AWS Certified AI Practitioner (AIF-C01)

The AWS Certified AI Practitioner course is designed for beginners and professionals. The course provides an overview of generative AI, planning a generative AI project, getting started with Amazon Bedrock, the foundations of prompt engineering, and the architecture patterns to build generative AI applications using Amazon Bedrock and LangChain.

Prerequisites

Recommended AWS knowledge

- Familiarity with the core AWS services (for example, Amazon EC2, Amazon S3, AWS Lambda, and Amazon SageMaker AI) and AWS core services use cases.

- Suggested to have up to 6 months of exposure to AI and ML technologies on AWS.

- Are familiar with, but do not necessarily build, solutions using AI and ML technologies on AWS.

- Familiarity with the AWS shared responsibility model for security and compliance in the AWS Cloud.

- Familiarity with AWS Identity and Access Management (IAM) for securing and controlling access to AWS resources.

- Familiarity with the AWS global infrastructure, including the concepts of AWS Regions, Availability Zones, and edge locations.

- Familiarity with AWS service pricing models.

Course outline

Introduction

Domain 1: Fundamentals of AI and ML

1.1: Explain basic AI concepts and terminologies

1.2: Identify practical use cases for AI

1.3: Describe the ML development lifecycle

Domain 2: Fundamentals of Generative AI

2.1: Explain the basic concepts of generative AI

2.2: Understand the capabilities and limitations of generative AI for solving business problems

2.3: Describe AWS infrastructure and technologies for building generative AI applications

Domain 3: Applications of Foundation Models

3.1: Describe design considerations for applications that use foundation models

3.2: Choose effective prompt engineering techniques

3.3: Describe the training and fine-tuning process for foundation models

3.4: Describe methods to evaluate foundation model performance

Domain 4: Guidelines for Responsible AI

4.1: Explain the development of AI systems that are responsible

4.2: Recognize the importance of transparent and explainable models

Domain 5: Security, Compliance, and Governance for AI Solutions

5.1: Explain methods to secure AI systems

5.2: Recognize governance and compliance regulations for AI systems