

Workshop	
Name	WPF 4
Duration	2 days
Objective	Developing WPF 4 Applications
Participants' Entry Profile	Participants attending this course must have: <ul style="list-style-type: none"> • Worked on C#
Training Methodology	The workshop will follow Synergetics methodology of Concept Visualization Active Experimentation Application Development. The workshop will be 100% Hands-On with each participant having access to system during the session

Setup Requirements	
Hardware and Software Requirements	Participant's as well as Trainer's Machine are required to have: Hardware Pentium 4 2.0 GHz 4 GB RAM LAN Connectivity 500MB HDD (Free Space) Software Windows 7 or Windows 8 IIS 7 Microsoft SQL Server 2008 R2 Microsoft Visual Studio 2010 Ultimate
Training Lab Requirements	Whiteboard 6 feet by 4 feet (minimum) Whiteboard markers – Red, Blue, Green, Black Video Projector (1024 X 768 resolutions)

Course Contents**Day 1**

- **Introducing WPF**
 - The Evolution of Windows Graphics
 - The Architecture
- **XAML**
 - Understanding XAML
 - Properties and Events
 - Loading and Compiling XAML
 - Elements and Attributes
 - Type converters
 - Markup extensions
- **Layout**
 - Understanding Layout
 - StackPanel
 - WrapPanel
 - DockPanel
 - Canvas
- **Properties**
 - Dependency Properties
 - Property value Inheritance
 - Dependency properties
 - Attached Properties
 - ReadOnly properties
- **Routed Events**
 - WPF Events
 - Keyboard Input
 - Mouse Input
- **Controls**
 - The Control Class
 - Content Controls
 - List Controls
 - Range-Based Controls
 - Date Controls
- **Element Binding**
 - Overview
 - Binding Elements Together
 - Binding to Objects That Aren't Elements
- **Resources**
 - Overview

- Resource Basics Resource Dictionaries
- Styles and Behaviors
- Overview Style Basics Triggers Behaviors
- Shapes, Brushes, and Transforms
- Overview Understanding Shapes Brushes
- Transforms Transparency

Day 2

➤ **Geometries and Drawings**

- Overview
- Paths and Geometries
- Drawings

➤ **Animation Basics**

- Overview
- Understanding WPF Animation Basic Animation
- Storyboards
- Animation Easing
- Animation Performance

➤ **Advanced Animation**

- Overview
- Key Frame Animation
- Path-Based Animation
- Frame-Based Animation
- Storyboards in Code

➤ **Control Templates**

- Overview
- Logical Trees
- Visual Trees
- Creating Control Templates
- Organizing Template Resources
- Building More Complex Templates
- Visual States

➤ **Data Binding**

- Overview
- Binding to a Database
- Objects Binding to a Collection
- Data Providers

➤ **Data Views**

- The View Object
- Filtering, Sorting, and Grouping
- Lists, Grids, and Trees
- DataGrid

