

Azure AI Bot Service and Copilot Studio

Duration: 5 days

Courseware: Unofficial PDF/PPT

Lab: Azurepass free or trial subscription will be required

Course Objectives

- Explain the concepts and features of Azure AI Bot Service and Microsoft Copilot Studio
- Create and register a Copilot Studio bot and a Microsoft Entra ID application
- Configure OAuth authentication for secure user access
- Design intents, entities, and conversation flows in Copilot Studio
- Use Azure AI services for natural language understanding and generative AI responses
- Deploy bots to Microsoft Teams, Web Chat, WhatsApp, and other channels
- Automate workflows using Power Automate and Microsoft Graph connectors
- Test, debug, and monitor bot performance using Copilot Studio tools
- Secure bots with Azure Key Vault and OAuth authentication
- Integrate bots with Azure Cognitive Services for advanced AI capabilities

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Day 1: Introduction to Azure AI Bot Service & Microsoft Copilot Studio

- Learn about the basics of Azure AI Bot Service and Microsoft Copilot Studio, including their evolution and benefits.
- You will also learn how to create and register a Copilot Studio bot and a Microsoft Entra ID application, which are essential steps for bot development.
- You will have a chance to see demos of these tasks in Azure Portal and Copilot Studio, followed by a hands-on lab to practice them on your own.
- At the end of the day, you will have a review session to recap the main points and a quiz to test your understanding.

Day 2: Designing Conversations & Integrating AI in Copilot Studio

- Learn how to design intents, entities, and conversation flows in Copilot Studio.
- You will also explore Azure AI services for natural language understanding (NLU) and integrate Azure OpenAI for generative AI responses.
- Additionally, you will learn how to add adaptive cards and rich media to bot interactions.
- You will have a chance to see demos of these features in Copilot Studio, followed by a hands-on lab to build and test a conversational flow.
- At the end of the day, you will have a review session to recap the main points and a quiz to test your understanding.

Day 3: Connecting Bots to Channels & Automating Workflows

- Learn how to deploy bots to Microsoft Teams, Web Chat, WhatsApp, and other channels.
- You will also explore Power Automate for workflow automation and integrate Microsoft Graph connectors (e.g., GitHub, Trello, Asana).
- Additionally, you will learn how to configure event-driven triggers for dynamic responses.
- You will have a chance to see demos of these integrations, followed by a hands-on lab to connect a bot to Teams and automate a workflow using Power Automate.
- At the end of the day, you will have a review session to recap the main points and a quiz to test your understanding.

Day 4: Testing, Debugging, and Deploying Bots

- Learn how to use Copilot Studio's built-in testing tools to debug bot interactions and improve accuracy.
- You will also explore deployment options, including Azure App Service and custom environments.
- Additionally, you will learn how to monitor bot performance using Azure Application Insights.
- You will have a chance to see demos of these tools, followed by a hands-on lab to test and deploy a bot with analytics tracking.
- At the end of the day, you will have a review session to recap the main points and a quiz to test your understanding.

Day 5: Advanced AI Integrations & Security Best Practices

- Learn how to enhance bots with Azure Cognitive Services, including speech recognition, vision analysis, and sentiment detection.
- You will also explore security best practices, such as Azure Key Vault and OAuth authentication.
- Additionally, you will learn how to implement autonomous AI agents for task automation and explore future trends in AI-powered bots.
- You will have a chance to see demos of these integrations, followed by a hands-on lab to apply AI services and security best practices to a bot.
- At the end of the day, you will have a review session to recap the main points and a quiz to test your understanding.