

# **DOT.NET: MODULE 5 WPF**

## **UNIT 1 Introducing WPF**

1. Understanding Windows Graphics
2. WPF: A Higher-Level API
3. The Architecture of WPF

## **UNIT 2 XAML**

1. Understanding XAML
2. XAML Basics
3. Properties and Events in XAML
4. Using Types from Other Namespaces
5. Loading and Compiling XAML

## **UNIT 3 The Application**

1. Creating an Application Object
2. Deriving a Custom Application Class
3. Multithreading

## **UNIT 4 Layout**

1. Understanding Layout in WPF
2. Simple Layout with the StackPanel
3. The WrapPanel and DockPanel
4. The Grid
5. Coordinate-Based Layout with the Canvas
6. Layout Examples

## **UNIT 5 Content**

1. Understanding Content Controls
2. Specialized Containers
3. Decorators

## **UNIT 6 Dependency Properties and Routed Events**

1. Understanding Dependency Properties
2. Understanding Routed Events
3. WPF Events

## **UNIT 7 Classic Controls**

1. The Control Class

2. Content Controls
3. Text Controls
4. List Controls
5. Range-Based Controls

### **UNIT 8 Windows**

1. The Window Class
2. Window Interaction
3. Nonrectangular Windows
4. Vista-Style Windows

### **UNIT 9 Pages and Navigation**

1. Understanding Page-Based Navigation
2. Page-Based Interfaces
3. The Page History
4. The Navigation Service
5. XAML Browser Applications

### **UNIT 10 Commands**

1. Understanding Commands
2. The WPF Command Model
3. Executing Commands
4. Advanced Commands

### **UNIT 11 Resources**

1. Assembly Resources
2. Localization
3. Object Resources

### **UNIT 12 Styles**

1. Style Basics
2. Triggers

### **UNIT 13 Shapes, Transforms, and Brushes**

1. Understanding Shapes
2. Transforms
3. Better Brushes
4. Bitmap Effects

### **UNIT 14 Geometries, Drawings, and Visuals**

1. Paths and Geometries
2. Drawings
3. Visuals

### **UNIT 15 Control Templates**

1. Understanding Logical Trees and Visual Trees
2. Understanding Templates
3. Creating Control Templates
4. Organizing Template Resources
5. Building More Complex Templates

### **UNIT 16 Data Binding**

1. Data Binding Basics
2. Binding to a Database with Custom Objects
3. Binding to a Collection of Objects
4. Data Conversion
5. Validation

### **UNIT 17 Data Templates, Data Views, and Data Providers**

1. Data Binding Redux
2. Data Templates
3. Data Views
4. Data Providers

### **UNIT 18 Lists, Trees, Toolbars, and Menus**

1. The ItemsControl Class
2. The ListView
3. The TreeView
4. Menus
5. Toolbars and Status Bars

### **UNIT 19 Documents**

1. Understanding Documents
2. Flow Documents
3. Read-Only Flow Document Containers
4. Editing a Flow Document
5. Fixed Documents
6. Annotations

### **UNIT 20 Printing**

1. Basic Printing

2. Custom Printing
3. Print Settings and Management
4. Printing Through XPS

### **UNIT 21 Animation**

1. Understanding WPF Animation
2. Basic Animation
3. Declarative Animation and Storyboards
4. Animation Types Revisited

### **UNIT 22 Sound and Video**

1. Playing WAV Audio
2. The MediaPlayer
3. The MediaElement
4. Speech

### **UNIT 23 3-D Drawing**

1. 3-D Drawing Basics
2. Deeper into 3-D
3. Interactivity and Animations

### **UNIT 24 Custom Elements**

1. Understanding Custom Elements in WPF
2. Building a Basic User Control
3. Lookless Controls
4. Extending an Existing Control
5. Custom Panels
6. Custom-Drawn Elements

### **UNIT 25 Interacting with Windows Forms**

1. Assessing Interoperability
2. Integrating Windows and Forms
3. Creating Windows with Mixed Content

### **UNIT 26 ClickOnce Deployment**

1. Application Deployment
2. A Simple ClickOnce Publication
3. ClickOnce Options