

Visual Studio 2008: Windows Presentation Foundation 3

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

Lab: Creating a WPF Application

- Creating a Standalone WPF Application
- Handling Events and Commands
- Navigating Between Pages
- Creating an XBAP Application

After completing this module, students will be able to:

- Explain WPF concepts and features.
- Create a simple WPF application.
- Handle events and commands.
- Navigate between pages in a WPF application.

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

Lab: Building User Interfaces

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

After completing this module, students will be able to:

- Define layout.
- Use content controls.
- Use items controls.
- Host 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

Lab: Customizing the Appearance of a WPF Application

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

After completing this module, students will be able to:

- Share logical resources throughout and application.
- Create a consistent user interface appearance by using styles.
- Change the appearance of controls using templates.
- Change the appearance of user interface elements by 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

Lab: Data Binding

- Binding Controls to Data
- Implementing Property Change Notifications
- Defining Value Converters
- Validating Data

After completing this module, students will be able to:

- Explain WPF data binding concepts and terminology.
- Create a binding between a data source and a control.
- Implement property change notifications.
- Convert data between the binding source and the binding target.
- Validate data entered by the user.

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

Lab: Data Binding to Collections

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

After completing this module, students will be able to:

- Bind to a collection of objects.
- Sort, filter, and group collections by using collection views.

- Create master-detail user interfaces.
- Fine-tune data display by 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

Lab: Creating New Controls

- Creating User Controls
- Creating Custom Controls

After completing this module, students will be able to:

- Explain scenarios and options for creating new controls.
- Create user controls.
- Create custom 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

Lab: Managing Documents

- Creating and Displaying Flow Documents
- Creating and Displaying Fixed Documents
- Packaging Documents
- Printing Documents

After completing this module, students will be able to:

- Create and view flow documents.
- Create and view fixed documents.
- Package a document.
- Print a document.

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

Lab: Adding Graphics and Multimedia Support to a WPF Application

- Displaying 2D graphics
- Displaying Images
- Displaying 3D Graphics

- Playing Audio and Video Clips

After completing this module, students will be able to:

- Display 2D graphics.
- Add images in a WPF application.
- Display 3D graphics.
- Use additional 3D graphics capabilities.
- Add multimedia content to a WPF application.

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

Lab: Configuring and Deploying WPF Applications

- Deploying a Standalone WPF Application
- Creating Deployment and Application Manifests
- Deploying an XBAP Application

After completing this module, students will be able to:

- Explain deployment options.
- Deploy a standalone WPF application.
- Deploy an XBAP application.
- Configure security settings.