

# AWS Certified Alexa Skill Builder Specialty (AXS-C01)

## Introduction

The AWS Certified Alexa Skill Builder - Specialty (AXS-C01) examination 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.

# **Course Objective**

This course teaches you about core aspects such as:

- The value of voice
- The user experience
- Designing the architecture in order to build the skill
- AWS and Alexa security best practices for the skill
- Developing, testing, validating, and troubleshooting the built skill
- Managing the skill-publishing process and working with the Alexa Developer Console
- Managing multiple skill operations and life cycles

#### **Course Outline**

## **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

#### **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 provides 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

# **Prerequisites**

- Proficiency with a programming language
- 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

# **Target Audience**

This certification is designed for software developers who have experience in any programming language and have a basic understanding of Alexa skills. Any IT professional looking for a career in voice services can go for this certification.

#### **Duration**

16 Hours Training Course