



Training – Consulting – Mentoring

Official Course Syllabus

A Pragmatic Introduction to WPF with Billy Hollis – 3 days



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OBJECTIVES

Join Microsoft Regional Director and Software Legend Billy Hollis for 3 days of intense Windows Presentation Foundation training. Our objective is to help you become proficient with this exciting technology and ensure that you have a good understanding of the key components and concepts that underlie WPF and Silverlight.

EXPERIENCE

This course assumes that students have a strong programming background and have experience with Visual Studio 2005 or 2008 along with an intermediate knowledge of C# or VB.NET.

CLASS OUTLINE

Day 1 – Morning

Module 1 – Introduction and Basics of WPF

- How WPF differs from previous UI technologies
- Overview of the learning process for WPF
- Basic scenarios for WPF and Silverlight usage
- A high–altitude view of WPF
 - Overview of XAML
 - Basics of the object model
 - Sizing and positioning
 - Simple panels
 - Simple data binding
 - Step–by–step exercise
- More about XAML
- More about the Application model
- Using the visual designers
- Details on panels, sizing, and layout
- A tour through the control set
- The concept of control “content”

Day 1 – Afternoon

Module 2 – Data Binding

- Terminology and basic concepts
- Binding expressions
- Data sources

- Value Converters
- Validation Rules

Day 2 – Morning

Module 3 – Resources and Data Templates

- WPF Resources – basic concepts and syntax
- Scenarios for applying resources
- List-oriented controls
- How data templates change UI design
- Data templates: construction
- Changing data templates on the fly
- Varying data templates for different items
- Templates with user interaction
- Changing the way items are arranged (the ItemsPanel property)

Day 2 – Afternoon

Module 4 – More WPF Capabilities

- Basics of Styles
- Managing Styles
- Basic of Triggers
- Basics of Animation in XAML
- Basics of Animation in code
- Controlling animation
 - Triggers
 - VisualStateManager
 - Code events

- Transforms

Day 3 – Morning

Module 5 – Advanced WPF capabilities

- Control Templates
- Advanced controls: Tab, Expander
- Scrolling and the ScrollViewer
- Data providers
- XBAP deployment
- Media in WPF

Day 3 – Afternoon

Module 6 – Basics of Silverlight

- How Silverlight compares to WPF
- Limitations of Silverlight
- Suggested use cases
- The VisualStateManager
- Basics of data in Silverlight

Module 7 – WPF Internals and Miscellaneous Capabilities

- Dependency and attached properties (internals)
- Routed events and implications
- Loading and saving XAML
- Commands in WPF
- The WPF Dispatch system – a brief introduction
- Ink in WPF – a brief overview
- Documents in WPF – a brief overview

- Interop with Windows Forms – a brief overview