Introduction to
Windows Presentation Foundation (WPF)

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Overview for today

1. Introduction to .NET 3.x and WPF (… a few slides)
2. Top 3 recommended books, links, and resources
3. “Hello WPF” and “Hello animated WPF”
Introduction to WPF and .NET

Source: Adam Nathan "Windows Presentation Foundation Unleashed", SAMS Publishing 2007
What we will learn in the tutorials…

• **Developing** applications with C#, WPF, and XAML
• **Using** *Visual Studio 2008*

**Topics:**
- User interface elements
- Animation and storyboards
- Transformations (e.g., scale, rotate, translate)
- Video
- Sound (e.g., MIDI)
- Data binding
- Expression Blend designer
- (… and a few others)
Unified framework: 2D, 3D, speech, video, etc.

Examples: http://windowsclient.net/community/showcase.aspx
Hardware accelerated

Example: British Library
http://www.bl.uk/onlinegallery/virtualbooks/
Resolution independent

Source: Adam Nathan "Windows Presentation Foundation Unleashed", SAMS Publishing 2007
Extensible Application Markup Language (XAML)

```xml
<Grid>
  <Button Name="buttonXAML"
    FontSize="20"
    FontWeight="Bold"
    Background="Orange"
    Margin="40,80,40,80">Button</Button>
</Grid>
```

```csharp
Button button = new Button();
button.Name = "button";
button.FontSize = 20.0;
button.FontWeight = FontWeights.Bold;
button.Background = new SolidColorBrush(Colors.Orange);
button.Margin = new Thickness(40, 80, 40, 80);
button.Content = "Button";

Grid grid = new Grid();
grid.Children.Add(button);
```
Rich composition and customization

Example: video inside of button

```xml
<Button Name="buttonVideo">
  <MediaElement Source="video.wmv" Width="240" Height="160" Name="mediaElement" />
</Button>
```

XAML
Top 3 recommended WPF books, links, and resources

Adam Nathan “Windows Presentation Foundation Unleashed”
SAMS Publishing 2007
Top 3 recommended WPF books, links, and resources

Microsoft Developer Network (MSDN)

http://msdn.microsoft.com
http://social.msdn.microsoft.com/forums/
Top 3 recommended WPF books, links, and resources

Microsoft WindowsClient.NET

http://windowsclient.net/wpf/

http://windowsclient.net/learn/videos_wpf.aspx
Walkthrough

“Hands-on”:

- Create “Hello WPF” application
- Create “Hello animated WPF” application