

Microsoft
CERTIFIED

*Professional
Developer*

Enterprise Applications Developer
Windows Developer
Web Developer

Microsoft
CERTIFIED

IT Professional

Database Developer
Database Administrator

Microsoft
CERTIFIED

*Technology
Specialist*

.Net Framework 2.0
Web Applications
Windows Applications
Distributed Applications
SQL Server 2005



CERTIFIED PROFESSIONAL



Silverlight

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Microsoft
CERTIFIED

Solution Developer

Microsoft
CERTIFIED

Application Developer

Microsoft
CERTIFIED

Database Administrator

Microsoft
CERTIFIED

Professional



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Silverlight™

Me.Bio.ToString()



- Project Management
- Software Development
- Technology Evangelism
- Allinone!

aribil

- AJAX
- Silverlight
- Expression Studio

trainings.

Microsoft UX Technologies



Various criteria for comparison

- “Richness” of user experience

- “Reach” of applications that are built

- Depth of platform integration

- Development experience

 - Developer & non-developer tooling, programming model, 3rd party controls, etc.

- Status & maturity of technology

Why Silverlight ?



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Microsoft Silverlight is a cross-browser, cross-platform implementation of .NET for building and delivering the next generation of media experiences & rich interactive applications for the Web.

Silverlight Overview



Compelling Cross-Platform User Experiences

- Immersive media experiences & RIA
- Seamless, fast installation for end users
- Consistent experiences on Mac / Windows

Flexible programming model with collaborative tools

- Integration with Web technologies
- Based on the .NET Framework
- Role specific tools for designers / developers

Efficient, lower cost delivery, and more capable media

- HD to Mobile w/ SMPTE VC-1
- Broad media ecosystem
- Tools for live and on-demand publishing

Designer/Developer Tooling



Designer

Look, behavior, brand,
and emotional connection



Developer

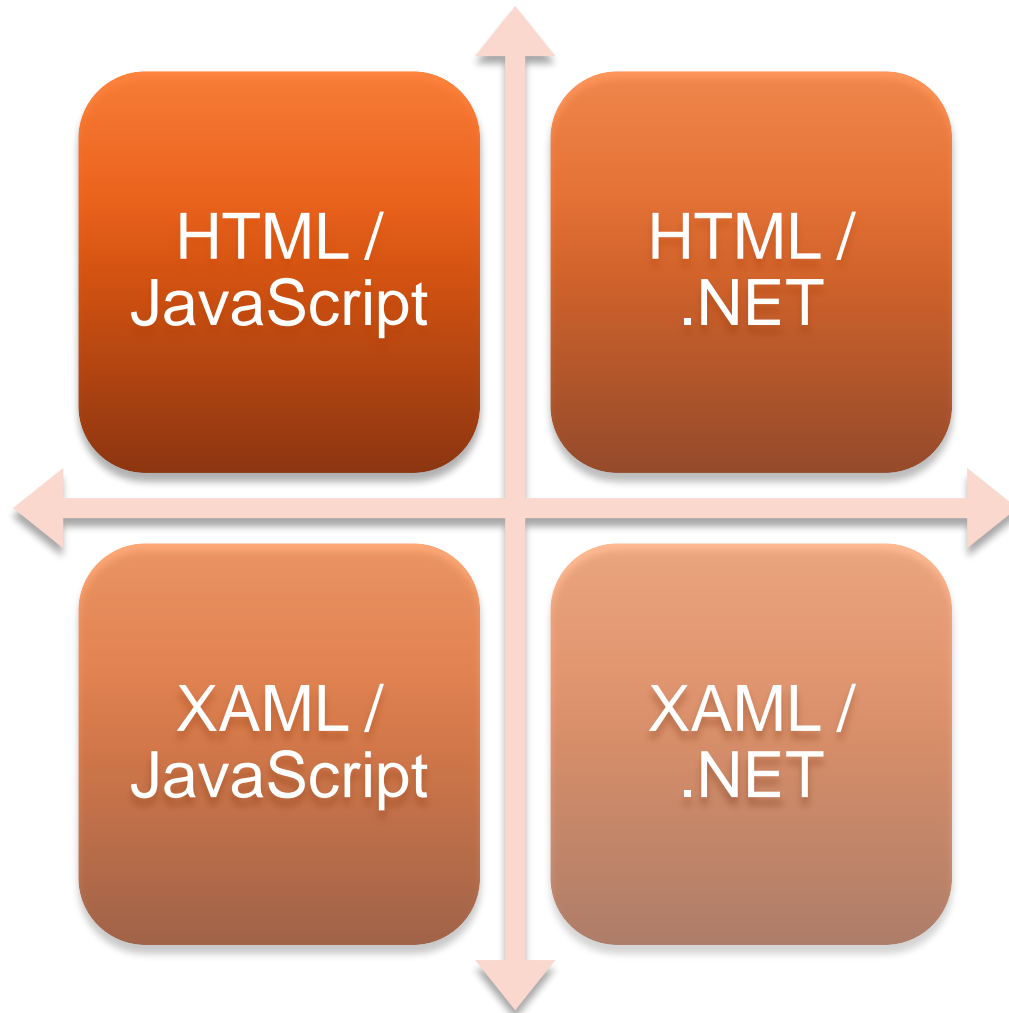
Function, deployment, data,
security, operational integrity



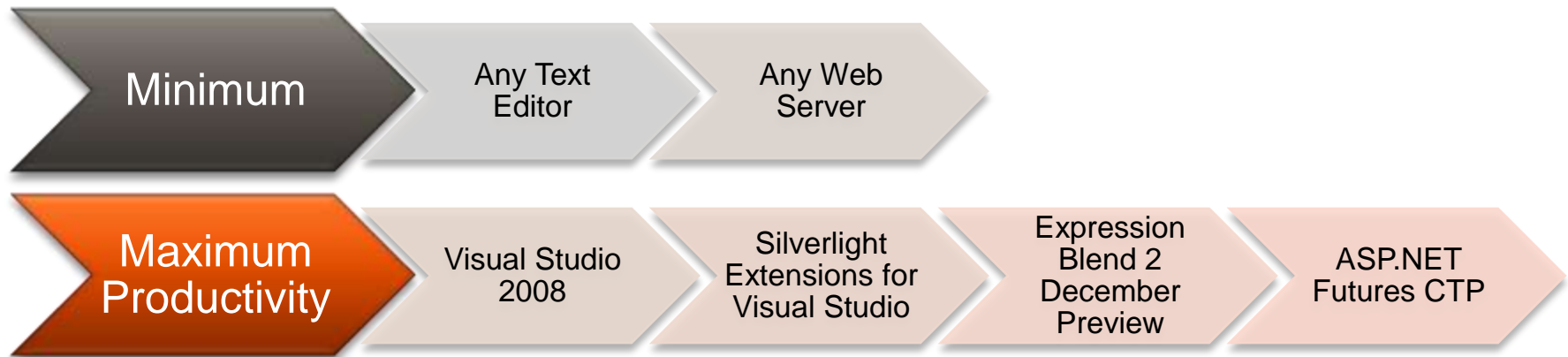
VS 2008



Silverlight and the Web



Silverlight Developer's Toolkit



Silverlight 1.0

2D Graphics

Animations

Input (mouse, keyboard, ink)

Media (WMV, WMA, MP3)

Imaging (JPEG, PNG)

Text

HTTP Downloader

XAML Parser

JavaScript DOM



Graphics and Animations in Silverlight

- 2D Graphics
 - Standard shapes, masking and clipping
 - Transformations: skew, rotate, scale, translate, matrix
- Animation Basics
 - Animations change properties over time
 - Support linear, discrete and spline animation
 - Animatable property types:
 - Double, Color, Point
- Animations and graphics are defined using XAML

Silverlight JavaScript Basics

- Silverlight XAML elements are scriptable via the browser script engine (JavaScript)
- Scriptable objects are obtained via `findName`
 - Scriptable objects (elements) can be controlled via properties and methods
 - Models JavaScript and HTML DOM interaction
 - `findName` is equivalent to `document.getElementById()`
 - Supports tree walking via `children` collection
- Position set using `"Canvas.Top"` and `"Canvas.Left"`
Size can be scaled or set via `Height/Width`

Media

- Media Features
 - Video: WMV V7, V8, V9, VC-1
 - Audio: WMA V7, V8, V9 (standard), MP3
 - Multiple options for deploying media
 - HTTP progressive download
 - Integration with Windows Media Server
 - Extensive WMV ecosystem



Text

- Glyphs
 - Fixed text
 - Full Unicode glyph rendering support
 - Does not support layout (word/line breaking)
- TextBlock
 - Basic layout support
 - Left-aligned, English-based text wrapping
 - Support font encryption and compression
 - V1 supports 64K Unicode Basic Multi-lingual Plane
 - Post V1, increased language support

汉语 ελληνικά English
русский 日本語

Downloader and CreateFromXAML

- HTTP Downloader
 - V1.0 supports HTTP gets (async and sync)
 - Provides download progress
 - ZIP packaging
 - Similar to XMLHTTP
- CreateFromXAML
 - Primary way in V1.0 to dynamically create content
 - Supports namespaces (for name collisions)



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DEMO

Let's Rock!

Silverlight Streaming

Provides developers a free, scalability-on-demand solution for Silverlight



<http://silverlight.live.com>

- Free, 4GB hosting and streaming
- You build the application, we deliver the scale
- High quality, differentiated, controllable user experience
- Complete API Programmability



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DEMO

```
((SilverMovie)sender).play(here);
```

Silverlight Programming Model

JavaScript

- Silverlight 1.0 and 2.0
- Code against both HTML and XAML content
- Integrates with ASP.NET AJAX controls

.NET

- Silverlight 2.0 only
- CoreCLR + Silverlight .NET Framework subset
- VB and C# against both XAML and HTML content

Silverlight V1.0 and V2.0



V2.0 will add .NET to V1.0

CoreCLR

Independent subset of the .NET Framework

Silverlight and .NET: Better Together

- **Highly productive development framework**
 - Multi-language support
 - Latest developer innovations (e.g. LINQ)
 - AJAX integration
- **Great tools**
 - Visual Studio
 - Expression Studio
- **Cross-platform & cross-browser plugin**
 - Works with Safari, Firefox and Internet Explorer
 - Mac OS X and Windows
 - Any web server
 - Fast, easy install process

Declarative Development - XAML

- eXtensible Application Markup Language

Code

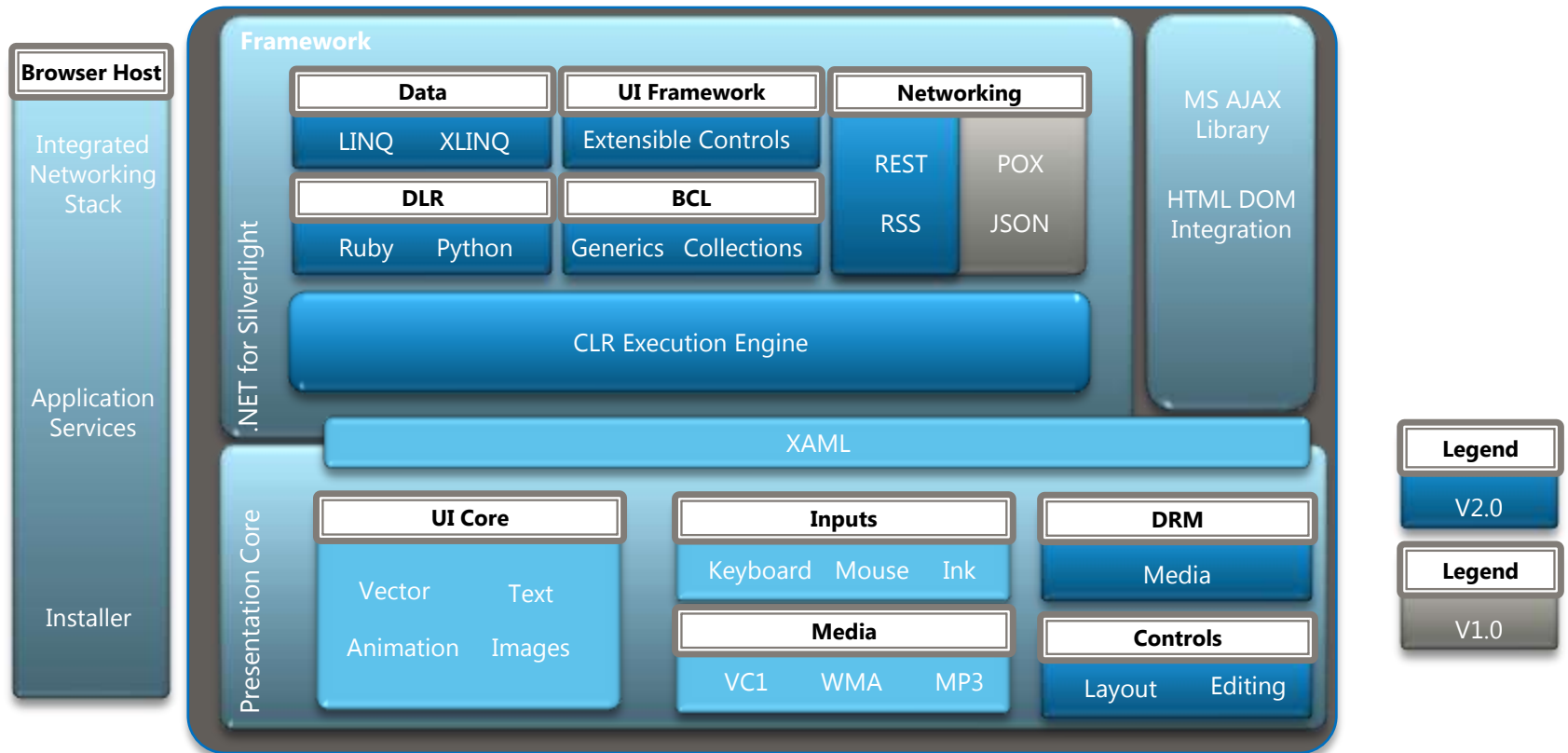
```
Calculator c = new Calculator()  
Multiply m = new Multiply();  
m.P1 = 10;  
m.P2 = 20;  
c.Operations.Add(m)
```

XAML

```
<Calculator>  
  <Operations>  
    <Multiply P1="10" P2="20"/>  
  </Operations>  
</Calculator>
```

- XAML usage
 - Compiled to produce executable code
 - Dynamically loaded (parsed or pre-parsed)

Silverlight Architecture



Silverlight and Tools Roadmap

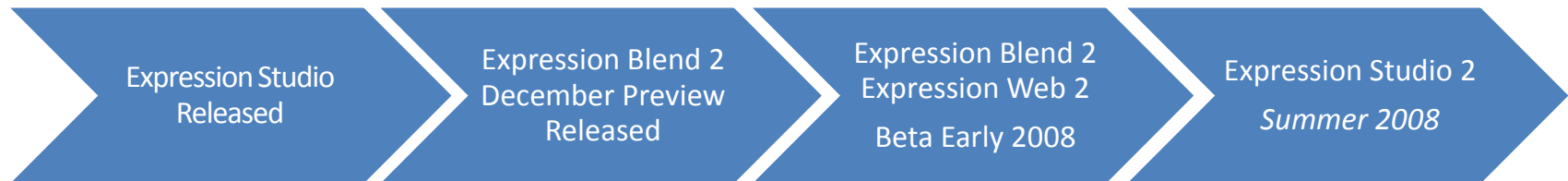
Silverlight



Visual Studio



Expression



Resources

- Community Site: <http://silverlight.net>
- Main Product Site: <http://www.microsoft.com/silverlight>
- MSDN Center: <http://msdn.microsoft.com/silverlight>
- Online Forums: <http://silverlight.net/forums>
- Online SDK: <http://msdn2.microsoft.com/bb188266.aspx>
- Top Silverlight Blogs
 - Tim Sneath: <http://blogs.msdn.com/tims>
 - Mike Harsh: <http://blogs.msdn.com/mharsh>
 - Joe Stegman: <http://blogs.msdn.com/jstegman>
 - Laurence Moroney: <http://blogs.msdn.com/webnext>
 - Ernie Booth: <http://blogs.msdn.com/ebooth>



Microsoft Egypt

Expression Studio Training Happy Ending

THANK YOU

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