



Advanced WPF 4.x

Course Summary Table

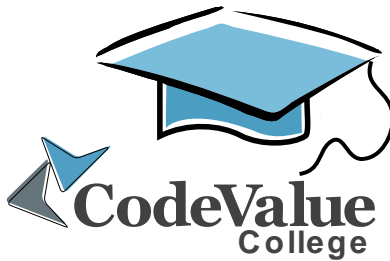
Duration:	24 hours instructor-led course
Target Audience:	Experienced WPF developers, wanting to get a deeper understanding of the technology, as well as practical techniques for better utilizing the platform.
Pre Requisites:	At least 6 months of experience with WPF Good acquaintance of WPF concepts: XAML, dependency properties, routed events, resources, data binding, data and control templates, layout and panels, basic controls
Objectives:	Understand the WPF philosophy and design Create lookless custom controls Understand advanced data binding issues Use the MVVM for decoupled, maintainable apps Customize existing controls effectively Understand performance issues in WPF

Abstract

WPF, the leading .NET technology for smart client applications, is very different from Windows Forms. Attaining a good grasp of WPF is usually slow, and utilizing it effectively is challenging.

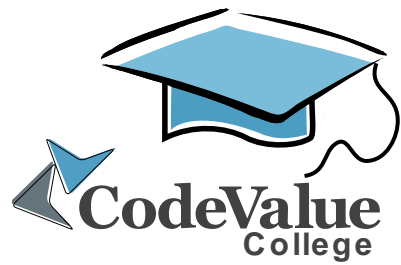
This instructor led course is intended for developers already familiar with WPF, increasing their knowledge and understanding of the way WPF works and emphasizing the proper way to leverage its capabilities.

Throughout the course, best practices are discussed and demonstrated, so students can master this exciting and capable technology. Labs are given to enhance understanding and put the principles learned, into practice.

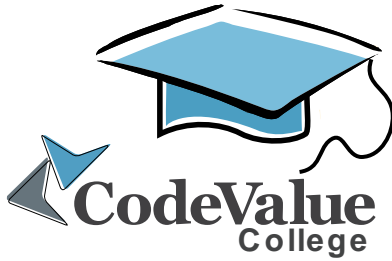


Syllabus

- ◀ Module 1: WPF Design
 - ◀ Data vs. Behavior
 - ◀ WPF visual class hierarchy
 - ◀ Selecting an appropriate base class
 - ◀ The Visual and DrawingVisual classes
 - ◀ Shapes
 - ◀ The FrameworkElement and Control classes
 - ◀ ContentControls and ContentPresenters
 - ◀ Decorators and Adorners
- ◀ Module 2: Customizing Existing Controls
 - ◀ Control Templates
 - ◀ Data Templates
 - ◀ Customizing ItemsControl based controls
 - ◀ Creating a custom scrollbar
 - ◀ Using attached properties for customization
- ◀ Module 3: Custom Controls
 - ◀ Custom element types
 - ◀ Lookless controls
 - ◀ User controls
 - ◀ Custom drawn elements
 - ◀ Custom panels
- ◀ Module 4: The MVVM Pattern
 - ◀ MVVM Basics
 - ◀ View and ViewModel interaction
 - ◀ Commands
 - ◀ Behaviors
 - ◀ Other aspects of MVVM
- ◀ Module 5: Advanced Data Binding
 - ◀ Dependency Properties Issues
 - ◀ Multi Data Binding
 - ◀ Special Data Binding Scenarios
 - ◀ The Dispatcher and Priority
 - ◀ Other Data Binding Issues



- ◀ Module 6: Miscellaneous Topics (optional)
 - ◀ Virtualization
 - ◀ WPF Performance
 - ◀ UI Control Automation
 - ◀ Pixel Shader Effects
 - ◀ Custom Animations



Course Compatibility Questionnaire

Please answer the following questions as accurately as possible:

Name: _____ Email: _____

Company: _____ Phone: _____

Language / Technology / Platform	Years of Experience						Level of Familiarity				
C#	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
WPF	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
XAML	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
Visual Studio	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
Blend	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
Other _____	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5

What are your expectations from the course?

Which tools do you use to debug WPF data bindings?

Thanks!

<http://college.codevalue.net/>