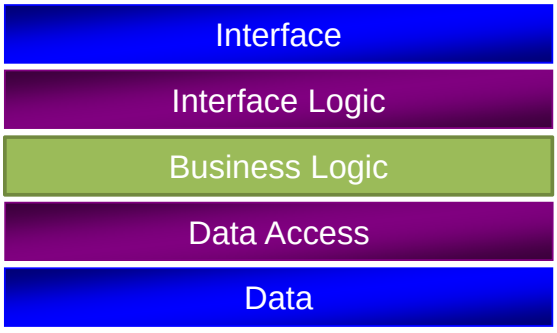
Visual Studio LIVE! EXPERT SOLUTIONS FOR .NET DEVELOPERS

ROCK YOUR CODE TOUR 2017 | CHICAGO

Building Cross-Platform Business Apps with CSLA .NET

Rocky Lhotka
Magenic

N-Layer App Architecture



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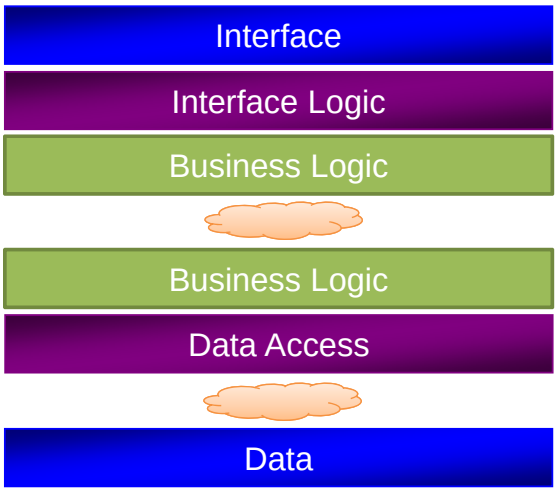
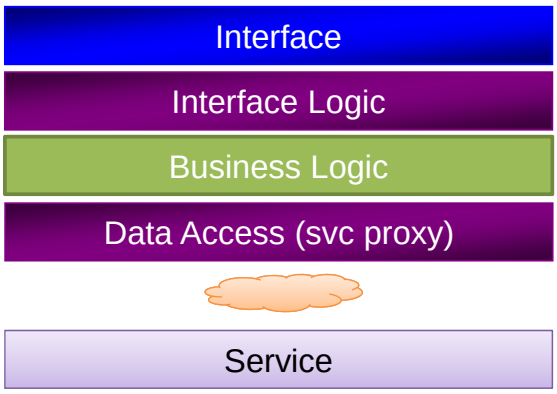
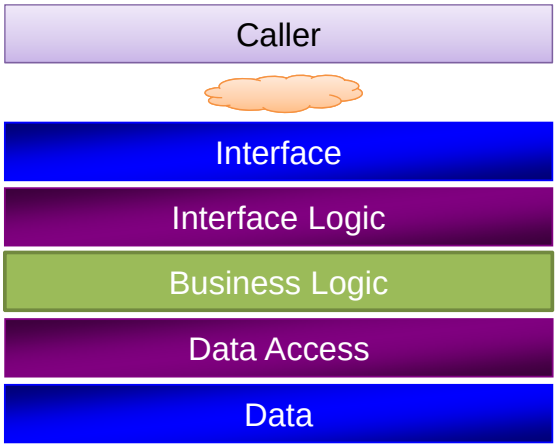
3-Tier App Architecture (shared logic)



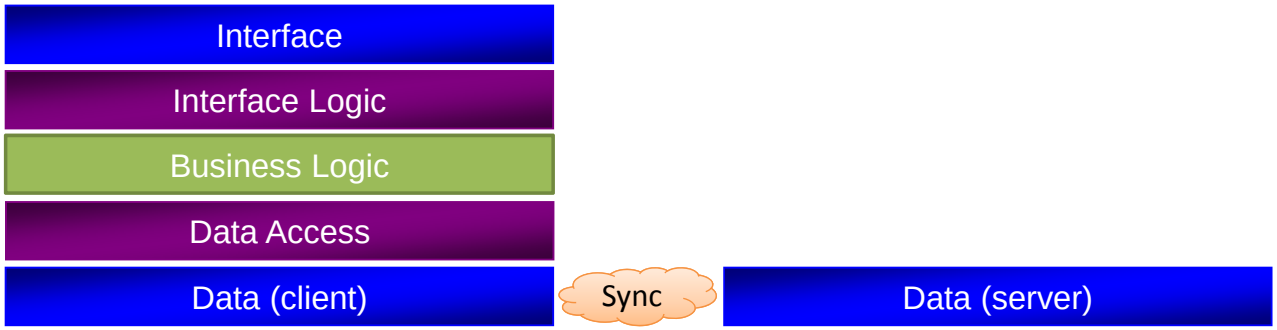
Edge App Architecture



Service Architecture



Disconnected Edge App Architecture



CSLA .NET Development Framework

Lower development, maintenance cost

- Standardize code structure
- Focus on business, not "plumbing"

Built-in support for growth

- Flexible deployment models
- Scalable use of server resources

Abstract .NET

- Leverage, but hide, .NET complexity
- Shield app code from .NET changes

About CSLA .NET

- Cross-platform open-source .NET development framework
- Used by

- Retail
- Manufacturing
- Telecom
- Finance
- Shipping
- Medical
- HR and Payroll
- Sports
- Security
- Media
- Web sales

- National
- State/Province
- Local
- City
- Police
- Fire

- Military
- International
- NGO
- Education

cslanet.com

github.com/marimerllc/csla

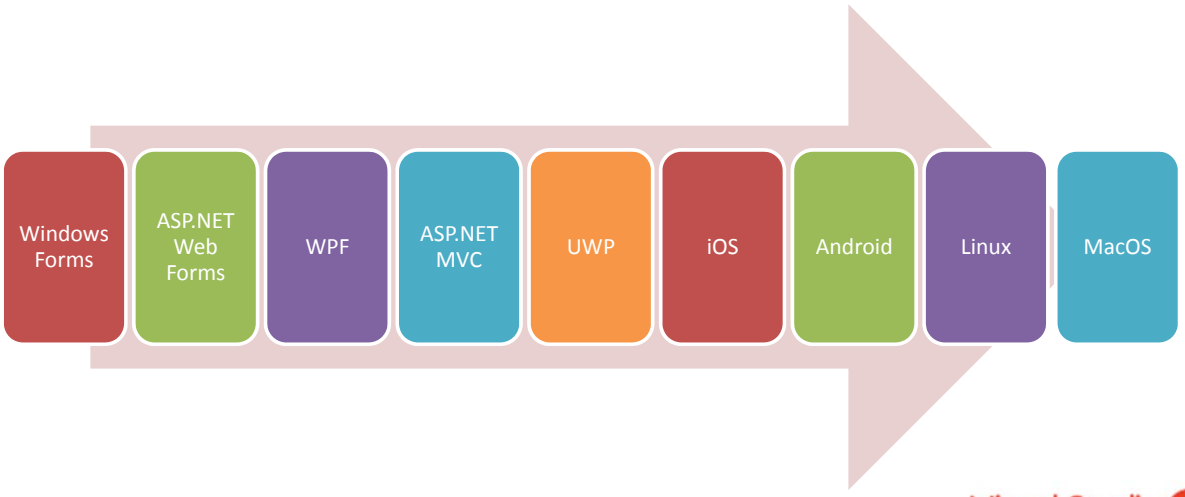
nuget.org/packages?q=csla+.net

20 years!

ef History

1997: CSLA COM
2001: CSLA .NET 1.0
2005: Support .NET 2.0, generics
2007: Support .NET 3.0: WCF, WPF, WF
2008: Support Silverlight, Entity Framework
2010: Support for .NET 4.0, Silverlight 4, WP 7
2011: Support for mono, Android, WP 7.5 "Mango"
2012: Support for .NET 4.5, Windows 8 WinRT, WinPRT
2013: Support for iOS (and Android) via Xamarin
2015: Support for .NET 4.6, UWP (Windows 10)
2017: Support for .NET Core and NetStandard

Supported Platforms



CSLA .NET Goals

Minimize/standardize coding

- Decrease maintenance costs

Require software layering

- Enforce layering/separation of concerns
- Decrease maintenance costs

Enable responsibility-driven business layer

- Responsibility-driven business objects
- Encapsulate validation/authorization/logic
- Support data binding (Windows, Web, XAML)

Abstract mobile object architecture

- Codeless switch between 1, 2, 3, 4-tier models
- Transport neutral (HTTP, WCF, Remoting, Enterprise Services)
- Gain scalability and security

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Non-goals

- UI framework
- Object-relational mapping (ORM)
- Support for data-centric OO designs
- Async messaging (pure SOA)
- Languages beyond VB/C#

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CSLA .NET Primary Features

Business rules	• Business, validation, authorization
Data binding	• XAML, Xamarin, Windows, Web
Mobile objects	• 1-, 2-, 3- and 4-tier deployment models
Abstract persistence	• ADO.NET, Entity Framework, others
LINQ	• Synced lists, data binding
N-level undo	• Smart client platforms

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Working with Xamarin

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DEMO

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THANK YOU

Microsoft Regional Director