Programming
Windows Presentation Foundation
(WPF)

Level: medium

Length: 35 hours

Course Objective: learn to use the Windows Presentation Framework for building .NET standalone applications

What You Will Learn
- The architecture of WPF: how the programs are organized, the main components, their roles, how they interact
- The main ways to organizing the standalone applications

Who Can Attend: programmers who want to use Windows Presentation Foundation in order to create standalone .NET applications with nice graphical user interfaces

Prerequisites
- Knowledge of C# at least at medium level
- Basics of the .NET platform
- It helps if the attendees are familiar with Windows Forms - the previous GUI framework used by Microsoft

Required Facilities: VGA projector, white board, computers with Microsoft Visual Studio or Microsoft Visual C# Express Edition installed.

Related Courses: The C# Programming Language

Description
      This training is a good start for programmers who are familiar with C# and .NET and want to build standalone applications with WPF. It is helpful if the former Microsoft solution for building GUIs under .NET, namely Windows Forms, is known.
      The WPF architecture is presented, its main components, how they are assembled and how they interact, the rules & constraints someone has to obey in order to build functional GUIs for .NET applications.

Contents

1. Introduction to WPF, its place among other .NET frameworks, its role

2. Declarative gui specification - XAML

3. Layouts

4. Dependency properties

5. Routed events

6. Controls

7. WPF applications

8. Biding elements

9. Commands

10. Model-View-ViewModel (MVVM) architectural pattern

11. Application resources

12. Multithreading

13. Windows

14. Styles, templates, skins, themes

15. Data binding