Microsoft 365 - Client Side Development Fundamentals (M365-CSDF)

ID M365-CSDF   **Price** 3,090.— €(excl. tax)   **Duration** 5 days

Course Overview

The Workshop Microsoft 365 Development Fundamentals is a series of modules that provide an in-depth introduction to Microsoft 365 development. It covers theory, demos, hands-on labs as well as deployment and best practices.

The workshop is designed for developers aiming to implement Microsoft 365 solutions and covers the following topics:

- Introduction to Microsoft 365 Development: Provides an overview of Microsoft 365 services, apps, and extension patterns, and discusses the integration with Azure and app deployment processes.
- Microsoft Identity Platform and Microsoft Entra ID: Covers the basics of Microsoft Identity, Entra ID app registrations, and authentication flows using OAuth 2.0 and OpenID Connect, along with the Microsoft Authentication Library (MSAL).
- Microsoft 365 Data Access using Microsoft Graph: Introduces Microsoft Graph, including batching and handling large files, managing events, calendar, and mail, accessing OneDrive and Teams, and using Graph's SharePoint REST API V2.
- SharePoint Data Access: Explains the SharePoint object hierarchy, compares PnP Core SDK, REST, and PnP JavaScript, and covers CRUD operations, OData queries, and using REST.
- Azure Functions in Microsoft 365 Development: Introduces Azure Functions, their use in timer jobs and automation, integrating Microsoft Graph, handling remote events and change notifications, and deployment of Azure Functions.
- Introduction to React for Microsoft 365 Development: Provides an introduction to React, its use cases in SharePoint development, differences between class and functional components, using hooks, and accessing Microsoft 365 data in React.
- SharePoint Framework Basics (SPFx): Offers an overview of SPFx, when to use it versus other patterns, implementing web parts, data access, extensions, and deploying SPFx solutions.
- Build Collaborative Apps for Microsoft Teams: Covers using Teams Toolkit for Visual Studio Code, building bots,

message extensions, tabs, connecting web services with webhooks, retrieving Microsoft Graph data, and deploying Teams apps to Azure. This module also prepares for the Applied Skill with the same name.

Who should attend

Developers aiming to implement Microsoft 365 solutions

Prerequisites

- HTML, CSS, JavaScript
- Node.js and .NET recommended

Course Content

Introduction Microsoft 365 Development

- Microsoft 365 Overview & Services
- Overview Microsoft 365 Apps & Extension Patterns
- Microsoft 365 Development & Azure
- Node.js Essentials
- Microsoft 365 App Deployment Overview

Microsoft Identity Platform and Microsoft Entra ID

- Introduction to Microsoft Identity
- Entra ID App Registrations
- OAuth 2.0, OpenID Connect & Authentication Flows
- Microsoft Authentication Library - MSAL

Microsoft 365 Data Access using Microsoft Graph

- Introduction to Microsoft Graph
- Batching & Large Files
- Managing Events, Calendar, Mail using Graph
- Accessing One Drive & Teams
- Using Graph's SharePoint Rest Api V2

SharePoint Data Access

- Introduction to SharePoint Object Hierarchy

- PnP Core SDK vs REST vs PnP JavaScrip
- Introduction to PnP Core SDK for .NET
- PnP/PnPjs Overview & CRUD Operations
- OData Queries and Expanding
- CRUD Operation using REST

Azure Functions in Microsoft 365 Development

- Introduction Azure Functions
- Timer Jobs & Automation using Azure Functions
- Using Microsoft Graph in Azure Functions
- SharePoint Remote Event Handling Options
- Handling Graph Change Notifications
- Azure Function Deployment

Introduction to React for Microsoft 365 Development

- Introduction to React
- Use Cases for React in SharePoint Development
- Classes vs Functional Components
- Using Hooks: useState, useEffect, useCallback
- Accessing Microsoft 365 Data in React
- Deploying Single Page Apps to Azure

SharePoint Framework Basics (SPFx)

- SharePoint Framework SPFx Overview
- When to use SPFx / When to use other Patterns
- Implementing SharePoint Framework Web Parts
- SharePoint Framework Data Access
- Introduction to SharePoint Framework Extension
- Deploying SharePoint Framework

Build collaborative apps for Microsoft Teams

- Teams Toolkit for Visual Studio Code
- Build conversational bots for Microsoft Teams
- Build tabs for Microsoft Teams
- Connect web services to Microsoft Teams using webhooks
- Retrieving Microsoft Graph Data in Teams
- Deploy a Microsoft Teams app to Azure by using Teams Toolkit for Visual Studio Code

About Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

Fast Lane Services
✓ High End Technology Training
✓ Business & Soft Skill Training
✓ Consulting Services
✓ Managed Training Services
✓ Digital Learning Solutions
✓ Content Development
✓ Remote Labs
✓ Talent Programs
✓ Event Management Services

Training Methods
✓ Classroom Training
✓ Instructor-Led Online Training
✓ FLEX Classroom – Classroom & Online Hybrid
✓ Onsite & Customized Training
✓ E-Learning
✓ Blended & Hybrid Learning
✓ Mobile Learning

Technologies & Solutions
✓ Digital Transformation
✓ Artificial Intelligence
✓ Cloud
✓ Networking
✓ Cyber Security
✓ Wireless & Mobility
✓ Modern Workplace
✓ Data Center

Worldwide Presence
with high-end training centers around the globe

Multiple Awards
from vendors such as AWS, Microsoft, Cisco, Google, NetApp, VMware

Experienced SMEs
with over 19.000 combined certifications

Germany
Fast Lane Institute for Knowledge Transfer GmbH
Tel. +49 40 25334610

info@flane.de / www.flane.de

Austria
ITLS GmbH
(Partner of Fast Lane)
Tel. +43 1 6000 8800

info@itls.at / www.itls.at

Switzerland
Fast Lane Institute for Knowledge Transfer (Switzerland) AG
Tel. +41 44 8325080

info@flane.ch / www.flane.ch