AWS Developer Associate

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Program **Overview:**

Enhance your proficiency with the Amazon Web Services (AWS) cloud platform. The AWS Developer Associate Certification will empower you to develop and deploy robust AWS cloud applications. This course combines instructor-led training courses, live demonstrations, hands-on exercises, and simulation exams to help you pass the exam on your first attempt. You will master the implementation of cloud security best practices and understand what it takes to become an AWS Developer Associate.

Program **Features:**

> 28 hours of instructor-led training

> 3 simulation exams (60 questions each)

> 16 live demos of AWS services

> 3 hands-on practice projects, with AWS console

> Practice assignment after every lesson

> AWS select technology partner

Delivery **Mode:**

Live Virtual Classes

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Prerequisites:

To apply for the AWS Developer Associate certification, you should:

> Complete the AWS Technical Essentials course, OR have significant hands-on professional experience with various AWS services
> Understand stateless and loosely coupled distributed applications
> Be familiar with the development of API interfaces
> Have a basic understanding of relational and non-relational databases and familiarity with messaging and queuing services

Target Audience:

The AWS Certified Developer Associate Level exam is designed for developers with at least one year of experience coding solutions using AWS for Amazon Simple Storage Service, Amazon DynamoDB, Amazon Simple Queue Service, Amazon Simple Notification Service, Amazon Simple Workflow Service, AWS Elastic Beanstalk, and AWS CloudFormation.

Key Learning Outcomes:

By the end of this online AWS Developer Associate course, you will be able to:

> Write code and design scalable applications
> Implement application security and testing
> Develop expertise with key AWS components such as S3, DynamoDB, Elastic Beanstalk, and CloudFormation

Certification Details and Criteria:

> Complete one batch of live classes
> Complete one project and one simulation test with a minimum score of 60 percent

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Course **Curriculum:**

AWS Overview

> Overview of Cloud Computing
> QUIZ: Test Your Cloud Computing Skills
> Identify the Main Events in the History of AWS
> Quiz: Test Your Skills of History of AWS
> Various AWS Platform
> QUIZ: Test Your AWS Platform Skills
> Understand AWS Global Infrastructure and Security
> Different AWS Services

Identity Access Management- IAM

> Overview of Identity and Access Management (IAM)
> IAM Features
> QUIZ: Check Your Knowledge of IAM and Features
> Elements of IAM: Identities, Policies, and Resources
> Identify Key IAM Terms and Policy Document
> Analyze a Sample JSON Script
> QUIZ: Check Your Knowledge of IAM Policy and Resources
> List of IAM Best Practices and Important Facts
> QUIZ: Check Your Knowledge of IAM Permission
> List of IAM Access Keys and Temporary Security Credentials
> AWS Policy Evaluation Process
> QUIZ: Check Your Knowledge of IAM Security Credentials
> Identity Federation Using Three Use Cases
> IAM as Single Sign On (SSO)
> QUIZ: Check Your Knowledge of IAM System Access
> IAM Key Takeaways
> Quiz: To Check Your Knowledge of IAM

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Elastic Cloud Compute- EC2

> Overview of Elastic Cloud Computing
> Identify EC2 Benefits and Related Terminology
> EC2 Instance Types and Resource Usage
> EC3 Instance Types, Families, and Purchasing Options
> Difference Between Root Volume in Instance Store and EBS
> QUIZ: Test Your Knowledge of EC2 and EBS
> Overview of Amazon Machine Images
> Identify the Flow of an Instance Lifecycle
> Instance Store/EBS as Root Volume Types
> Definition of Amazon EFS
> QUIZ: Test Your Knowledge of EBS and AMI
> Create IAM Roles with ECS
> Various Security Groups
> Meta Data and User Data in EC2
> Overview of Placement Groups
> Elastic Load Balancer and Auto Scaling in EC2
> QUIZ: Test Your Knowledge of ELB, Meta Data

Amazon Simple Storage Service (S3)

> Basic Concept and Overview of Simple Storage Service (S3)
> S3 Buckets and Identify Different Storage Classes in S3
> S3 Data Consistency Model
> QUIZ: Test Your Knowledge on S3 Bucket and Storage
> Overview of Version Control and Lifecycle Management
> Definition and Creating Buckets, ACLs, and User Policies
> QUIZ: Test Your Knowledge on S3 Policies
> Host an Static Website on S3
> Work with Cross Origin Resource Sharing
> Describe CloudFront integration with S3
> S3 Transfer Acceleration and Performance Optimization
> QUIZ: Test Your Knowledge on Website on S3

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DB Services

- Basic Concept of Relational Database Service
- Overview and Characteristics of RDS
- Online Transaction Processing
- Features and Availability of DB Instance
- RDS Database Failover Process
- QUIZ: Check the Knowledge of RDS Features
- Overview of ReadReplicas and DB Instance Backups
- Management of DB Instance
- RDS Storage and Maintenance
- Security Groups and Working with DB
- Difference Between Aurora and Other DB Engines
- Overview of Amazon ElastiCache and Redshift

Dynamo DB

- Basic Concepts and Overview of DynamoDB.
- Core components of DynamoDB.
- DynamoDB Primary and Secondary Indexes.
- Purpose of Query and Scan Operations.
- QUIZ: Test Your Knowledge of Concepts of DynamoDB
- Management of Capacity and Throughput in DynamoDB
- Overview of Read/Write Operations.
- QUIZ: Test Your Knowledge of Concepts of Dynamodb Capacity and Throughput
- DynamoDB Access Control and Data Migration
- Web Identity Federation Using Third Party Identity Providers
- QUIZ: Test Your Knowledge of Access Control and Data Migration

Cost Management

- AWS Support Plans for Different AWS Account: Basic, Developer, Business, and Enterprise
- Billing and Cost Management for AWS Console
- AWS Consolidated Billing
- Volume Discounts Features and Benefits for AWS Account
- AWS Trusted Advisor Services
- QUIZ: Test Your Knowledge on AWS Accounts and Billing

Application Services

- Basic Concepts and Overview of SQS
- SQS Architecture and Features
- Queue and Messages Services for SQS
- QUIZ: Test Your Knowledge of SQS Features
- Management of SQS Visibility Timeout
- SQS Message Lifecycle, Dead Letter with Delay Queues
- SQS Long Polling and Important Facts
- QUIZ: Test Your Knowledge on Long Pooling
- SNS Services and its Core Components
- Compared: SNS and SQS
- QUIZ: Test Your Knowledge on SNS
- SWF Services and its Core Components
- Compare SWF with SQS
- QUIZ: Test Your Knowledge of SWF

Management Tools, Lambda and Kinesis

- AWS CloudFormation Features and Template
- AWS Cloud Formation Stacks and How to Work With Them
- QUIZ: Test Your Knowledge on Cloud Formation Features and Template
- Elastic Beanstalk Overview and its Core Components
- Elastic Beanstalk Architecture and supporting Platforms
- Manage Beanstalk Environments
- QUIZ: Test Your Knowledge on Elastic Beanstalk
- Manage Lambda Environments and its Features
- QUIZ: Test Your Knowledge on Lambda
- Overview of Kinesis and Kinesis Client Library
- Cloud Formation, Lambda, and Kinesis Key Takeaways
- QUIZ: Test Your Knowledge on Lambda

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AWS Software Development Kit and Command Line Interface

> Overview of AWS SDK (Software Development Kit)
> Different Programming Languages SDK Supports
> Install AWS SDK for PHP, Configure it, and to Set it Up
> AWS SDK Use with Client Objects
> Manage access credentials for SDK.
> Review AWS SDK for Python or Boto, and its Use for Service Operations
> QUIZ: Test Your Knowledge on AWS SDK PHP
> Command Line Interface Installation and Setup
> Command Line Interface Service Operations
> QUIZ: Test Your Knowledge of CLI

Amazon DNS Service Route 53

> Basic Concepts of Route 53 and its Overview
> Compare Public and Private Hosted Zones
> DNS Resource Record Sets
> Various DNS Routing Policies
> DNS Health Checks for DNS
> Describe DNS Failover Configuration Procedure
> QUIZ: Test your knowledge of Routing Policies

Virtual Private Cloud- VPC

> Overview of VPC
> Types of Subnets and Security Groups
> Creating and Usage of VPC Wizard
> Manually Configuring a VPC
> QUIZ: Test Your Knowledge of Internet Gateway
> Elastic IP for an Instance While Creating a VPC
> Routing Table and Route Priority for VPC
> Compare NACL with Security Groups
> Flow Logs on IP Traffic
> QUIZ: Test your knowledge of Security Group
> Configure NAT Gateway Configuration and Instance
> VPN Connections and VPC Limits
> VPC Peering for VPCs
> Default VPC and its Characteristics

AWS Security Features

> AWS Security Features and its Overview

> Various Shared Responsibility Models

> QUIZ: Test Your Knowledge of AWS Security Models

> AWS Compliance Program

> Difference Between Physical and Environmental Security

> Business Continuity Management

> Network Security and AWS Access Management

> AWS Trusted Advisor Security Service Checks

> QUIZ: Test Your Knowledge of AWS Security and Access Management

> AWS Security Services with Other Amazon Services, such as Amazon Simple Storage Service Security, Elastic Block Storage Security and Amazon Elastic Load Balancing Security

> QUIZ: Test Your Knowledge of AWS Security Services and Other Services

> Describe Amazon Virtual Private Cloud Security, CloudFront Security, and AWS CloudHSM Security

CloudFront and CloudWatch

> CloudFront

> QUIZ: Test Your Knowledge of CloudFront

> CloudWatch

> QUIZ: Test Your Knowledge of CloudWatch

Troubleshooting

> AWS Support

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For more information,please visit our website: https://www.simplilearn.com/cloud-computing/aws-developer-certification-training

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Founded in 2009, Simplilearn is one of the world's leading providers of online training for Digital Marketing, Cloud Computing, Project Management, Data Science, IT Service Management, Software Development and many other emerging technologies. Based in Bangalore, India, San Francisco, California, and Raleigh, North Carolina, Simplilearn partners with companies and individuals to address their unique needs, providing training and coaching to help working professionals meet their career goals. Simplilearn has enabled over 1 million professionals and companies across 150+ countries train, certify and upskill their employees.

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