

# 80666AE: Extending Microsoft Dynamics CRM

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## Course Details

### Course Outline

#### 1. Extending Dynamics CRM Online

- Talent Introduction and Course Overview

#### 2. Overview of Extending Dynamics CRM 2015

- Configuration, Customize, and Extend
- Built-in Functionality
- Types of Extensibility
- Navigation and Commanding
- APIs - Working with Data, Services, and Forms
- Multi-Tenant Deployment
- Solutions Overview
- Introducing the CRM SDK
- Developer Tools Overview
- Development Environments
- Module Review

#### 3. Customizing navigation and the command bar

- Overview of CRM Navigation and Commanding
- Navigation Across the Different User Experiences
- Site Map Structure
- Steps to Modify Navigation
- Command Bar Customization
- URL Addressable Forms & Views
- Command Definition Components
- Using Parameters
- Types of Display and Enable Rules
- Languages
- Command Bar Editing Consideration
- Learning more from the SDK

- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

#### **4. Form event scripting**

- Overview of Form Scripting
- Form Scripting Scenarios
- Form and Field Events
- Steps to implement a script in CRM
- Walkthrough using Dev Tools
- Xrm.Page API Overview
- Working with Data
- Attributes vs. Controls
- Working with Controls
- Utility Function Overview
- Learning more in the SDK
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

#### **5. Extending the UI with web resources**

- Types of Web Resources
- Where Web Resource can be used/ Scenarios
- Steps to create a web resource
- Placing and Web Resources on Forms
- Using the Data and other Parameters
- Controlling Web Resources
- Referencing web resources
- Learning more from the SDK
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

#### **6. Using the CRM organization service**

- Scenarios for using the organization service
- Understanding Organization Request/Response

- CRM Data Types
- Options for Getting IOrganizationService Instance
- CRM SDK Assemblies
- Demonstration: Create Records using Late Binding
- Early and Late Binding
- CRMSvc Utility
- CRM Data Types
- Demonstration: Update & Delete Records using Late Binding
- Basic Operations
- Other Methods
- Demonstration: Update & Delete Records using Late Binding
- Handling Faults
- Learn more from the SDK
- Demonstration: Learn More with the SDK
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

#### **7. Query data with the organization service**

- Query Styles- Query by Attribute, Query Expression, Fetch, LINQ
- Using Query by Expression
- Demonstration: Query CRM Data with Query Expression
- Using Query Attribute
- Using Fetch
- Demonstration: Create an Aggregate FetchXML Query
- Using LINQ
- Learn more from the SDK
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

#### **8. Using the REST/OData endpoint**

- Overview of REST/Odata
- OData Resource Path Examples
- Query Options

- Demonstration: Query CRM data using Odata
- Modifying Data
- Demonstration: Perform Record Operations with OData
- External Application Authentication with OAuth (high level)
- Review of the Web API
- Learn more from the SDK
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

## **9. Plug-ins**

- Overview of Plugin Scenarios
- Exploring Plug-in Architecture
- Demonstration: Create a CRM Plugin
- Using CRM Developer Toolkit
- Plug-in Isolation
- Tracing and Debugging Plugins
- Demonstration: Debug a CRM Plugin
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers

## **10. Custom workflow activities**

- Overview of CRM Workflows
- Example Custom Activity Scenarios
- Custom Workflow Class Diagram
- Working with Parameters
- Working with Services using Developer Toolkit
- Demonstration: Create a Custom Workflow Activity
- Learn more from the SDK
- Module Review
- Test Your Knowledge Questions
- Test Your Knowledge Answers
- Course Review