

805725: Extending Microsoft Dynamics CRM 2015/2016 Course Outline

1. Extensibility Overview
 - a. Objectives
 - b. Introduction
 - c. xRM Application Framework
 - d. Extensibility Platform and Features
 - e. Security Model
 - f. Business Model
 - g. Business Logic
 - h. Business Entity Components
 - i. Data Access Components and Platform
 - j. Helpful Skills
 - k. Resources
 - l. Summary
 - m. Test Your Knowledge
 - n. Quick Interaction: Lessons Learned
 - o. Solutions
2. Common Platform Operations
 - . Objectives
 - a. Introduction
 - b. WCF Web Services
 - c. Discovery Service
 - d. Early versus Late-Binding
 - e. Early-Bound Entity Class
 - f. Late-Bound Entity Class
 - g. Organization Service
 - h. Authentication and Authorization
 - i. Entity Information
 - j. Working with Data Types
 - k. Using the Create Method
 - l. Using the Retrieve Method
 - m. Using the Update Method
 - n. Using the Delete Method

- o. Using the RetrieveMultipleMethod
 - p. Handling WCF Faults
 - q. Summary
 - r. Test Your Knowledge
 - s. Solutions
3. Querying Data and Executing Operations
- . Objectives
 - a. Introduction
 - b. Querying in Microsoft Dynamics CRM
 - c. Query Expression
 - d. QueryByAttitude
 - e. LINQ Queries
 - f. FetchXML
 - g. Filtered Views
 - h. OData
 - i. Execute Method
 - j. Requests and Responses
 - k. Using the MetadataService Web Service
 - l. Summary
 - m. Test Your Knowledge
 - n. Quick Interaction: Lessons Learned
 - o. Solutions
4. Implementing Business Processes
- . Objectives
 - a. Introduction
 - b. Overview of Workflow
 - c. Overview of Dialogues
 - d. Setting up Custom Workflow Activity Assemblies
 - e. Demonstration: Configuring a Custom Workflow Activity
 - f. Creating Custom Workflow Activities
 - g. Debugging Custom Workflow Activities
 - h. Creating and Modifying Windows Workflow Foundation (XAML Workflows)
 - i. Demonstration: Modifying an Existing Workflow in Visual Studio 2010
 - j. Summary

- k. Test Your Knowledge
 - l. Quick Interaction: Lessons Learned
 - m. Solutions
5. Plug-ins
- . Objectives
 - a. Introduction
 - b. Overview of Plug-ins
 - c. Event Framework
 - d. Plug-in Isolation, Trusts and Statistics
 - e. Developing Plug-ins
 - f. Impersonation in Plug-ins
 - g. Entity Classes and Plug-ins
 - h. Register and Deploy Plug-ins
 - i. Debugging Plug-ins
 - j. Windows Azure Integration with Microsoft Dynamics CRM
 - k. Summary
 - l. Test Your Knowledge
 - m. Quick Interaction: Lesson Learned
 - n. Solutions
6. Application Event Programming
- . Objectives
 - a. Introduction
 - b. Using Jscript Libraries
 - c. Form and Field Events
 - d. Xrm.Page
 - e. Xrm.Page.context (Client-Side Context)
 - f. Xrm.Pge.data entity
 - g. Xrm.Page.ui
 - h. Form Types
 - i. Form Event Handler Execution Context
 - j. Setting Event Dependencies
 - k. Pass Parameters
 - l. Using Best Practices in Writing Client-Side Code
 - m. Debugging Client-Side Code

- n. Summary
 - o. Test Your Knowledge
 - p. Quick Interaction: Lessons Learned
 - q. Solutions
7. Client Extensions
- . Objectives
 - a. Introduction
 - b. Customizing the Site Map
 - c. Customizing the Ribbon
 - d. URL Addressable Forms and Views
 - e. Summary
 - f. Test Your Knowledge
 - g. Quick Interaction: Lessons Learned
 - h. Solutions
8. Web Resources
- . Objectives
 - a. Introduction
 - b. Overview of Web Resources
 - c. Web Resource Management
 - d. Referencing Web Resources
 - e. Silverlight Web Resource
 - f. REST Endpoint, OData and JSON
 - g. Using JQuery
 - h. Test Your Knowledge
 - i. Quick Interaction: Lessons Learned
 - j. Solutions
9. Labs
- . Lab: Creating Leads
 - a. Lab: Account Management Application
 - b. Lab: Using QueryExpression
 - c. Lab: Using LINQ to Perform, Create, Read, Update and Delete Operations
 - d. Lab: Using Fetch XML
 - e. Lab: Using FetchXML
 - f. Lab: Using Request and Response

- g. Lab: Creating a Custom Workflow Activity
- h. Lab: Creating a Plug-in
- i. Lab: Telephone Number Formatting
- j. Lab: Control Tab Visibility
- k. Lab: Modifying the Site Map
- l. Lab: Customize the Ribbon
- m. Lab: Silverlight and Opportunity Slider