Building applications and solutions with Microsoft 365 core services

Description

In this course, students will learn how to build collaboration solutions leveraging 4 central elements of the Microsoft 365 platform: implementing Microsoft identity, working with Microsoft Graph, extending and customizing Microsoft 365 with SharePoint Framework, and building applications for Microsoft Teams.

Classroom Registration Price (CHF)
3200
Virtual Classroom Registration Price (CHF)
3000
Course Content
Module 1: Getting Started with Microsoft Identity

- Different types of tokens used in Microsoft identity
- Account types in Microsoft identity
- Identity topology options

Module 2: Application types in Microsoft identity

- Single-page applications
- Web apps that sign in users and call APIs
- Daemon and non-interactive apps

Module 3: Permissions and Consent Framework

- Understand the permissions and consent framework in the Microsoft identity platform
- Delegated permissions and consent
- Application permissions and consent

Module 4: Secure custom APIs with Microsoft Identity

- Create and secure a web API with Microsoft identity
- Call secured APIs from web applications
- Call secured APIs from daemon apps

Module 5: Work with users, groups, and roles in custom apps and APIs

- Role-based access control in Microsoft identity
- Utilize security groups in custom apps and APIs secured with Microsoft identity
- Leverage application roles in custom apps and APIs

Module 6: Optimize data usage when using Microsoft Graph with query parameters

- Microsoft Graph of Query Parameters
- Expand related entities & search content in Microsoft Graph
- Reduce traffic with batched requests

Module 7: Optimize network traffic with Microsoft Graph

- Understand throttling in Microsoft Graph
- Avoid throttling & implement throttling strategies
- Eliminate polling Microsoft Graph with delta query

Module 8: Access User Data from Microsoft Graph

- Working with users in the organization
- User profile photos and related users
- Modifying users

Module 9: Manage Group Lifecycle with Microsoft Graph

- Working with groups in the organization
- Users and their groups
- Manage group lifecycle

Module 10: Access Files with Microsoft Graph

- Access and download files from OneDrive
- Uploading files to OneDrive
- Work with file relationships and trends in OneDrive

Module 11: Use Change Notifications and Track Changes with Microsoft Graph

- Microsoft Graph overview and .NET core web APIs
- Microsoft Graph change notifications
- Microsoft Graph track changes (delta query)

Module 12 : Introduction to building apps for Microsoft Teams

- What are Microsoft Teams apps?
- How do you create an app for Microsoft Teams?
- When should you choose to build a custom Microsoft Teams app?

Module 13: Task-oriented interactions in Microsoft Teams with messaging extensions

- Microsoft Teams messaging extensions and action commands
- Search command message extensions
- Link unfurling message extensions

Module 14 : Module Create embedded web experiences with tabs for Microsoft Teams

- Create a custom Microsoft Teams personal tab
- Create a custom Microsoft Teams channel or group tab
- Implement authentication in a custom tab

Module 15: Create interactive conversational bots for Microsoft Teams

- Overview of bots with Microsoft Teams
- Bots in Microsoft Teams channels and group chats
- Proactive messages from bots

Module 16: Collect Input in Microsoft Teams with Task Modules

- Collecting user input with task modules
- Using adaptive cards and deep links in task modules
- Using task modules with bots

Module 17: Connect web services to Microsoft Teams with webhooks and Office 365 Connectors

- Connect web services to Microsoft Teams with webhooks
- Create incoming webhooks
- Use Office 365 Connectors in Microsoft Teams

Module 18: Microsoft Teams - Use the teamwork Microsoft Graph endpoint

- Use Microsoft Graph with Microsoft Teams
- Configure a built-in tab with Microsoft Graph
- Use Microsoft Graph to post to the activity feed

Module 19: Microsoft Teams - Authentication and Single Sign-on

- Understand authentication and single sign-on (SSO) in Microsoft Teams apps
- Single sign-on (SSO) with Microsoft Teams tabs
- Single sign-on (SSO) with Microsoft Teams bots

Module 20: Create interactive meeting apps for Microsoft Teams

- Understand Microsoft Teams meetings apps
- In-meeting experience and participant roles
- Implement a post-meeting experience for attendees

Module 21: Distribute your Microsoft Teams app

- Manage apps in the Developer Portal
- Upload to a user or team
- Publish to your organization
- Automate Teams app deployment

Module 22 : Monitor and maintain Microsoft Teams solutions

- Configure audit logging
- Monitor performance using App Insights
- Analyze app logs

Documentation

- Access to Microsoft Learn (online learning content)

Exam

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This course prepares you to the **MS-600: Building Applications and Solutions with Microsoft 365 Core** exam
- If you wish to take this exam, please select it when you add the course to your basket

Participant profiles

- Developers interested in the Microsoft 365 development platform

Prerequisites

- 1-2 years experience as a developer
- 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
- Have some experience developing solutions on Microsoft Teams, Office Add-ins, or SharePoint Framework through all phases of software development

Objectives

- Design collaborative app solutions and existing app integration
- Implement Microsoft identity
- Build apps with Microsoft Graph
- Extend and customize Microsoft 365 with SharePoint Framework
- Extend Microsoft Teams
- Test, deploy, monitor, and maintain modern enterprise-grade app solutions

Niveau
Intermédiaire
Duration (in Days)
4
Reference
MS-600T00