

*The Trials and
Tribulations of
Developing an In-House
Customized Municipal
GIS Web Site using the
ArcGIS Server API 2.0 for
Silverlight*

Live Audience Cam



Why Silverlight?

Why Me?

Why, why me???



Site Specs

- Visual Studio 2010
 - Started at 2008
- Silverlight 4
 - started at 3
- .Net 4
 - started at 3.5
- ArcGIS Silverlight API 2.0
 - Started at 1.2
- WCF RIA Service 1.0
 - Started at beta

Who am I and who are you?



Start with Decisions

- Who builds it?
- Which API?
- Which code?
- Which template?
- Which database connection?



DECISIONS



In-house vs. Vendor



VS.



DECISIONS



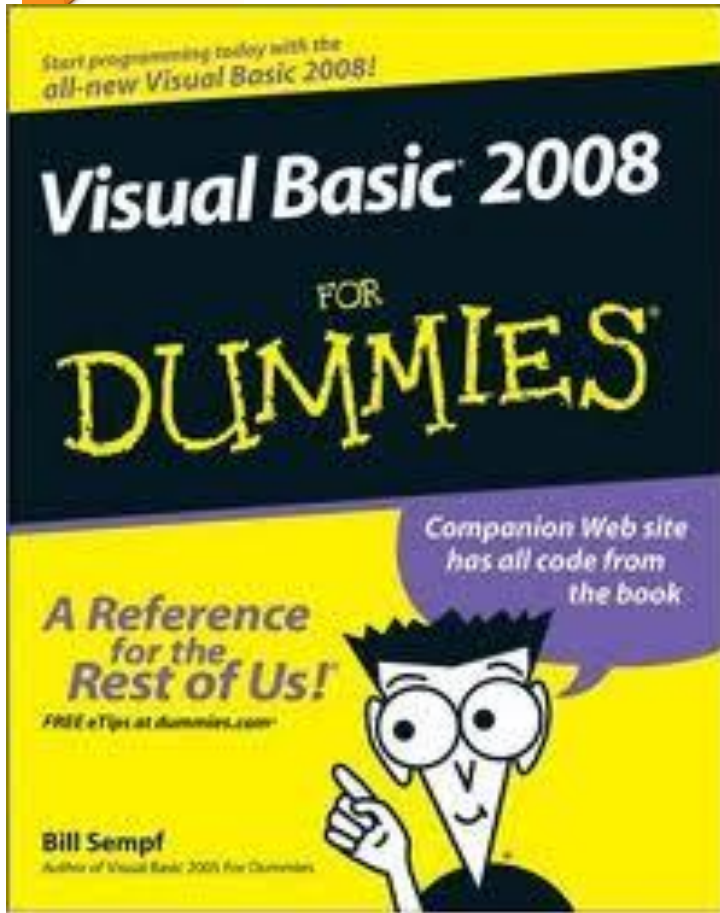
Silverlight vs. Flex



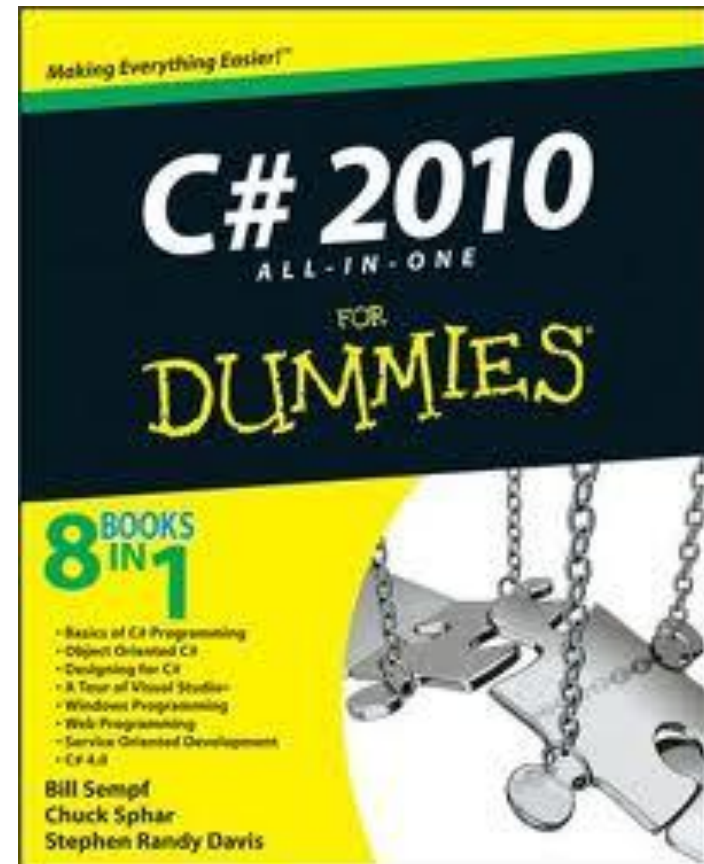
DECISIONS



VB vs. C#



vs.



C# has a lot more sample code (both ESRI and others)

DECISIONS



Business vs. Navigation template

Log-in vs. no Log-in

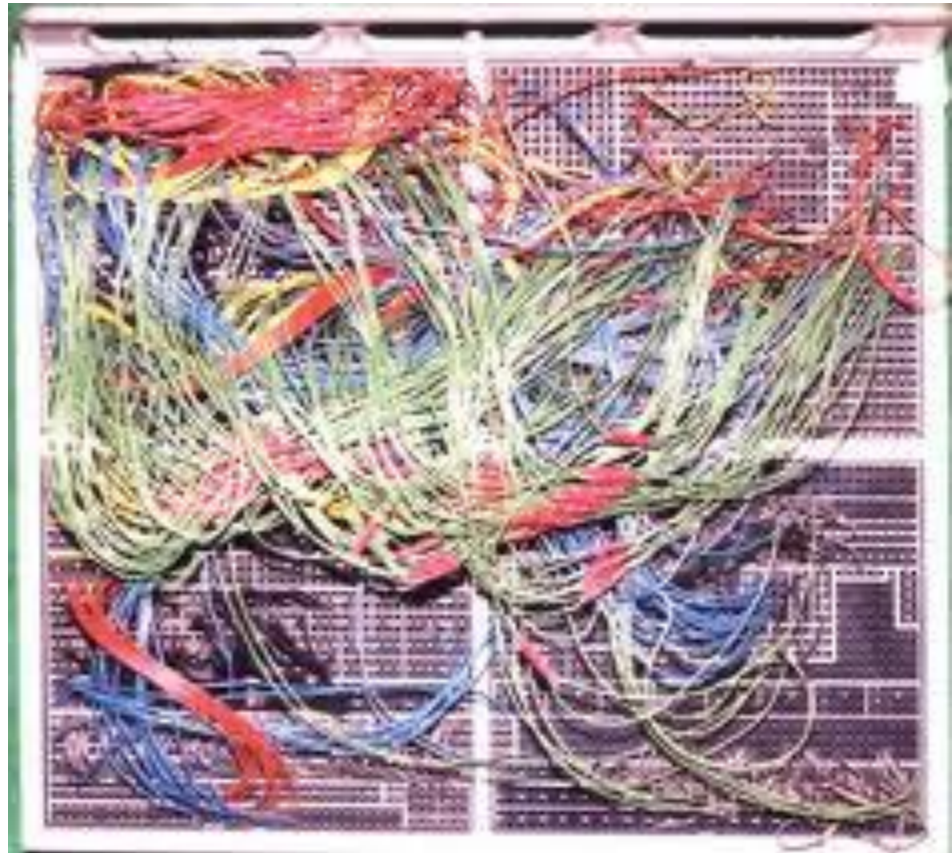


DECISIONS



How to connect to the database

- ADO.NET (no)
- LINQtoSQL
- WCF RIA Services



What does WCF RIA stand for and who really cares?

- WCF = Windows Communication Framework
- RIA = Rich Internet Application
- N-tier solution
 - Presentation tier (Silverlight)
 - Middle tier (asp.net)
 - Database tier (SQL Server 2008)
- .Net RIA services sounded cooler

“Things you struggle with”



“THINGS YOU
STRUGGLE WITH”



Where to put the
ClientAccess.xml file



“THINGS YOU
STRUGGLE WITH”



Making database changes

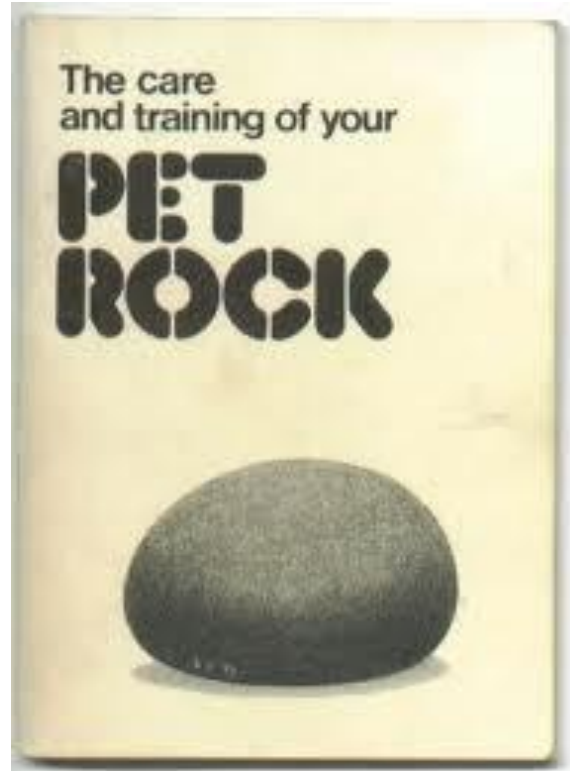


WCF RIA Services not great at this

“THINGS YOU
STRUGGLE WITH”



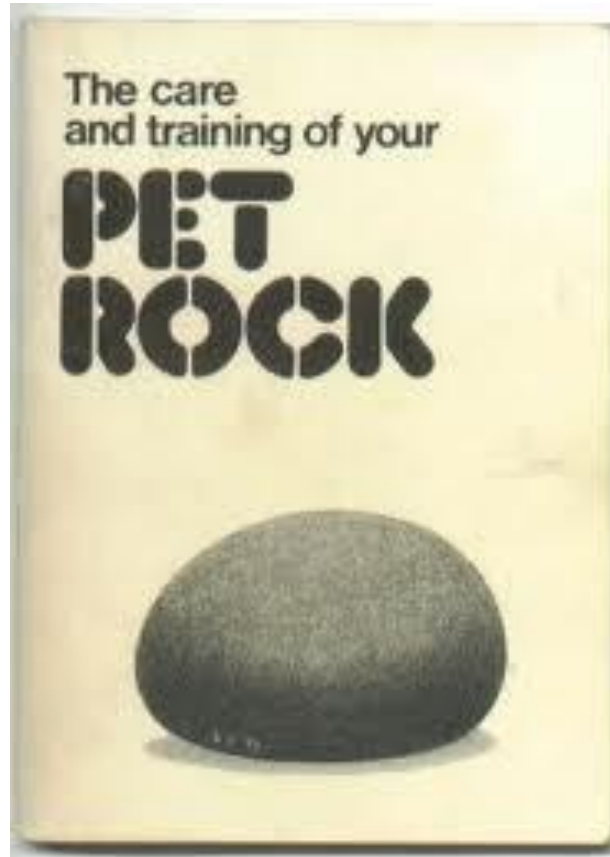
Default ID button



“THINGS YOU
STRUGGLE WITH”



Find Address Tool



“THINGS YOU
STRUGGLE WITH”



“Moving at the speed of government. . .”



“Reduce XAP size by using application library caching”

“THINGS YOU
STRUGGLE WITH”



Running Asp.net 2 and 4 on same server

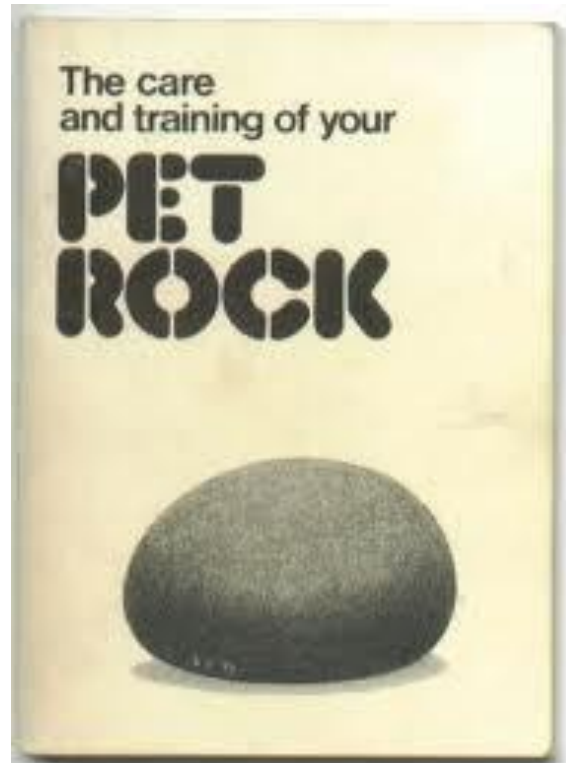


Use application pools in IIS

“THINGS YOU
STRUGGLE WITH”



Printing in Silverlight



“THINGS YOU
STRUGGLE WITH”



What's my server?



```
myHost = Application.Current.Host.Source.Host;
```

“THINGS YOU
STRUGGLE WITH”



Layers going to sleep



Set the maximum time an idle instance can be kept running = 0

“THINGS YOU
STRUGGLE WITH”



800 x 600



```
string screenWidth = HtmlPage.Window.Eval("screen.width").ToString();
```

“THINGS YOU
STRUGGLE WITH”



Mouse-less laptops



“THINGS YOU
STRUGGLE WITH”



More things to struggle with

- Selection tool – arrays
- Disclaimer popup window
- Publishing to server



“THINGS YOU
STRUGGLE WITH”



More things to struggle with

- Clear Map Cache – who knew
 - <http://giswebservr/ArcGIS/rest/admin/login>
- Stepping (too far) away from application
- Internet solutions – quickly out-dated



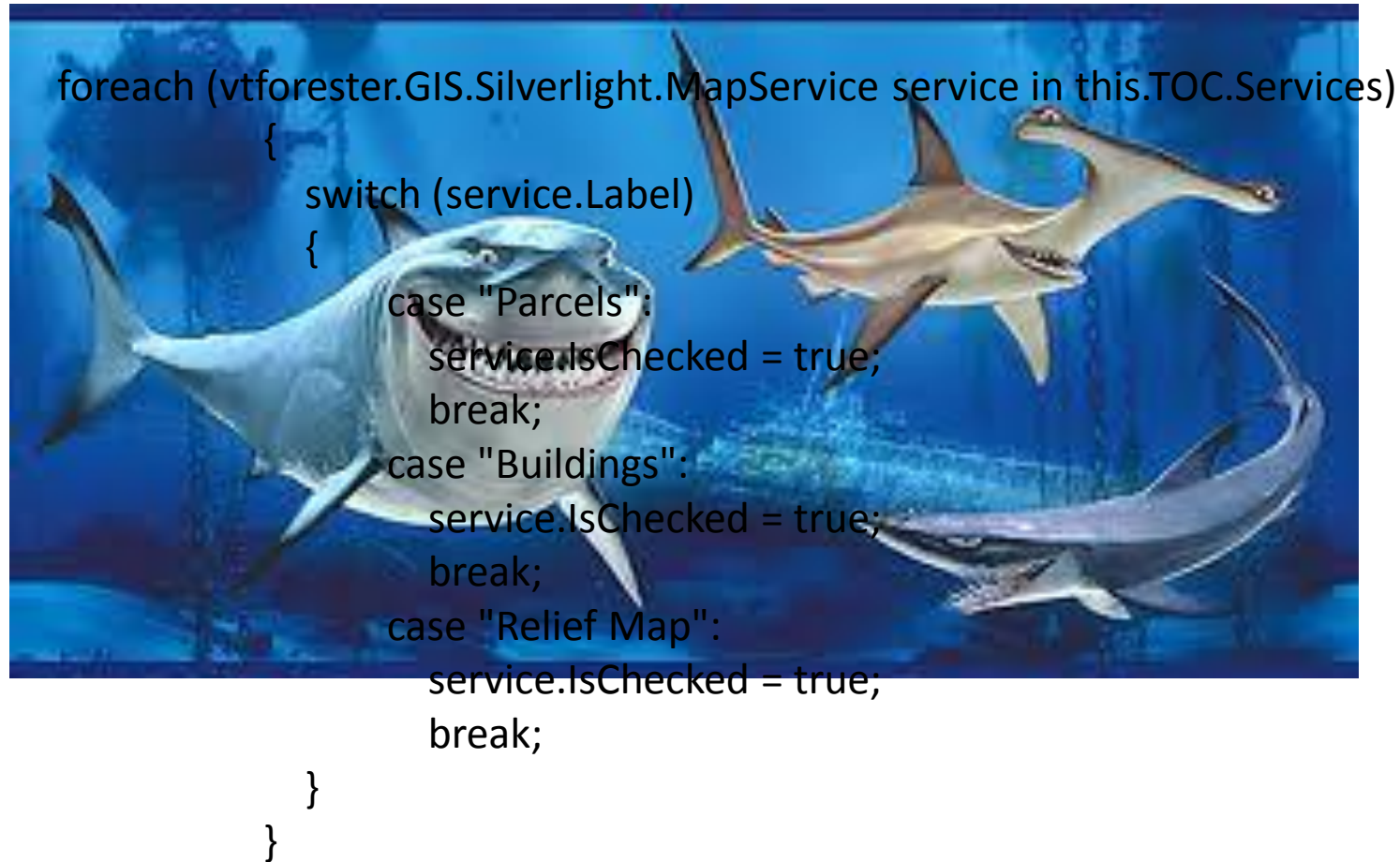
“THINGS YOU
STRUGGLE WITH”



Colors, buttons, and
placement of tools drove
me crazy



Forums are friends not food



Punch list



- ~~Layers on/layers off code behind~~
- Measure Tool
- Sales Comparables
- Street Name dropdown list
- As of Friday, Intellisense stopped working
(Darn that Bill Gates!)

In conclusion

- Silverlight vs. Flex
- In-house vs. Vendor
- VB vs. C#
- Password protected?
- Database connectivity
- Printing in Silverlight
- Be prepared to troubleshoot

There's no place like 127.0.0.1



Meriden GIS Home

Welcome to the City of Meriden GIS Home Page

This is the newest version of Meriden's GIS website. It takes advantage of Microsoft's Silverlight technology to provide faster rendering and better access to data.

To begin, navigate to a GIS page by clicking on one of the tabs above. For beginners, we suggest starting with the Quick Search page. To get more information about this site and the data behind it, click on About.

BENEFITS OF NEW GIS WEB SITE

Assessment information is current to within the hour of actual assessor database updates.

Map drawing and refreshing of maps is significantly faster.

Site includes links to Bing Map oblique aerial view.

All tools can be toggled on/off.

ID tools are more robust and include a number of map selection tools.

Use the left mouse button to pan and the mouse wheel to zoom in/out.

Aerial images can be faded in/out to visualize changes over time.

New features will be added soon including a Sales Comparables page.

Links to Static Maps

[Zoning Map](#)

[Street Map](#)

Contact Us

[Property Information Questions](#)

EMAIL

Phone: 203-603-4065

[Web site questions](#)

EMAIL

Phone: 203-603-4148

ENTER ADDRESS: More Search Options Map ID Tools Layers On/Off

PROPERTY SEARCH RESULTS

Number	Street Name	Owner
29	DANIEL WAY	FRASER LARRY L
30	DANIEL WAY	BENIGNI MARK D
50	DANIEL WAY	SALERNO KEITH A
51	DANIEL WAY	SZYMASZEK THOMAS J
68	DANIEL WAY	SZYMASZEK JOSEPH J
69	DANIEL WAY	ANGILETTA MARY H S
75	DANIEL WAY	ANGILETTA ROBERT E

Page 1 of 1

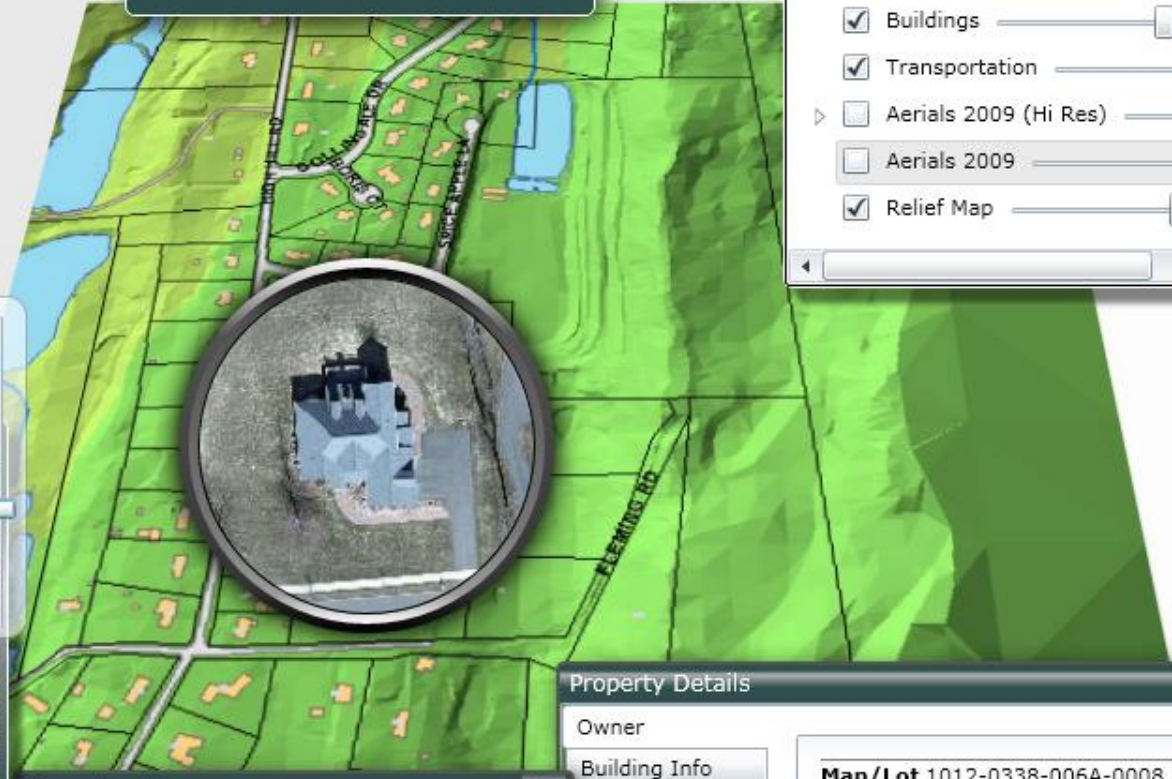
Tools for Selected Record



House Image



- Search By PIN
- Search By Condos
- Search Abutting
- Sales Comparables (under construction)



Layers

- Other Features
- Parcels
- Buildings
- Transportation
- Aerials 2009 (Hi Res)
- Aerials 2009
- Relief Map



Property Details

- Owner
- Building Info
- Assessment Info
- Land Info
- Sales
- Permits
- Special Features

Map/Lot 1012-0338-006A-0008
Property Address 30 DANIEL WAY
Owner Information
 BENIGNI MARK D
 AMY
 30 DANIEL WAY MERIDEN CT 06450