

AI 3016- Develop Generative AI Apps in Azure

Days: 1



Prerequisites: Before starting this module, you should be familiar with fundamental AI concepts and services in Azure.

Description: Generative Artificial Intelligence (AI) is becoming more accessible through easy-to-use platforms like Azure AI Studio. Learn how to build generative AI applications like custom copilots that use language models and prompt flow to provide value to your users.

OUTLINE:

LESSON 1 - PLAN AND PREPARE TO DEVELOP AI SOLUTIONS ON AZURE

- What is AI?
- Foundry Tools
- Microsoft Foundry
- Developer tools and SDKs
- Responsible AI
- Module assessment

LESSON 2 - CHOOSE AND DEPLOY MODELS FROM THE MODEL CATALOG IN MICROSOFT FOUNDRY PORTAL

- Explore the model catalog
- Deploy a model to an endpoint
- Optimize model performance
- Module assessment

LESSON 3 - DEVELOP AN AI APP WITH THE MICROSOFT FOUNDRY SDK

- What is the Microsoft Foundry SDK?
- Work with project connections
- Create a chat client
- Module assessment

LESSON 4 - GET STARTED WITH PROMPT FLOW TO DEVELOP LANGUAGE MODEL APPS IN THE MICROSOFT FOUNDRY

- Understand the development lifecycle of a large language model (LLM) app
- Understand core components and explore flow types
- Explore connections and runtimes
- Explore variants and monitoring options
- Module assessment

LESSON 5 - DEVELOP A RAG-BASED SOLUTION WITH YOUR OWN DATA USING MICROSOFT FOUNDRY

- Understand how to ground your language model
- Make your data searchable
- Create a RAG-based client application
- Implement RAG in a prompt flow
- Module assessment

LESSON 6 - FINE-TUNE A LANGUAGE MODEL WITH MICROSOFT FOUNDRY

- Understand when to fine-tune a language model
- Prepare your data to fine-tune a chat completion model
- Explore fine-tuning language models in Microsoft Foundry portal
- Module assessment

LESSON 7 - IMPLEMENT A RESPONSIBLE GENERATIVE AI SOLUTION IN MICROSOFT FOUNDRY

- Plan a responsible generative AI solution
- Map potential harms
- Measure potential harms
- Mitigate potential harms
- Manage a responsible generative AI solution
- Module assessment

LESSON 8 - EVALUATE GENERATIVE AI PERFORMANCE IN MICROSOFT FOUNDRY PORTAL

- Assess the model performance
- Manually evaluate the performance of a model
- Automated evaluations
- Module assessment