

Windows Presentation Foundation

(4 days hands-on)

Windows Presentation Foundation (WPF) is Microsoft's new API for creating compelling and dynamic user interfaces based on XAML. This course provides comprehensive coverage of WPF in .NET 4.0, explaining how it differs from traditional Windows Forms development. The course also takes a detailed look at the Model-View-ViewModel design pattern and Prism.

This course can be used as part of your preparation for Microsoft Exam 70-511: TS: Windows Applications Development with Microsoft .NET Framework 4.

Contents:

- **Getting Started with WPF:** Overview of WPF concepts and features; Creating a simple WPF application
- **Event Handling:** Overview of events; Bubbling events; Tunnelling events; Commands
- **Creating a User Interface:** Page layouts; Content controls; Range-based controls; Items controls; Accessing the visual tree
- **Managing Windows:** Window essentials; Creating modal and modeless dialogs; Pages and navigation
- **Resources, Styles, and Triggers:** Logical resources; Defining styles; Style inheritance; Using triggers
- **Using Control Templates:** Overview of control templates; Defining control templates for content controls; Defining control templates for items controls; Resource-only DLLs
- **Data Binding:** Concepts and terminology; Binding a data source to a control; Handling property-change notifications; Conversion and validation
- **Data Binding to a Database:** Binding to a data object; Updating the database
- **Data Binding to Collections:** Binding to a collection; Defining data templates; Using collection views; Binding to ADO.NET data objects; Binding to LINQ and XML
- **Shapes, Transforms, and Brushes:** Defining shapes; Creating and using transforms; Using brushes effectively
- **Multithreading:** Multithreading with the dispatcher; BackgroundWorker; Tracking progress; Supporting cancellation
- **The MVVM Design Pattern:** Overview of MVVM; MVVM application structure; MVVM programming techniques
- **Using the MVVM Light Toolkit:** Overview of the MVVM Light Toolkit; Creating an MVVM Light application; Implementing commands; Mapping events to commands
- **Prism:** Overview of Prism; Prism key technical concepts; Implementing a Prism application

Who Should Attend:

Developers who want to create XAML user interfaces on the .NET 4.0 platform.

Prerequisites:

3-6 months experience in general .NET development.