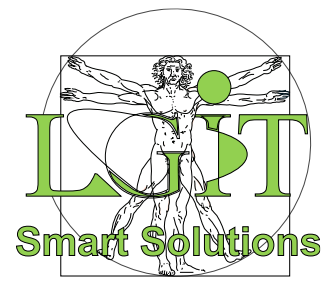# Dynamics 365 Finance & Operations Apps Developer: MB-500T00

Course Overview

In this course we discuss the tasks needed to fulfil the role of developer in Dynamics 365 Finance and Operations Apps. The Dynamics 365 for Finance and Operations (FO) developer is a key technical resource that implements and extends the application to meet the requirements of the business.

Audience Profile

Microsoft Dynamics 365 Finance and Operations Apps Developers

Duration: 30 hrs (10 x 3hrs)

Course Outline

Module 1: Overview & Architecture

Describe the Dynamics 365 ecosystem and major components of the Dynamics 365 Finance and Operations (FO) software, describe the architecture of D365FO, describe relevant D365FO design and deployment considerations

Lessons

- Explore the ecosystem and main components
- Explore the technical architecture
- Explore design and deployment considerations

Lab: Development Environment configuration and Project/Model Creation

Module 2: Developer Tools

Manage system implementations by using Lifecycle Services, Customize D365FO by using Visual Studio, manage source code and artifacts by using version control, Work with other development tools to complete tasks

Lessons

- Manage implementations by using Lifecycle Services
- Manage source code by using version control
- Customize by using Visual Studio

Lab: Source Control using DevOps

Module 3: Solution Design

Determine the required application stack components and server architecture, Implement Application Lifecycle Management (ALM), Design a solution for D365FO

Lessons

- Implement application lifecycle management

Lab: Data Structure Development

Module 4: AOT Elements

Create forms, Create, and extend tables, Create Extended data Types (EDT) and enumerations, create classes and extend AOT elements

Lessons

- Build extended data types and enumerations
- Build tables
- Build forms and optimize form performance
- Create classes
- Create other user interface elements

Lab: Metadata Extension & Development

Module 5: Code Development & Testing

Develop X++ code, develop object-oriented code, Extend D365 FO functionality, describe test framework and tools, Perform Unit Testing

Lessons

- Explore the test framework and use tools
- Get started with development using X++
- Develop object-oriented code
- Use RSAT tool

Lab: Code Extension & Development

Module 6: Data Migration

Describe migration tools and methodologies, Plan Migration strategy, prepare data for migration and migrate data

Lessons

- Prepare data for migration

Lab: Data Export/Import using Data Entity
Lab: Recurring Data Transfer

Module 7: Frameworks

Implement D365 FO functionality

Lessons

- Introduction
- Explore extensions and the extension framework
- Extend elements
- SysOperationSandbox framework
- Summary

Lab: SysExtension Framework

Module 8: Integration

Identify Data integration patterns and scenarios, Implement Data integration concepts and solutions, Implement Recurring integrations, Integrate D365FO with Microsoft Azure, troubleshoot integration errors, Implement the Data Management Package API

Lessons

- Identify data integration patterns and scenarios
- Implement data integration concepts and solutions
- Implement the data management package API
- Data integrations
- Integrate with Microsoft Azure
- Connecting to Power Platform services
- Consume business events
- Integrate Finance and Operations apps with Microsoft Dataverse

Lab: OData Integration
Lab: Logic App Integration
Lab: Calling an External Web Service

Module 9: Reporting

Describe the capabilities and limitations of reporting tools in D365FO, Design, create, and revise Dynamics Reports, Design, create, and revise Dynamics workspaces, Design, create, and revise data sources that connect to data stores external to D365FO

Lessons

- Explore the reporting tools
- Build reports
- Build workspaces
- Manage data sources with external data stores

Lab: Power BI reporting from F&O

Module 10: Security & Performance

Describe and implement performance tools and LCS Environment Monitoring tools, implement role-based security policies and requirements, apply fundamental performance optimization techniques, optimize performance for batch processes, optimize user interface performance, Enhance Integration performance, Optimize Report Performance

Lessons

- Work with performance and monitoring tools
- Implement role-based security
- Apply basic performance optimization techniques