

Thinking in XAML: An Introduction to programming on Windows Presentation Foundation

A class created and taught by Billy Hollis

Executive summary

This class is for developers and teams switching to Windows Presentation Foundation (WPF) as their UI platform targeting any recent version of Windows. It stresses core concepts and helps students build a conceptual skeleton as their starting point for WPF development: layout and composition concepts, data binding, templating, styling, and animation. The emphasis is on using XAML to create applications that help users enter, visualize, and locate the complex data in a modern business application.

Previous clients have said that the class significantly reduced the time required for developers to gain the expertise for production quality work in XAML, and helped them leverage the technology to produce software applications that are more productive, more intuitive, and contain more business value.

The class is taught by a world-renowned XAML expert. It is available in three-day, four-day, and five-day versions, with longer versions including more advanced technical topics, more exercises, and content on helping developers produce better user experiences.

Detailed description

Windows 7 is still the workhorse desktop OS for many organizations. The most advanced and mainstream user interface technology for developing native desktop applications for Windows 7 is Windows Presentation Foundation, which used the XAML markup language.

XAML has many advantages over other UI technologies, but that power comes at a price - it is not easy to learn. It takes many months for a developer to become proficient alone, and until then the XAML-based views they produce will often be limited in functionality and suffer from sub-optimal construction.

This class, led by one of the foremost XAML experts in the world, can make a substantial difference, allowing development teams to gain XAML expertise far more quickly and use it to produce more valuable and better crafted results. Billy Hollis has taught XAML classes to teams from half a dozen Fortune 1000 companies and dozens of other organizations. He also leads a development team that has a worldwide reputation for producing innovative user experiences in XAML, for both WPF and the newer Universal Windows Platform.

But this class is not just for developers. Parts of the class can help business analysts, development managers, visual designers, and others involved in software development, by making them aware of what XAML can do. The class has a flat rate fee, and is thus open to anyone at your organization who can benefit from it.

Basic technical topics include:

- Syntax of XAML
- The composition model that knits parts of the UI together
- The layout system and how it works
- The base set of visual elements

- Data binding
- Templating for data visualization – data templates and control templates
- Graphical elements needed for visualization and aesthetics: brushes, opacity, shapes, gradients, etc.
- Styling and animation

Longer classes can also have more advanced technical topics, including:

- XAML internals
- The dependency property system
- Creating controls and components for XAML
- Architecture of navigation shells, patterns to use, and other parts of a typical business framework
- Differences in XAML for WPF and Windows 10 / UWP, and recommendations for creating WPF assets that can be reused in UWP XAML

Classes can also incorporate non-technical topics to help developers see how to design for XAML more effectively:

- Fundamental design do's and don'ts based on important principles of design
- Lightweight design process for developers
- Interaction and navigation patterns
- Designing touch-based interfaces

Classes are available in three-day, four-day, and five-day versions. The three-day version covers the core concepts for XAML development, and longer classes incorporate the topics listed above in an appropriate mix for a particular team.

The class requires attendees to have a Windows 7 or Windows 10 machine with Visual Studio 2013 or 2015. The class contains many hands-on exercises. Almost all of them are “challenge” exercises, in which a result or outcome is shown and the class attendee is tasked with finding a way to accomplish the outcome in XAML.

If your development team is beginning development with Windows Presentation Foundation, help them get there faster, produce better, more maintainable results, and create user experiences that will add significant business value. Call today for a syllabus and to check availability for your organization. You can reach Billy on his mobile phone at 615.400.7678.