

AdvWPF

# Advanced WPF

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## **Advanced WPF**

AdvWPF - Version: 2

### 3 days Course

#### **Description:**

This three-day instructor-led course provides students with the knowledge and skills architecting and developing Advanced WPF applications and infrastructures.

In this course students will have best practices and learn how to build custom controls, work with resources, manipulate the logical and visual tree, trace and debug, design with the famous MVVM pattern, create advanced data binding, interop with other UI technologies, create UI and data virtualization and profile and enhance WPF application performance.

The course is packed with code samples, demos, exercises and labs, to facilitate understanding Advanced WPF-based UI applications design concepts, development and best practices.

#### **Intended audience:**

Developers with working knowledge of WPF

**Prerequisites:** 

**Objectives:** 

**Topics:** 



#### Day 1

- UI & Markup features :
  - <sup>o</sup> Understand Xaml & Layout
  - <sup>o</sup> Working with shapes
  - <sup>o</sup> Transformation of ui objects
  - <sup>o</sup> Custom panel workshop
  - <sup>o</sup> Markup extension
  - <sup>o</sup> Resources & styles best practices
  - <sup>o</sup> Expression Blend Intro
  - <sup>o</sup> Introduction to Animation
  - <sup>o</sup> Animation with blend

#### Day 2

- Custom controls & UserControls
- Custom controls workshop
- Controls Templates & Style
- UserControl vs. CustomControls
- Debug Visual Tree
- Asynchronous Application & WPF
- Intro to Win10 UWP development

#### Day 3

- MVVM & Binding
  - <sup>o</sup> Binding deep inside
  - Dependency property
  - <sup>o</sup> MVVM Pattern : ViewFirst , VMFirst
  - º IOC pattern,



- <sup>o</sup> MVVM libraries : Light, Prism
- <sup>o</sup> Navigation in MVVM
- <sup>o</sup> DataTemplates
- <sup>o</sup> Validation
- <sup>o</sup> WPF Behaviors & attached properties