

.Net and WinRT

What are Metro style apps?

Metro style apps are full screen apps tailored to your users' needs, tailored to the device they run on, tailored for touch interaction, and tailored to the Windows user interface. Windows helps you interact with your users, and your users interact with your app.

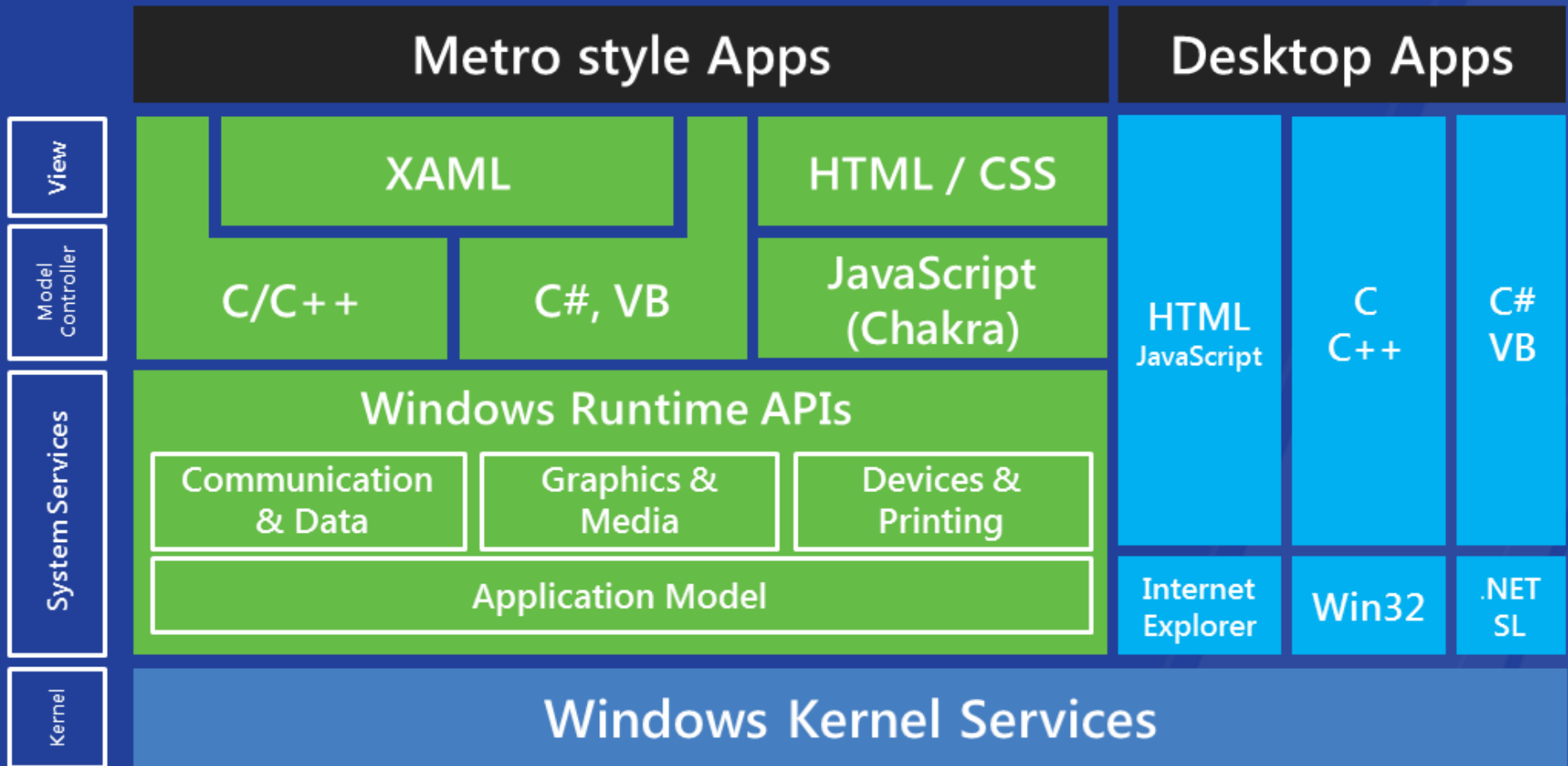
Demo: Metro style apps

Windows Runtime

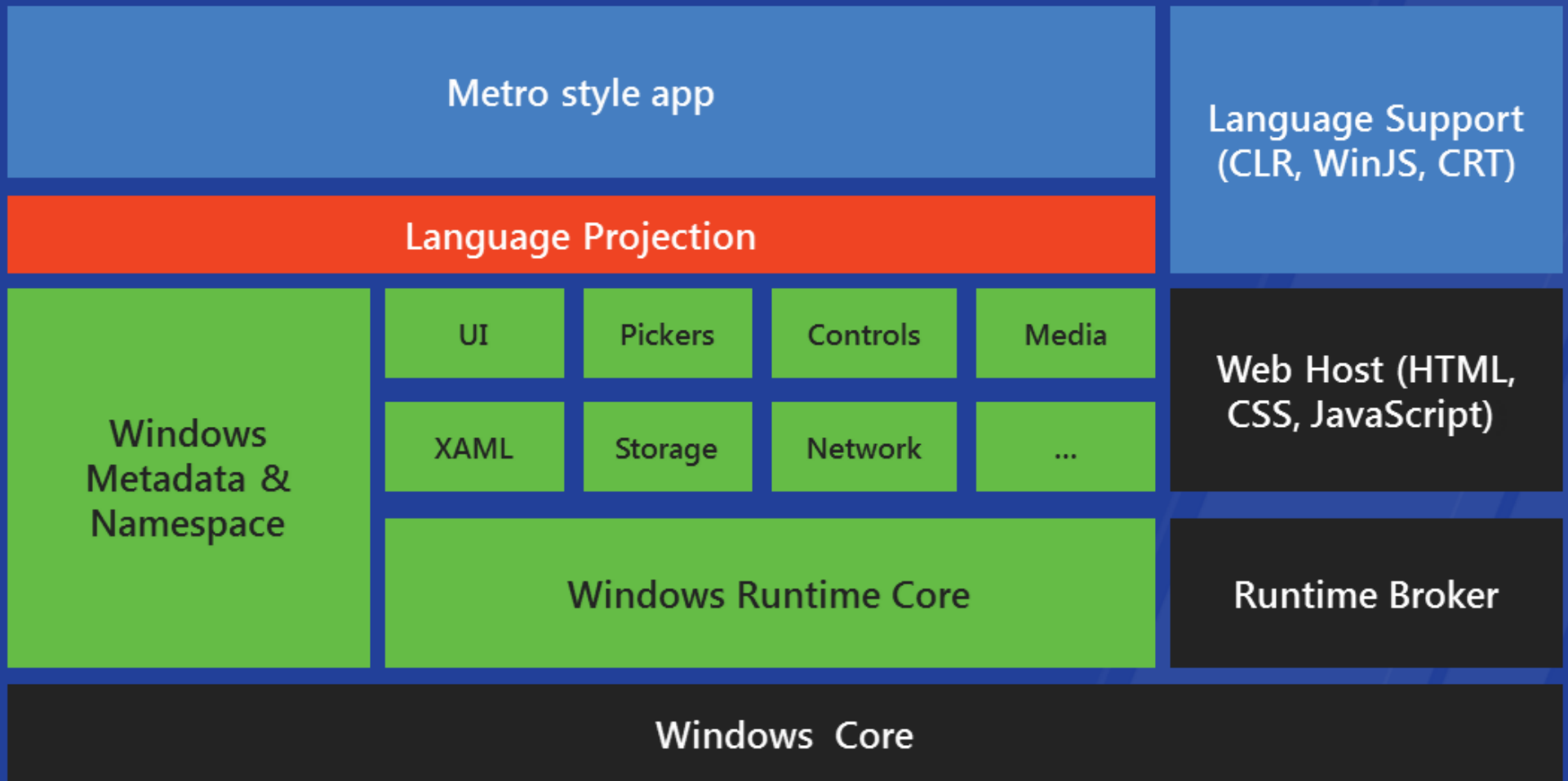
Windows Runtime, or WinRT, is Microsoft's new programming model that makes the backbone of the new Metro-style apps (also known as **Immersive**) in new Windows 8 operating system.

You already have the skills to build
Metro style apps with C# and VB

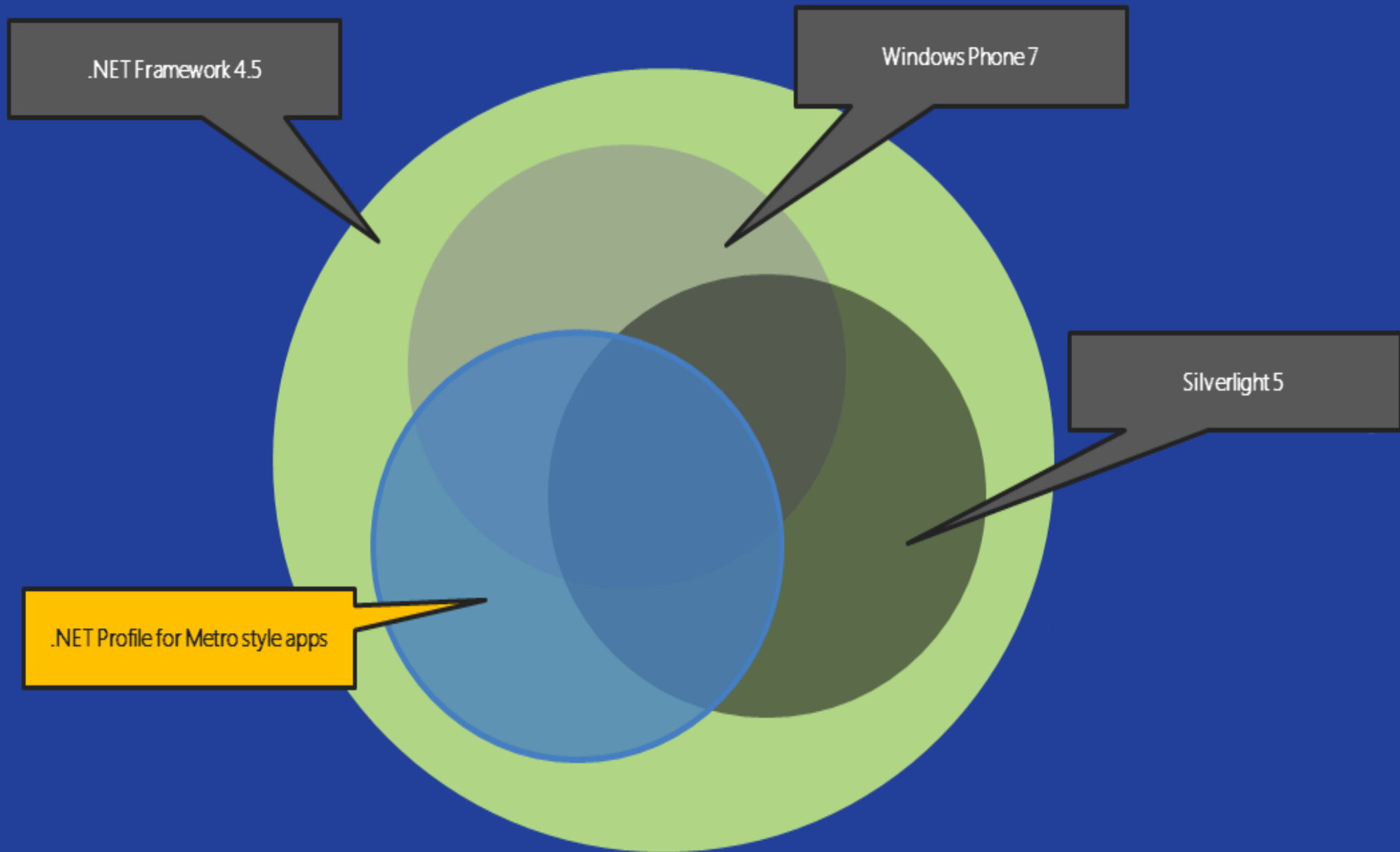
Windows 8



Windows Runtime Architecture



Metro style profile



.NET for Metro style apps

WCF

XML

HTTP

MEF

Serialization

BCL

Main Namespaces of the profile

System

System.Collections*

System.ComponentModel

System.ComponentModel.Composition*

System.Diagnostics*

System.Dynamic

System.Globalization

System.IO

System.Linq*

System.Net*

System.Reflection

System.Runtime.InteropServices*

System.Runtime.Serialization*

System.ServiceModel*

System.Text*

System.Threading

System.Threading.Tasks

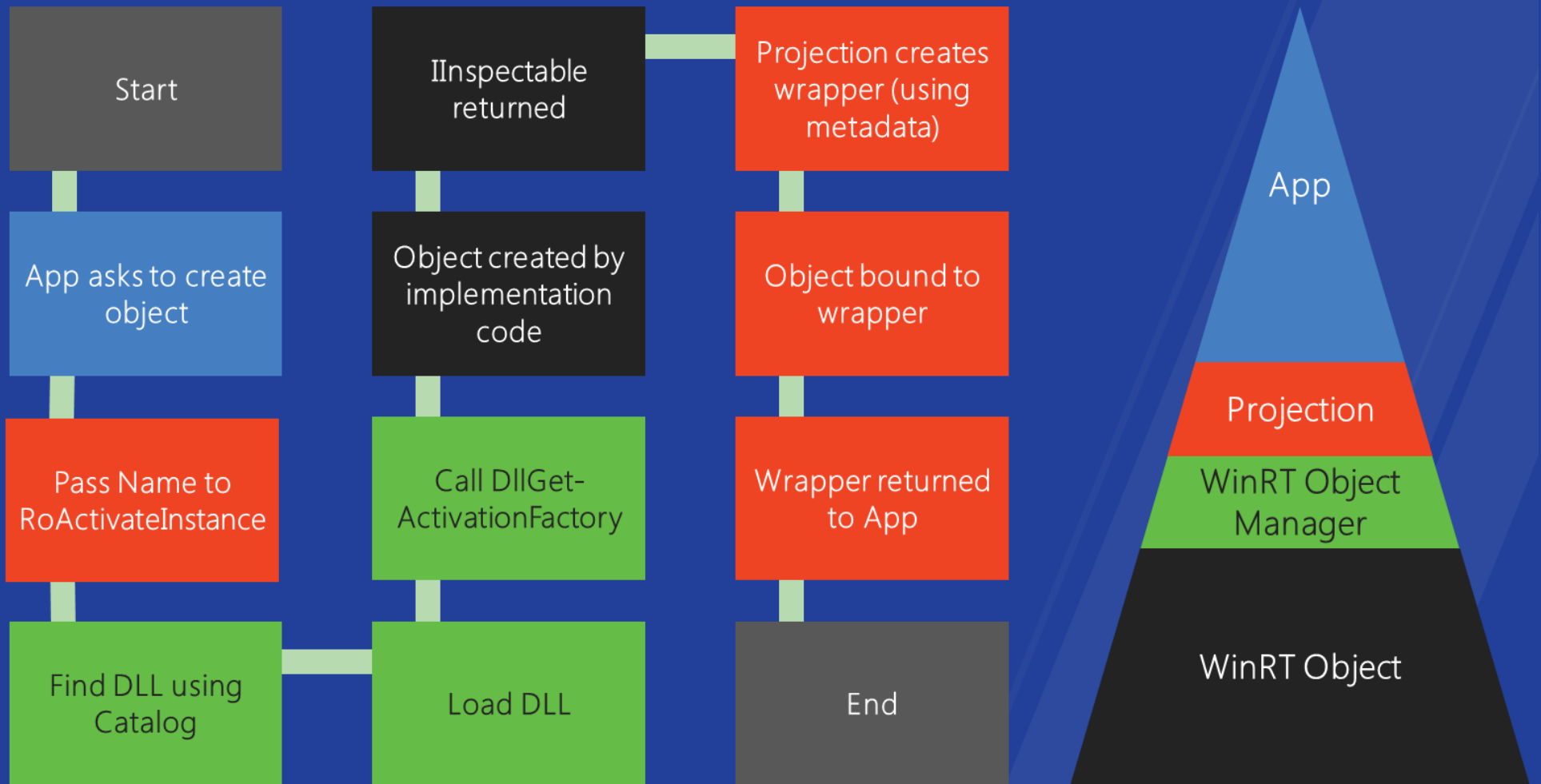
System.Xml.*

System.Xml.Linq

WinRT metadata

Windows Runtime metadata files use an updated version of .NET's metadata format

Object Creation/Activation



A kind of magic

Type Forwarding

Projection

Wrappers

DO NOT call APIs that are not
part of the profile!

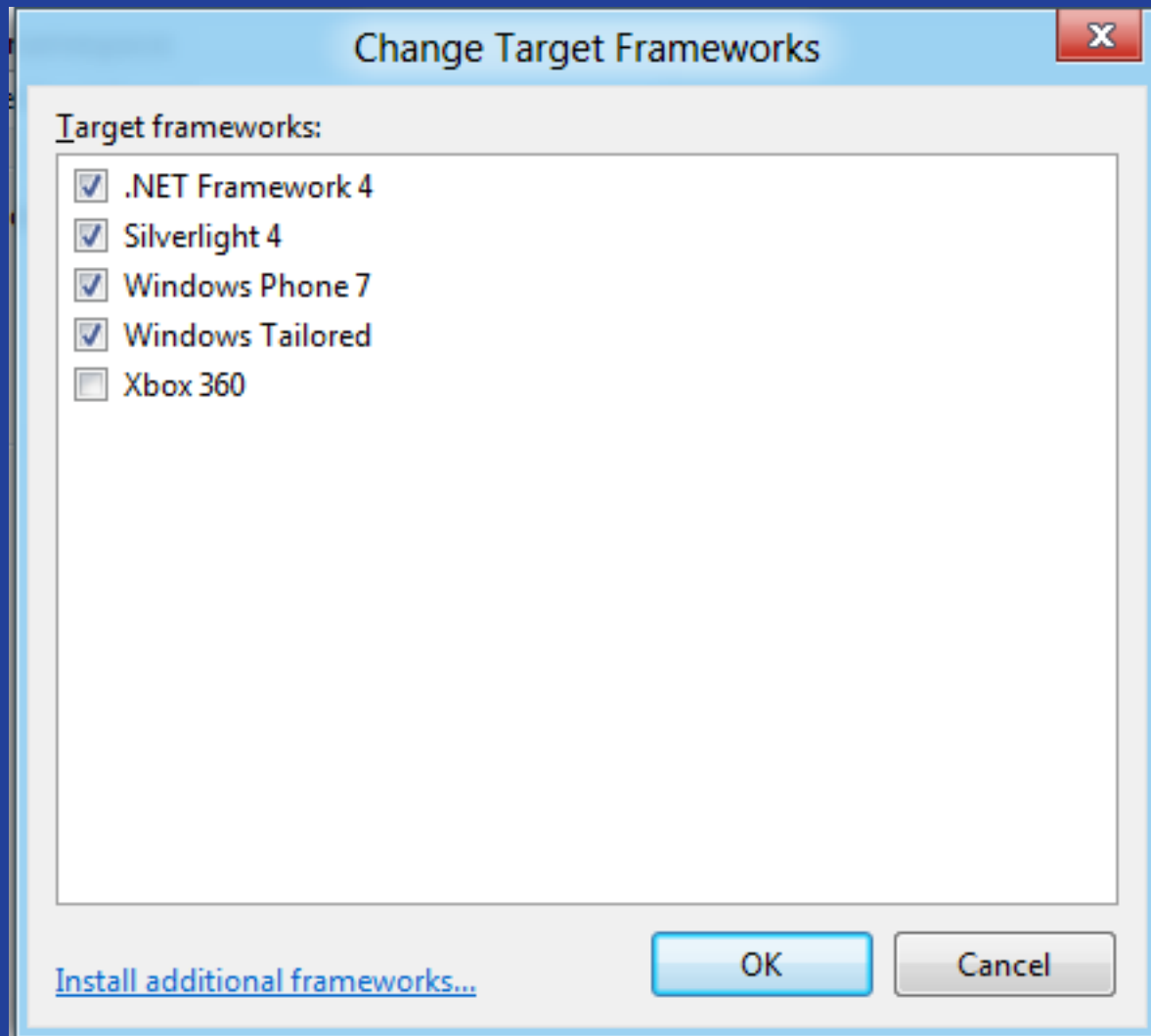
WinRT Components

You should build a WinRT component when you want your code to be used from JS, C++, C# and VB

Demo

Managed WinRT Component

Portable class library



Demo

Using WinRT in Desktop App

Finalization

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Metro style apps with C# and VB

Resource Videos

- PLAT-874T – Lap around the Windows Runtime
- PLAT-875T – Windows Runtime internals: understanding “Hello World”
- TOOL-531T – Using WinRT with C#
- TOOL-930C – A .NET developer’s view of Windows 8 app development

Questions