

Visual Studio 2008: Windows Presentation Foundation

Course 6460—Three days—Instructor-led

Introduction

This three-day instructor-led course provides students with the knowledge and skills to build and configure a Windows Presentation Foundation (WPF) solution

Audience

This course is intended for application developers who know how to build Windows Forms applications, custom user controls in .NET 2.0 and how to use the common features of the base class library. They do not have to understand concepts such as advanced UI threading and asynchronous programming, building custom controls from scratch or using GDI. They also do not need experience building Visual Studio add-ins or custom designers.

At Course Completion

At the end of the course, students will be able to:

- Create a WPF application
- Build a user interface in a WPF application
- Customize the appearance of a WPF application.
- Bind user interface controls to data sources
- Bind user interface controls to collections
- Create new controls in a WPF application
- Manage documents in a WPF application
- Add graphics and multimedia support to a WPF application
- Configure and deploy WPF applications.

Prerequisites

Before attending this course, students should have intermediate experience developing applications by using previous versions of Microsoft Visual Studio at level 200.

Course Outline

Module 1: Creating an Application by Using WPF

This module explains how to build a WPF application.

Lessons

- Overview of WPF
- Creating a Simple WPF Application
- Handling Events and Commands
- Navigating Between Pages

Module 2: Building User Interfaces

This module explains how to build a user interface in a WPF application.

Lessons

- Defining Layout
- Using Content Controls
- Using Item Controls
- Hosting Windows Forms Controls

Module 3: Customizing Appearance

This module explains how to customize the appearance of a WPF application.

Lessons

- Sharing Logical Resources in an Application
- Creating Consistent User Interfaces Using Styles
- Changing the Appearance of Controls Using Templates
- Using Triggers and Animations

Module 4: Data Binding

This module explains how to bind user interface controls to data sources.

Lessons

- Overview of Data Binding
- Create a Data Binding

- Implementing Property Change Notification
- Converting Data
- Validating Data

Module 5: Data Binding to Collections

This module explains how to bind user interface controls to collections.

Lessons

- Binding to Collections of Objects
- Using Collection Views
- Create Master-Detail User Interfaces
- Using Data Templates

Module 6: Creating New Controls

This module explains how to create new controls in a WPF application.

Lessons

- Overview of Control Authoring
- Creating Controls

Module 7: Managing Documents

This module explains how to manage documents in a WPF application.

Lessons

- Working with Flow Documents
- Working with Fixed Documents
- Packaging Documents
- Printing Documents

Module 8: Graphics and Multimedia

This module explains how to add graphics and multimedia support to a WPF application.

Lessons

- Displaying 2D graphics
- Displaying Images
- Displaying 3D Graphics
- Going Further with 3D Graphics

- Adding Multimedia Support

Module 9: Configure and Deploy WPF Applications

This module explains how to configure and deploy WPF applications.

Lessons

- Deployment Options
- Deploying a Standalone WPF Application
- Deploying an XBAP Application
- Configuring Security Settings