

WPF and MVVM Training

COURSE CONTENT

GET IN TOUCH



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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

The WPF and MVVM Training offered by Multisoft Systems is designed for developers aiming to build rich, interactive, and maintainable desktop applications using Microsoft's .NET framework. Windows Presentation Foundation (WPF) provides a modern UI framework for developing desktop client applications, while the Model-View-ViewModel (MVVM) design pattern promotes clean separation of concerns and enhances testability, scalability, and code reusability.

Module 1: Creating Your First WPF Application

- ✓ Introduction
- ✓ What is WPF?
- ✓ Create and Explore WPF Project
- ✓ Understanding How Files are generated

Module 2: Instantiating Objects in XAML

- ✓ Introduction
- ✓ Work with elements and attributes
- ✓ Set property with the Property Element Syntax
- ✓ Set Property with content Syntax
- ✓ Use the Collection Syntax

Module 3: Building a User Interface

- ✓ Introduction
- ✓ WPF Layouts
- ✓ Grid Layout
- ✓ Understand the size of Rows and Columns
- ✓ Layout Properties
- ✓ Nested Grid
- ✓ Set attached properties of XAML
- ✓ Set attached properties in C#
- ✓ Accessing the properties with static method

Module 4: Organizing Code with User Controls

- ✓ Introduction
- ✓ Extracting the header into User Controls
- ✓ Refactor of XAML code in Main Window
- ✓ Create User Control

- ✓ XAML Namespaces of WPF

Module 5: Apply Data Binding and MVVM

- ✓ Introduction
- ✓ The MVVM Pattern
- ✓ Creation of View Model
- ✓ Use of ViewModel in the in View
- ✓ Implementation of Business Logic
- ✓ Usage of IValueConverter
- ✓ Understand Commands and MVVM
- ✓ Creation and usage of Delegate Commands
- ✓ Raising the Command's Events

Module 6: Creation of Reusable Resources

- ✓ Introduction
- ✓ Understand XAML Resources
- ✓ Binding Converter
- ✓ Move Resources to Separate file
- ✓ Merge Multiple Resource Dictionaries

Module 7: Working with Data Templates

- ✓ Introduction
- ✓ WPF's Flexible Content Model
- ✓ Data Templates with Items Control
- ✓ Implementation of Main View Model
- ✓ Usage of Data Template with Content Control
- ✓ Implementation of Implicit Data Template
- ✓ Binding Menu Items with Commands

Module 8: Dependency Injection and Styling of Application

- ✓ Introduction
- ✓ Instantiate the Main Window in C#
- ✓ Setting up the Dependency Injection
- ✓ Define Property Values with Style
- ✓ Understand Explicit and Implicit Styles

Module 9: Mastering Control Templates

- ✓ Introduction
- ✓ Look at Custom Control
- ✓ Creating of Custom Template for the Check Box
- ✓ Sizing of Check Box

Module 10: Validating User Inputs and Debugging the WPF Application

- ✓ Introduction
- ✓ Implementation of INotifyDataErrorInfo
- ✓ Implementation of ValidationViewModelBase class
- ✓ Showing Error in ToolTip
- ✓ Using the Validation Error Template
- ✓ Showing the Error in User Interface