

### Introduction

The AWS Certified Alexa Skill Builder Specialty Exam (AXS-C01) is intended for individuals who perform an Alexa Skill Builder role. This exam validates an examinee's ability to demonstrate knowledge about building, testing, publishing, and certifying Amazon Alexa skills.

This exam validates an examinee's ability to:

- Explain the value of voice.
- Design the user experience.
- Design the architecture to build the skill.
- Follow AWS and Alexa security best practices for the skill.
- Develop, test, validate, and troubleshoot the skill.
- Manage the skill publishing process and work with the Alexa developer console.
- Manage skill operations and lifecycles.

#### Recommended Amazon and AWS Knowledge

- At least 6 months of hands-on experience building Alexa skills using the Alexa Skills Kit, including skills that incorporate services from the AWS cloud
- Proficiency with a programming language
- Published an Alexa skill

### Exam Preparation

These training courses and materials may be helpful for examination preparation.

#### Alexa Training and Documentation:

- Alexa Skill Builder's Guides: <https://developer.amazon.com/alexa-skills-kit/guides>
- Alexa Skills Kit – Tutorials: <https://developer.amazon.com/alexa-skills-kit/tutorials>
- Alexa Skills Kit – SDKs: <https://developer.amazon.com/docs/sdk/alexa-skills-kit-sdks.html>
- Alexa Skills Kit – Voice Interaction Design: <https://developer.amazon.com/alexa-skills-kit/design>
- Amazon Developer Documentation: <https://developer.amazon.com/alexa>
- Alexa Skills Training Courses: <https://developer.amazon.com/alexa-skills-kit/alexa-skills-developer-training>

#### AWS Documentation:

- AWS Lambda: [https://docs.aws.amazon.com/lambda/index.html#lang/en\\_us](https://docs.aws.amazon.com/lambda/index.html#lang/en_us)
- Amazon EC2: [https://docs.aws.amazon.com/ec2/index.html#lang/en\\_us](https://docs.aws.amazon.com/ec2/index.html#lang/en_us)
- Amazon S3: [https://docs.aws.amazon.com/s3/index.html#lang/en\\_us](https://docs.aws.amazon.com/s3/index.html#lang/en_us)
- Amazon DynamoDB: [https://docs.aws.amazon.com/dynamodb/index.html#lang/en\\_us](https://docs.aws.amazon.com/dynamodb/index.html#lang/en_us)
- Amazon CloudWatch: [https://docs.aws.amazon.com/cloudwatch/index.html#lang/en\\_us](https://docs.aws.amazon.com/cloudwatch/index.html#lang/en_us)
- Amazon CloudFront: [https://docs.aws.amazon.com/cloudfront/index.html#lang/en\\_us](https://docs.aws.amazon.com/cloudfront/index.html#lang/en_us)

#### AWS Whitepapers ([aws.amazon.com/whitepapers](https://aws.amazon.com/whitepapers)), Kindle, and .pdf

- AWS Security Best Practices: <https://aws.amazon.com/whitepapers/aws-security-best-practices/>

## Exam Content

### Response Types

There are two types of questions on the examination:

- **Multiple-choice:** Has one correct response and three incorrect responses (distractors).
- **Multiple-response:** Has two or more correct responses out of five or more options.

Select one or more responses that best complete the statement or answer the question. Distractors, or incorrect answers, are response options that an examinee with incomplete knowledge or skill would likely choose. However, they are generally plausible responses that fit in the content area defined by the test objective.

Unanswered questions are scored as incorrect; there is no penalty for guessing.

### Unscored Content

Your examination may include unscored items that are placed on the test to gather statistical information. These items are not identified on the form and do not affect your score.

### Exam Results

The AWS Certified Alexa Skill Builder Specialty Exam (AXS-C01) is a pass or fail exam. The examination is scored against a minimum standard established by Amazon Alexa professionals who are guided by certification industry best practices and guidelines.

Your results for the examination are reported as a score from 100–1,000, with a minimum passing score of 750. Your score shows how you performed on the examination as a whole and whether or not you passed. Scaled scoring models are used to equate scores across multiple exam forms that may have slightly different difficulty levels.

Your score report contains a table of classifications of your performance at each section level. This information is designed to provide general feedback concerning your examination performance. The examination uses a compensatory scoring model, which means that you do not need to “pass” the individual sections, only the overall examination. Each section of the examination has a specific weighting, so some sections have more questions than others. The table contains general information, highlighting your strengths and weaknesses. Exercise caution when interpreting section-level feedback.

### Content Outline

This exam guide includes weightings, test domains, and objectives only. It is not a comprehensive listing of the content on this examination. The table below lists the main content domains and their weightings.

| Domain   | % of Examination |
|--|------------------|
| Domain 1: Voice-First Design Practices and Capabilities    | 14%              |
| Domain 2: Skill Design                                     | 24%              |
| Domain 3: Skill Architecture                               | 14%              |
| Domain 4: Skill Development                                | 20%              |
| Domain 5: Test, Validate, and Troubleshoot                 | 18%              |
| Domain 6: Publishing, Operations, and Lifecycle Management | 10%              |
| <b>TOTAL</b>   | <b>100%</b>      |

**Domain 1: Voice-First Design Practices and Capabilities**

- 1.1 Describe how users interact with skills
- 1.2 Map features and capabilities to use cases

**Domain 2: Skill Design**

- 2.1 Design and develop an interaction model
- 2.2 Design a multi-turn conversation
- 2.3 Use built-in intents and slots
- 2.4 Handle unexpected conversational requests or responses
- 2.5 Design multi-modal skills using one or more service interfaces (for example, audio, video, and gadgets)

**Domain 3: Skill Architecture**

- 3.1 Identify AWS services for extending Alexa skill functionality (Amazon CloudFront, Amazon S3, Amazon CloudWatch, and Amazon DynamoDB)
- 3.2 Use AWS Lambda to build Alexa skills
- 3.3 Follow AWS and Alexa security and privacy best practices

**Domain 4: Skill Development**

- 4.1 Implement in-skill purchasing and Amazon Pay for Alexa Skills
- 4.2 Use Speech Synthesis Markup Language (SSML) for expression and MP3 audio
- 4.3 Implement state management
- 4.4 Implement Alexa service interfaces (audio player, video player, and screens)
- 4.5 Parse Alexa JSON requests and provide responses

**Domain 5: Test, Validate, and Troubleshoot**

- 5.1 Debug and troubleshoot using Amazon CloudWatch or other tools
- 5.2 Use the Alexa developer testing tools
- 5.3 Perform beta testing
- 5.4 Troubleshoot errors in the interaction model

**Domain 6: Publishing, Operations, and Lifecycle Management**

- 6.1 Describe the skill publishing process
- 6.2 Add and remove users in the developer console
- 6.3 Perform analysis of skill analytics in the developer console
- 6.4 Differentiate among the statuses/versions of skills (for example, In Development, In Certification, and Live)