Enterprise Computing Solutions - Education Services

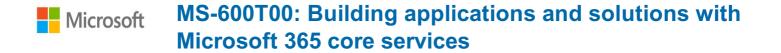
WUVN

TRAINING OFFERING

You can reach us at:

Arrow Enterprise Computing Solutions Ltd, Part 1st Floor, Suite 1D/1, Central House, Otley Road, Harrogate, HG3 1UG

Email: educationteam.ecs.uk@arrow.com Phone: 0870 251 1000



CODE:	LENGTH:	PRICE:

MCS_MS600T00 40 Hours (5 days) £2,995.00

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.