

**Number of Days : 2**

## **INTRODUCTION TO SOFTWARE ARCHITECTURE**

- Designing Visually
- Microsoft's Modeling Strategy
- Understanding Model-Driven Development
- Understanding Domain-Specific Languages
- The "Code Understanding" Experience
- The Architecture Tools in Visual Studio Ultimate 2013
- Use Case Diagrams
- Activity Diagrams
- Sequence Diagrams
- Component Diagrams
- Class Diagrams
- Layer Diagrams
- Architecture Explorer
- What's New with Architecture Tools in Visual Studio Ultimate 2013
- Code Maps
- Visual Studio Visualization and Modeling SDK

### **TOP-DOWN DESIGN WITH USE CASE, ACTIVITY, SEQUENCE, COMPONENT, AND CLASS DIAGRAMS**

- Use Case Diagrams
- Creating a Use Case Diagram
- Use Case Diagram Toolbox
- Activity Diagrams
- Creating an Activity Diagram
- Activity Diagram Toolbox
- Adding an Activity Diagram to a Use Case Diagram
- Sequence Diagrams
- Creating a Sequence Diagram
- Sequence Diagram Toolbox
- Component Diagrams
- Creating a Component Diagram
- Component Diagram Toolbox
- Class Diagrams
- Creating a Class Diagram
- Class Diagram Toolbox
- Generating Code from a UML Class Diagram

### **ANALYZING APPLICATIONS USING ARCHITECTURE EXPLORER, DEPENDENCY GRAPHS, AND CODE MAPS**

- Understanding the Code Base
- Architecture Explorer Basics
- Understanding the Architecture Explorer Window
- Architecture Explorer Options
- Navigating Through Architecture Explorer

- Exploring Options for Namespaces
- Exploring Options for Classes
  - Exploring Options for Members
- Dependency Graphs
- Creating the First Dependency Graph
- Creating a Dependency Graph Without Architecture Explorer
- Navigating Through Your Dependency Graph
- Dependency Graph Legend
- Dependency Graph Toolbar
- The Code Index
- Code Maps
- Summary

### **USING LAYER DIAGRAMS TO MODEL AND ENFORCE APPLICATION ARCHITECTURE 343**

- Creating a Layer Diagram
- Defining Layers on a Layer Diagram
- Creating a Layer for a Single Artifact
- Adding Multiple Objects to a Layer Diagram
- The Layer Explorer
- Defining Dependencies
- Validating the Layer Diagram
  - Layer Diagrams and the Build Process