

AI – 100T01-A: Designing and Implementing an Azure AI Solution



Days: 3

Prerequisites: Successful Azure AI Engineers start this role with professional experience with cloud technologies, and experience with software development kits.

Specifically:

- Implementing solutions in C# or Python
- Application development in the cloud
- Understanding Azure storage technologies

To gain these prerequisite skills, take the following free online training before attending the course:

- Explore Microsoft Azure cloud concepts
- Take your first steps with C# or Take your first steps with Python
- Core Cloud Services – Introduction to Azure
- Core Cloud Services – Azure compute options

If you are completely new to Azure AI services, please complete Microsoft Azure AI Fundamentals first.

Audience: This course is aimed at Cloud Solution Architects, Azure artificial intelligence designers, and AI developers.

Description: Gain the necessary knowledge for designing Azure AI solution by building a customer support chat Bot using artificial intelligence from the Microsoft Azure platform including language understanding and pre-built AI functionality in the Azure Cognitive Services.

OUTLINE

MODULE 1: INTRODUCING AZURE COGNITIVE SERVICES

The student will learn about the available Cognitive Services on Microsoft Azure and their role in architecting AI solutions.

Lessons

- Overview of Azure Cognitive Services
- Creating a Cognitive Service on the Azure Portal
- Access and Test a Cognitive Service

MODULE 2: CREATING BOTS

The student will learn about the Microsoft Bot Framework and Bot Services.

Lessons

- Introducing the Bot Service
- Creating a Basic Chat Bot
- Testing with the Bot Emulator

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MODULE 3: ENHANCING BOTS WITH QNA MAKER

The student will learn about the QnA Maker and how to integrate Bots and QnA Maker to build up a useful knowledge base for user interactions.

Lessons

- Introducing QnA Maker
- Implement a Knowledge Base with QnA Maker
- Integrate QnA with a Bot

MODULE 4: LEARN HOW TO CREATE LANGUAGE UNDERSTANDING FUNCTIONALITY WITH LUIS

The student will learn about Language Understanding with Intents and Utterances (LUIS) and how to create intents and utterances to support a natural language processing solution.

Lessons

- Introducing Language Understanding
- Create a new LUIS Service
- Build LUIS

MODULE 5: ENHANCING YOUR BOTS WITH LUIS

The student will learn about integrating LUIS with a Bot to better understand the users' intentions when interacting with the Bot.

Lessons

- Overview of language understanding for AI applications
- Integrate LUIS and Bot to create an AI-based solution

MODULE 6: INTEGRATE COGNITIVE SERVICES WITH BOTS AND AGENTS

The student will learn about integrating Bots and Agents with Azure Cognitive Services for advanced features such as sentiment analysis, image and text analysis, and OCR and object detection.

Lessons

- Understand Cognitive Services for Bot Interactions
- Perform Sentiment Analysis for your Bot with Text Analytics
- Detect Language in a Bot with the Language Cognitive Services
- Integrate Computer Vision with Bots