IAM

- Users
- > Groups
- > Roles
- Polices

Relational Database Service

- Aurora
- > MySQL
- MsSQL
- MariaDB
- PostgreSQL
- Oracle

Dynamo DB

- > Scaling through performance
- > Server less environment
- Microservices



Cloud Watch

- > Events
- Logs
- Metrics
- Alarms

Application Services

- > Simple E-mail Service
- > Simple Queue Services
- > Simple Notification Service

Design and Architecture

- > Operational excellence
- > Reliability
- > Security
- > Cost optimization
- > Performance efficiency

Monitoring and Troubleshooting

- Write code that can be monitored
- Perform root cause analysis on faults found in testing or production

Prerequisites:

- An AWS CCP or CSA-A certification is preferred, but not required.
- In-depth knowledge of at least one high-level programming language
- Understanding of core AWS services, uses, and basic AWS architecture best practices
- Proficiency in developing, deploying, and debugging cloud-based applications using AWS
- Ability to use the AWS service APIs, AWS CLI, and SDKs to write applications
- Ability to identify key features of AWS services
- Understanding of the AWS shared responsibility model

- Understanding of application lifecycle management
- Ability to use a CI/CD pipeline to deploy applications on AWS
- Ability to use or interact with AWS services
- Ability to apply a basic understanding of cloud-native applications to write code
- Ability to write code using AWS security best practices (e.g., not using secret and access keys in the code, instead using IAM roles)
- Ability to author, maintain, and debug code modules on AWS
- Proficiency writing code for serverless applications
- Understanding of the use of containers in the development process

Who Can Attend:

- Existing developers, Systems Engineers, SysOps Engineers, DevOPs Engineers, Architects
- People interested in hosting highly scaleable, fault tolerant applications on the AWS cloud
- Number of Hours: 40hrs
- Certification: AWS Certified Developer Associate (DVA-C01)
- Key Features:
- One to One Training
- Online Training
- Fastrack & Normal Track
- > Resume Modification
- Mock Interviews
- Video Tutorials
- Materials
- Real Time Projects
- Virtual Live Experience
- Preparing for Certification