Introduction

The AWS Certified Developer – Associate Level exam is intended for individuals who perform a Developer role. This exam validates an examinee's ability to:

- Design, develop and deploy cloud based solutions using AWS
- Understand the core AWS services, uses, and basic architecture best practices
- Develop and maintain applications written for Amazon Simple Storage Services (S3), Amazon DynamoDB, Amazon Simple Queue Service (SQS), Amazon Simple Notification Service (SNS), Amazon Simple Workflow Service (SWS), AWS Elastic Beanstalk, and AWS CloudFormation

The knowledge and skills required at this level should include all of the following areas and objective components below.

AWS Knowledge

- Professional experience using AWS technology
- Hands-on experience programming with AWS APIs
- Understanding of AWS Security best practices
- Understanding of automation and AWS deployment tools
- Understanding storage options and their underlying consistency models
- Excellent understanding of at least one AWS SDK

General IT Knowledge

- Understanding of stateless and loosely coupled distributed applications
- Familiarity developing with RESTful API interfaces
- Basic understanding of relational and non-relational databases
- Familiarity with messaging & queuing services

These training courses or other equivalent methodologies will assist in exam preparation:

- Developing on AWS (aws.amazon.com/training/developing)
- In-depth knowledge or training in at least one high-level programming language
- AWS Cloud Computing Whitepapers (aws.amazon.com/whitepapers)
- AWS Documentation (aws.amazon.com/documentation)

Note: This examination blueprint includes weighting, test objectives, and example content. Example topics and concepts are included to clarify the test objectives. They should not be construed as a comprehensive listing of all of the content of this examination.

The table below lists the domains measured by this examination and the extent to which they are represented.

Domain	% of Examination
1.0 AWS Fundamentals	10%
2.0 Designing and Developing	40%
3.0 Deployment and Security	30%
4.0 Debugging	20%
TOTAL	**100%**

Response Limits

The examinee selects from four (4) or more response options the option(s) that best completes the statement or answers the question. Distracters or wrong answers are response options that examinees with incomplete knowledge or skill would likely choose, but are generally plausible responses fitting into the content area defined by the test objective.

Test item formats used in this examination are:

- **Multiple-choice:** examinee selects one option that best answers the question or completes a statement. The option can be embedded in a graphic where the examinee "points and clicks" on their selection choice to complete the test item.
- **Multiple-response:** examinee selects more than one option that best answers the question or completes a statement.
- **Sample Directions:** Read the statement or question and from the response options, select only the option(s) that represent the most correct or best answer(s) given the information.

Content Limits

1 Domain 1.0: AWS Fundamentals

1.1 Identify and recognize cloud architecture considerations, such as fundamental components and effective designs.

Content may include the following:

- How to design cloud services
- Database concepts
- Planning and design
- Familiarity with architectural trade-off decisions (high availability vs. cost, Amazon Relational Database Service (RDS) vs. installing your own database on Amazon Elastic Compute Cloud (EC2))
- Amazon S3, Amazon Simple Workflow Service (SWS), and Messaging
- DynamoDB, AWS Elastic Beanstalk, AWS CloudFormation
- Elasticity and scalability

2 Domain 2.0: Designing and Developing

2.1 Identify the appropriate techniques to code a cloud solution.

Content may include the following:

- Configure an Amazon Machine Image (AMI)
- Programming with AWS APIs

3 Domain 3.0: Deployment and Security

3.1 Recognize and implement secure procedures for optimum cloud deployment and maintenance.

Content may include the following:

- Cloud Security Best Practices

3.2 Demonstrate ability to implement the right architecture for development, testing, and staging environments.

Content may include the following:

- Shared Security Responsibility Model
- AWS Platform Compliance
- AWS security attributes (customer workloads down to physical layer)
- Security Services
- AWS Identity and Access Management (IAM)
- Amazon Virtual Private Cloud (VPC)
- CIA and AAA models, ingress vs. egress filtering, and which AWS services and features fit

4 Domain 4.0: Debugging

Content may include the following:

- General troubleshooting information and questions
- Best Practices in debugging