Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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MS-600T00: Building applications and solutions with Microsoft 365 core services

CODE:	LENGTH:	PRICE:
MCS_MS600T00	40 Hours (5 days)	€2,650.00

Description

This course covers five central elements of Microsoft 365 platform – implementing Microsoft Identity, working with Microsoft Graph, extending and customizing SharePoint, extending Teams, and extending Office. In this course, students will learn how to implement Microsoft Identity and work with Microsoft Graph. Students will also gain the knowledge on UI elements (including Adaptive Cards and UI Fabric), Integration Points (including Microsoft Teams, Office Add-ins, SharePoint Framework, Actionable Messages), and determining workload platform targets. In implementing Microsoft Identity, students will learn to implement Microsoft identity including registering an application, implanting authentication, configuring permissions to consume an API, and creating a service to access Microsoft Graph. In working with Microsoft Graph, students will learn how to access user data, explore query parameters, manage a group lifecycle, access files, and optimize network traffic using Microsoft Graph. In extending and customizing SharePoint, students will learn about SharePoint Framework web parts, extensions, and how to package and deploy a SPFx solution. In extending Teams, students will look at the components of a Teams App, work with webhooks, tabs, and conversational bots. In extending Office, students work with Office Add-ins, task pane add-ins, JavaScript APIs, Office UI Fabric, and actionable messages with adaptive cards.

Audience

Students in this course are interested in Microsoft 365 development platform or in passing the Microsoft 365 Developer Associate certification exam. Students should also have 1-2 years experience as a developer. This course assumes students know how to code and have a basic understanding of REST APIs, JSON, OAuth2, OData, OpenID Connect, Microsoft identities including Azure AD and Microsoft accounts, Azure AD B2C, and permission/consent concepts.

Prerequisites

Before attending this course, students should have:
1-2 years experience as a developer. This course assumes students know how to code and have a basic understanding of REST APIs, JSON, OAuth2, OData, OpenID Connect, Microsoft identities including Azure AD and Microsoft accounts, Azure AD B2C, and permission/consent concepts.
It is recommended that students have some experience developing solutions on Microsoft Teams, Office Add-ins, or SharePoint Framework through all phases of software development.

Programme

Module 1: Implement Microsoft Identity
In this module, you will learn to implement Microsoft identity including registering an application, implanting authentication, configuring permissions to consume an API, and creating a service to access Microsoft Graph.
Lessons
Getting Started with Microsoft Identity
Application types in Microsoft identity
Permissions and Consent Framework
Secure custom APIs with Microsoft Identity
Work with users, groups, and roles in custom apps and APIs
Lab : Implement Microsoft identity
Exercise - Different types of tokens used in Microsoft identity
Exercise - Single-page apps
Exercise - Web apps that sign in users and call APIs
Exercise - Daemon and non-interactive apps
Exercise - Understanding permissions and the consent framework in the Microsoft identity platform
Exercise - Delegated permissions and consent

Exercise - Application permissions and consent
Exercise - Create and secure a web API with Microsoft identity
Exercise - Call secured APIs from web applications
Exercise - Call secured APIs from daemon apps
Exercise - Create and secure a web app with Microsoft identity
Exercise - Utilize security groups in custom apps and APIs secured with Microsoft identity
Exercise - Leverage application roles in custom apps
After completing this module, students will be able to:
Register an application in Azure AD
Implement authentication
Configure permissions to consume an API
Create a service to access Microsoft Graph
Module 2: Build apps with Microsoft Graph
In this module you will learn how to access user data, explore query parameters, manage a group lifecycle, access files, and optimize network traffic using Microsoft Graph.
Lessons
Optimize data usage with query parameters
Optimize network traffic with Microsoft Graph
Access user data from Microsoft Graph
Manage Group lifecycle with Microsoft Graph
Access Files with Microsoft Graph
Use change notifications and track changes with Microsoft Graph
Lab : Build apps with Microsoft Graph
Exercise - Retrieve and control information returned from Microsoft Graph
Exercise - Expand related entities and search content in Microsoft Graph
Exercise - Reduce traffic with batched requests
Exercise - Understand throttling in Microsoft Graph
Exercise - Avoid throttling and implement throttling strategies
Exercise - Eliminate polling Microsoft Graph with the delta query
Exercise - Working with users in the organization
Exercise -User profiles and related users
Exercise - Modifying users
Exercise - Working with groups in the organization
Exercise - Users and their groups
Exercise - Manage group lifecycle
Exercise - Access and download files from OneDrive
Exercise - Uploading files to OneDrive
Exercise - Work with file relationships and trends in OneDrive
Exercise - Azure AD apps .NET core web APIs
Exercise - Microsoft Graph change notifications
Exercise - Track changes with Microsoft Graph
After completing this module, students will be able to:
Access user data with Microsoft Graph
Work with data using queries on Microsoft Graph
Manage a group lifecycle on Microsoft Graph
Optimize network traffic using Microsoft Graph
Module 3: Extend Microsoft 365
In this module you will learn about SharePoint Framework web parts, extensions, and how to package and deploy a SPFx solution. You will also work with Office Add-ins, task pane add-ins, JavaScript APIs, Office UI Fabric, and actionable messages with adaptive cards.
Lessons
Introduction to customizing and extending SharePoint
Introduction to Office client customization with add-ins
Lab : Extend Microsoft 365
Exercise - Create and configure your SharePoint Online developer tenant
Exercise - Interact with SPFx client-side web parts in modern sites
After completing this module, students will be able to:
Package and deploy a SharePoint Framework solution
Utilize consumption of Microsoft Graph
Work with web parts as Team Tabs
Understanding fundamental components and types of Office Add-ins
Understand Office JavaScript APIs
Understand testing, debugging, and deployment options for Office Add-ins
Module 4: Develop apps for Microsoft Teams
In this module you will look at the components of a Teams App, work with webhooks, tabs, and conversational bots.
Lessons
Overview of building apps for Microsoft Teams
Task-oriented interactions with messaging extensions
Tabs in Microsoft Teams

Create interactive conversational bots
Collect input with task modules
Webhooks in Microsoft Teams
The Microsoft Graph teamwork endpoint
Authentication and single sign-on in Microsoft Teams
Lab : Develop apps for Microsoft Teams
Exercise - Create action command messaging extensions
Exercise - Create search command messaging extensions
Exercise - Implement link unfurling messaging extensions
Exercise - Create a custom Microsoft Teams personal tab
Exercise - Create a custom Microsoft Teams channel tab
Exercise - Creating conversational bots
Exercise - Bots in channels and group chats
Exercise - Sending proactive messages from bots
Exercise - Collecting user input with task modules
Exercise - Using adaptive cards and deep links in task modules
Exercise - Using task modules with bots
Exercise - Creating outgoing webhooks
Exercise - Creating incoming webhooks
Exercise - Getting started with the teamwork endpoint
Exercise - Configure a built-in tab with Microsoft Graph
Exercise - Use Microsoft Graph to post to the activity feed
Exercise - Implement single sign-on for Microsoft Teams apps
Exercise - Implement single sign-on with Microsoft Teams tabs
Exercise - Implement single sign-on with Microsoft Teams bots
After completing this module, students will be able to:
Recognize the components of a Teams App
Work with webhooks in Microsoft Teams
Create tabs in Microsoft Teams
Create and register outgoing webhooks

Further Information

Skills gained:

- Implementing Microsoft Identity
- Working with Microsoft Graph
- Determining workload platform targets
- Integration Points, including Microsoft Teams, Office Add-ins, and SharePoint Framework

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.