

WorkshopPLUS - Power Platform Low Code

WorkshopPLUS

Duration: 3 days [Onsite/Remote]

Difficulty: 300 - Advanced

Overview

With the rise of digital transformation, a low-code/no-code development platform which anyone can use to rapidly develop new applications is a major way your company can adapt and prosper. This low-code/no-code approach also guides makers to take advantage of the optimized patterns and best practices, avoiding the potential pitfalls and antipatterns that are observed in a complex code. With our diverse feature set in Power Platform Low Code, you can choose from the following modules, choose one of the following:

- WorkshopPLUS - Power Platform: Extended Development on Dataverse with Labs
- WorkshopPLUS - Power Platform: Power Pages 1 Day with Lab
- WorkshopPLUS - Power Platform: Power Automate with Dataverse & Dynamics 365
- WorkshopPLUS - Power Platform: Model-Driven Power Apps for Makers with Labs
- WorkshopPLUS - Power Platform: ALM with Dataverse 1 Day with Lab
- WorkshopPLUS - Dynamics 365 Customer Engagement: Power Apps & Power Automate 1 Day with Lab
- WorkshopPLUS - Power Platform: Visualizing Data with Dataverse with Labs

- WorkshopPLUS - Power Platform Low Code - Extending the Platform with Connectors

Objectives

- Learn about the tools & technologies used for extending and building applications using the Low-Code/No-Code platform.

Outcomes

- Gain an understanding into the tools & technologies used for extending and building applications using the Low-Code/No-Code platform.

Methodology

Learn by example

Participate in group discussions and learn from presentations and demonstrations.

Hands-on

- Use a ready environment for a hands-on experience
- Access to resources and labs for up to six months after the workshop

Scope

1. The scope is limited to learning to use Dynamics 365 cross app capabilities where all applications & environments are present in a single tenant.
2. Delivery will be scoped to one of the below modules (See below for more details).

Delivery Outline

WorkshopPLUS - Power Platform: Extended Development on Dataverse with Labs

Description	This course focuses on the concepts, tools & technologies used for building applications on Dynamics 365. This training introduces attendees to server-side and client-side development using Dynamics 365 SDK and its extensibility concepts.	
Duration and Level	<ul style="list-style-type: none"> • 3 Days • Level 300 	
Detailed Agenda	<p>Module 1: Get started with Development</p> <ul style="list-style-type: none"> • Introduction to Dynamics 365 CE Development • Deeper dive into development concepts • Solution concepts <p>Module 2: Extending on the server</p> <ul style="list-style-type: none"> • Late-Bound versus Early-Bound Entity Models • Plugin Development • Custom Workflow Activity • Actions • Sandbox Isolation <p>Module 3: Extending on the client</p> <ul style="list-style-type: none"> • Client API Object Model • Web Resources • Sitemap and Ribbon Customization 	<p>Module 4: PowerApps Component Framework</p> <ul style="list-style-type: none"> • Overview • How to develop PCF Controls • Testing & Debugging <p>Module 5: Extending and Building custom apps</p> <ul style="list-style-type: none"> • Dynamics 365 Web API • Query APIs, FetchXML, TDE (SQL) Access • Connecting to Dynamics 365 and building applications • OAuth & other Authentication methods • Build Windows client applications using the SDK • Dynamics 365 Management API <p>Module 6: Integration with Azure</p> <ul style="list-style-type: none"> • Why extend to Azure • Azure Aware Plugins • Web Hooks & Azure functions • Service Bus & Logic Apps • Execution Context • Fault and Debugging • Monitoring
Participants	Pro Developer	
Skill Requirements	It is recommended to have at least 2 years of software development experience. Knowledge of Dynamics 365 Customer Engagement apps, .NET & JavaScript is strongly recommended to gain the most out of this course.	
Delivery Requirements	<p>Hardware Requirements:</p> <ul style="list-style-type: none"> • An Intel Core-i5-based PC • 4 GB RAM, 128 GB HDD • Windows 7 SP1 or later • Internet access with at least 1 Mbps bandwidth per student. 	

WorkshopPLUS - Power Platform: Power Pages 1 Day with Lab

Description	In this course you will gain the knowledge of how to set up a new Power Pages site, configure Power Pages content, configure security, authentication and administer the Power Pages site.	
Duration and Level	<ul style="list-style-type: none"> • 1 Day • Level 200 	
Detailed Agenda	<p>Module 1: Introduction to Power Pages</p> <ul style="list-style-type: none"> • Power Pages Overview • Power Pages Architecture • Provisioning <p>Module 2: Power Pages Studio</p> <ul style="list-style-type: none"> • Web Pages • Content Management • Power Pages Design Studio and Pages Model Driven App • Caching • Lab: Explore the Pages Studio <p>Module 3: Security</p> <ul style="list-style-type: none"> • Authentication + Registration • Web Roles • Page + Page Permissions • Site Visibility • Lab: Secure your Page 	<p>Module 4: Interact with Microsoft Dataverse</p> <ul style="list-style-type: none"> • Basic Forms + Lists • Lab: Basic Forms + Lists • Multistep Form • Lab: Multistep Form <p>Module 5: Administration</p> <ul style="list-style-type: none"> • Power Pages Admin Center • Migration • Lab: Prepare to migrate
Participants	Citizen Developers, Low Code Developers, Professional Developers	
Skill Requirements	<ul style="list-style-type: none"> • This course is designed for IT staff who have experience customizing the Power Platform. In addition, we require the following qualifications: <ul style="list-style-type: none"> • Experience working with Dataverse and Model-Driven apps: modifying forms, columns and views 	
Delivery Requirements	<ul style="list-style-type: none"> • Computer with Windows 10 or later, audio equipment, internet access. Modern browser and at least 1 Mbps bandwidth per participant • Chromium-based browser (Microsoft Edge or Google Chrome) • Microsoft/Windows Live ID to connect to the virtual environment • Microsoft Teams for remote deliveries 	

Description	This course is designed for Dynamics 365 and Power Platform developers, customizers and administrators. It focuses on building automated business processes within Dataverse and Dynamics 365 data source and Power Automate cloud flows.	
Duration and Level	<ul style="list-style-type: none"> • 1 Day • Level 300 	
Detailed Agenda	<p>Module 1: Power Automate with Dataverse Overview</p> <ul style="list-style-type: none"> • Power Automate Overview • Dataverse and Non-Dataverse Flows • Microsoft Dataverse Connectors • Other Customization options <p>Module 2: Power Platform Limits</p> <ul style="list-style-type: none"> • Power Platform Limits <p>Module 3: Flow Design Considerations and Best Practices</p> <ul style="list-style-type: none"> • Considerations • Design Tips and Best Practices • Microsoft Dataverse Action and Trigger Tips • Built-In Controls • Data Operations • Variables • Error Handling • Advanced Settings 	<p>Module 4: Child Flows</p> <ul style="list-style-type: none"> • Creating Parent and Child Flows <p>Module 5: Approval Flows</p> <ul style="list-style-type: none"> • Considerations <p>Module 6: Testing and Troubleshooting</p> <ul style="list-style-type: none"> • Flow Checker • Run History <p>Module 7: Deployment and Administration</p> <ul style="list-style-type: none"> • Solutions and Dependencies • Data Loss Prevention • Connections and Connection References • Environment Variables • Monitoring and Analytics
Participants	Participants that have existing experience customizing Dynamics 365 Customer Engagement will receive the most value from this course.	
Skill Requirements	<ul style="list-style-type: none"> • Foundational Knowledge of Power Automate Cloud Flows • Foundational of Dynamics 365 and Dataverse 	
Delivery Requirements	<p>An Intel Core-i5-based PC</p> <ul style="list-style-type: none"> • 4 GB RAM • 128 GB HDD • Windows 7 SP1 or later • Office 2016 or Office 365 Enterprise E3 or later <p>Internet access with at least 1 Mbps bandwidth per student</p>	

Description	This course designed for Dynamics 365 and Power Platform developers or administrators that focuses on customizations of tables and their components, managing segmented, solutions and custom help pages.
Duration and Level	<ul style="list-style-type: none">• 1 Day• Level 200
Detailed Agenda	<p>Module 1: Customizations</p> <ul style="list-style-type: none">• Metadata• Entities and Attributes• Forms and Relationships• Business Rules• Site Map and App Designer• Other Customization options <p>Module 2: Solutions</p> <ul style="list-style-type: none">• Solutions Concepts <p>Module 3: Learning Path</p> <ul style="list-style-type: none">• Overview and Enabling Learning Path
Participants	Participants that have existing experience customizing Dynamics 365 Customer Engagement will receive the most value from this course.
Skill Requirements	<ul style="list-style-type: none">• Experience with Software Development• Experience with Office 365
Delivery Requirements	<p>An Intel Core-i5-based PC</p> <ul style="list-style-type: none">• 4 GB RAM• 128 GB HDD• Windows 7 SP1 or later• Office 2016 or Office 365 Enterprise E3 or later <p>Internet access with at least 1 Mbps bandwidth per student</p>

Description	Attendees will learn the core principles of ALM, the benefits of implementing a healthy ALM process, and gain practical applied knowledge. During the workshop, attendees will have the opportunity to view the demonstration of ALM setup by an instructor with deep technical knowledge.		
Duration and Level	<ul style="list-style-type: none"> • 1 Day • Level 300 		
Detailed Agenda	<p>Module 1: Introduction to ALM</p> <ul style="list-style-type: none"> • Overview • What is ALM? • Why is ALM needed? • Demonstration of a functioning pipeline <p>Module 2: Solution Fundamentals</p> <ul style="list-style-type: none"> • What is a solution? • Working with solutions • Managed vs. unmanaged solutions • Solution architecture tools and techniques <ul style="list-style-type: none"> • Layering • Segmentation • Patching • Managed solution updates and upgrades • Examples of solution layering and common anti-patterns • Version control for solutions 	<p>Module 3: Team Development</p> <ul style="list-style-type: none"> Continuous integration health check activity Continuous integration and its benefits Team development by example Environment architecture best practices Source control best practices <p>Module 4a: Azure DevOps for ALM</p> <ul style="list-style-type: none"> • High-level overview of Azure Repos • Azure Pipelines key concepts • Define pipelines using YAML syntax • YAML by example 	<p>Module 4b: GitHub for ALM</p> <ul style="list-style-type: none"> • High-level overview of GitHub Actions • GitHub workflows key concepts • Define workflows using YAML syntax • GitHub actions Demo <p>Module 4c: Power Platform Pipelines</p> <ul style="list-style-type: none"> • High-level overview Power Platform Pipelines <p>Module 5: Continuous Deployment</p> <ul style="list-style-type: none"> • Continuous deployment health check activity • Continuous deployment and its benefits • Continuous Deployment by example • Considerations for continuous deployment/delivery of solution
Skill Requirements	<ul style="list-style-type: none"> • Experience with developing solutions for Dynamics 365 Customer Engagement or Power Platform is <i>required</i>. • Experience with standard development concepts such as version control and build pipelines is recommended. • A basic knowledge of Azure DevOps* or GitHub* is recommended. (This workshop focuses on leveraging the technologies for storing and deploying Power Platform components.) 		

WorkshopPLUS - Dynamics 365 Customer Engagement: Power Apps & Power Automate 1 Day with Lab

Description	This is a one-day course designed for Dynamics 365 business analysts, Makers and developers that focuses on the Business Application Platform: Power Apps Canvas apps, Model-driven apps, Dataverse, and Microsoft Power Automate.	
Duration and Level	<ul style="list-style-type: none"> • 1 Day • Level 200 	
Detailed Agenda	<p>Module 1: Business Applications Platform</p> <ul style="list-style-type: none"> • Microsoft Business Applications Platform Overview • Power Apps Canvas Apps • Power Apps Maker Portal <p>Module 2: Common Data Service</p> <ul style="list-style-type: none"> • Common Data Server (CDS) for Apps • Power Apps + CDS vs. Dynamics 365 platform • Environments • Data Loss Prevention • Power Platform Admin Center • Create a new CDS instance (Lab) <p>Module 3: Common Data Model</p> <ul style="list-style-type: none"> • Overview of Common Data Model • Model-driven Apps • Canvas Apps vs. Model-driven Apps • Model-driven app components • Model-driven integration (Lab) 	<p>Module 4: Power Automate</p> <ul style="list-style-type: none"> • Overview of Microsoft Power Automate • Microsoft Power Automate Portal • Power Automate Flow Templates • Environment Variables • UI Flows • Power Automate Mobile App • Admin Connectors • Power Automate and Teams integration (Lab) <p>Module 5: Immersive Business Flow</p> <ul style="list-style-type: none"> • Overview of Immersive Business Flow • Immersive Business Flow and Microsoft Power Automate Flow Approvals (Lab).
Skill Requirements	<p>This course is designed for IT staff who have experience customizing Dynamics 365 Customer Engagement. In addition, we recommend the following qualifications:</p> <ul style="list-style-type: none"> • Experience with Dynamics 365 Customer Engagement • Experience with Office 365 • Experience with Mobile Apps <p>The basic concepts of the product will not be covered in this course. It is expected that the attendees will already possess this knowledge.</p>	
Delivery Requirements	<p>An Intel Core-i5-based PC</p> <ul style="list-style-type: none"> • 4 GB RAM • 128 GB HDD • Windows 7 SP1 or later • Office 2016 or Office 365 Enterprise E3 or later <p>Internet access with at least 1 Mbps bandwidth per student</p>	

Description	<p>A connector is a proxy or a wrapper around an API that allows the underlying service to talk to Microsoft Power Automate, Microsoft Power Apps, and Azure Logic Apps. It provides a way for users to connect their accounts and leverage a set of prebuilt actions and triggers to build their apps and workflows.</p> <p>The Power Platform has a large ecosystem of software as a service (SaaS) connector that enables you to connect apps, data, and devices in the cloud.</p> <p>This module will introduce citizen developers to some of our most popular standard and premium connectors and how to use them on the Power Platform, and for our pro developers, how to create a Custom Connector that interacts with an Azure APIM instance.</p>
Duration and Level	<ul style="list-style-type: none"> • 1 Days • Level 300
Detailed Agenda	<p>For Makers</p> <ul style="list-style-type: none"> • Connector overview <ul style="list-style-type: none"> • Actions and triggers • Where can connectors be used, Power Apps, Power Automate, etc. • Connection overview <ul style="list-style-type: none"> • Authentication • Sharing connections • Popular standard connectors • Popular premium connectors <p>For Developers</p> <ul style="list-style-type: none"> • Create a custom connector. • Coding standards for custom connectors. • Testing custom connectors. <p>For Administrators</p> <ul style="list-style-type: none"> • Creating service principals and granting access to the environment – System Administrator. • Data protection in connectors.
Participants	<ul style="list-style-type: none"> • Makers • Developers • Power Platform Administrators
Skill and Delivery Requirements	<ul style="list-style-type: none"> • General knowledge of the Power Platform, and its components, Power Apps and Power Automate. • Access to a Power Platform Tenant and Azure Tenant.

Description	This offering is designed to provide administrators and business intelligence staff with the knowledge to report based on data stored in Dynamics 365 and Dataverse. You will examine reporting techniques in Dynamics 365 and model-driven apps, Power BI usage with Dataverse, and best practices and troubleshooting for Dynamics 365 and Dataverse reporting.
Duration and Level	<ul style="list-style-type: none"> • 1 Day • Level 300
Detailed Agenda	<p>Dataverse Reporting and Visualizations</p> <ul style="list-style-type: none"> • Reporting security and visibility • Using the Report Wizard • Views and Advanced Find • Adding Reporting features to Model Driven Apps • Charts and Dashboards • Interactive Experience Dashboards • Power BI Integration with Dynamics 365 <p>Power BI</p> <ul style="list-style-type: none"> • Create a connection to Dynamics 365 • Build a query • Create visualizations and dashboards • Publish a report • TDS Endpoint to Power BI <p>Reporting Best Practices and Troubleshooting</p> <ul style="list-style-type: none"> • Reporting considerations and Best Practices • Improving Report performance • Testing and Troubleshooting • Power BI Tips and Tricks
Participants	Administrators and staff of Dynamics 365 and/or Dataverse who plan to develop, configure, or administer reports
Skill Requirements	<ul style="list-style-type: none"> • Experience with Dynamics 365 and Dataverse
Delivery Requirements	<ul style="list-style-type: none"> • Computer with Microsoft Windows 10 or later, audio equipment, internet access, and at least 1 Mbps bandwidth per participant • Microsoft Teams for remote deliveries • A modern browser capable of rendering web sites that use current web standards

Note: Advanced lessons can be replaced with any other lessons.

For more information: Please contact your Microsoft Representative for more details.