

# Visual Studio 2008

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<http://www.miketaulty.com> ( for slides )



# Release History

Visual Studio 2008 Sp1

.NET 3.5 Sp1

2008

**Visual Studio 2008**

**.NET 3.5**

**2007**

**.NET 3.0**

**.NET 2.0**

**.NET 1.1**

**.NET  
1.0**

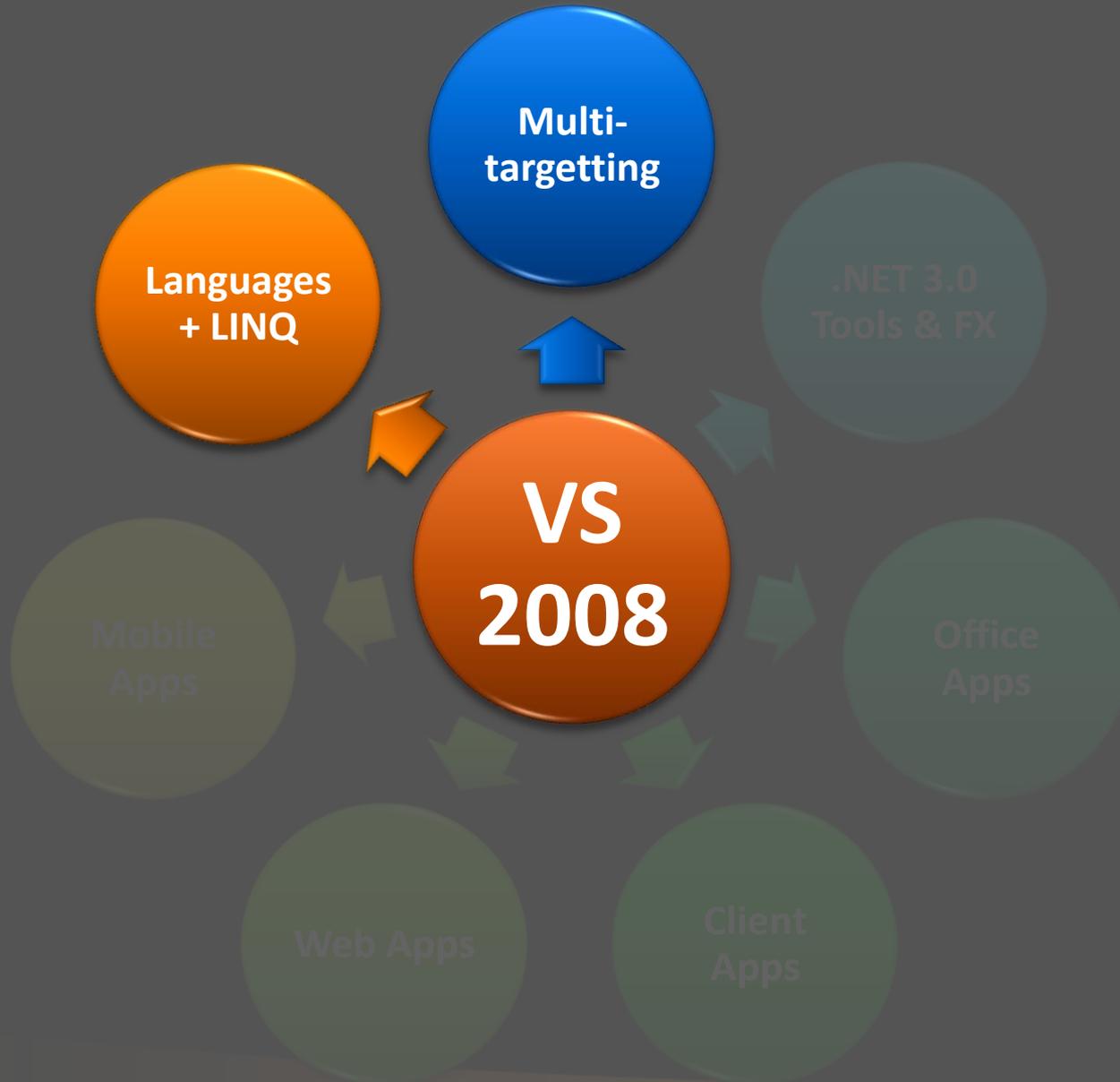
Visual Studio 2005

Visual Studio .NET 2003

Visual Studio .NET

2002

# What's New In VS 2008? ( [video](#) )



reference slides  
( <http://miketaulty.com> )

# Client Applications ( [video](#) )

## Windows Presentation Foundation

- Visual Designer Integrated into Visual Studio
- XBAP deployment to FireFox
- UIElement3D, Viewport2DVisual3D

## Windows Forms

- ClickOnce For FireFox
- Consume ASP.NET Provider Services
- Better WPF Interoperability
- UAC Manifests

## Consume WCF Services in Partial Trust

# Web Applications ( video )

Microsoft AJAX Libraries

IDE Enhancements

- Javascript IntelliSense
- Javascript Debugging
- New HTML Editor
  - Shared with Expression Web
  - Rich support for CSS
  - Split view with better switching performance
  - Nested Master Pages

Controls – ListView, DataPager

# Office Applications ( [video](#) )

## Office 2003 & 2007 Support

- Built in to core product

## Office 2007 Customisations

- Document or Application
- Ribbon Designer
- Outlook Form Region Designer
- Custom Action Panes
- ClickOnce Deployment

# WF and WCF ( [video](#) )

## Workflow (WF)

- Integration with WCF

## Communication (WCF)

- RESTful support
- Syndication Support
- Partial Trust Support

# Mobile Applications ( [video](#) )

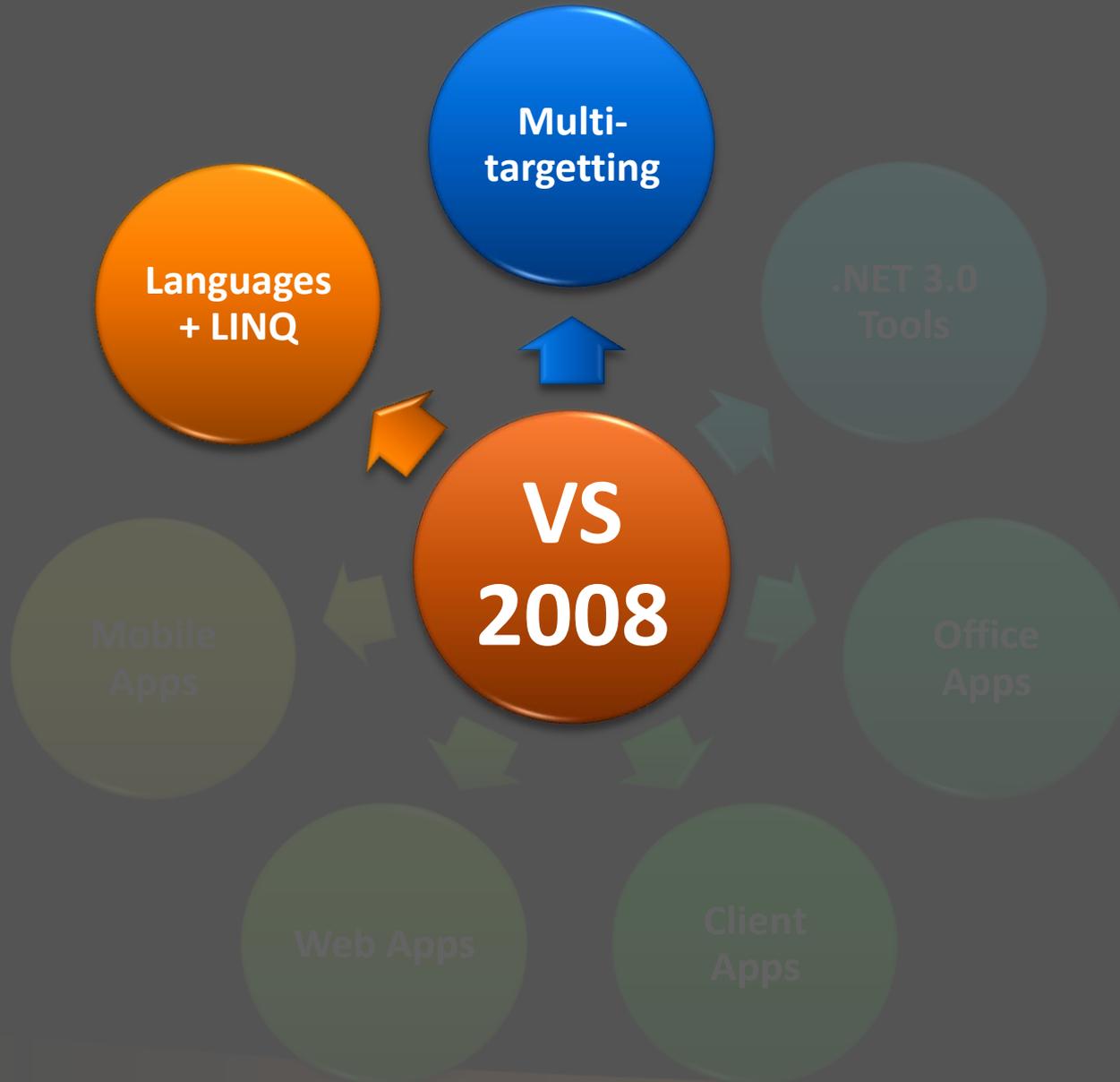
Visual Studio for Devices

.NET Compact Framework 3.5

Device Emulator 3

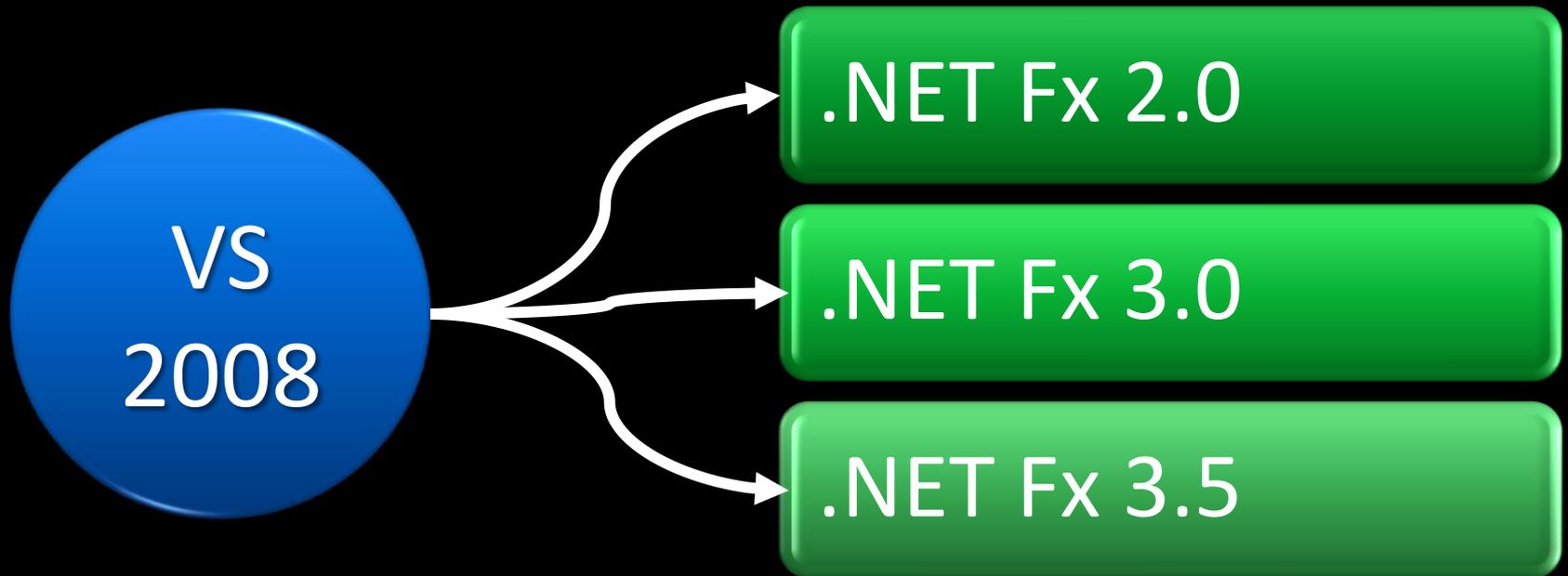
Windows Mobile 6

# What's New In VS 2008? ( [video](#) )



# Multitargetting

- ▶ No longer a hard link between Visual Studio and the application's target framework



# multitargetting demo

# Language Features in VS 2008

Most are LINQ enablers

## VB9

XML Literals

Relaxed Delegates

If Ternary Operator

Nullable Syntax

Anonymous Types

Extension Methods

Lambda expressions

Object Initialisers

Local Type Inference

Partial Methods

## C# 3

Collection Initialisers

Automatic Properties

Lambda statements

# C# 3.0 language features demo

# Language INtegrated Query?

- ▶ Lots of code written today in order to **loop, filter, sort, group, etc.**

```
List<Account> accounts = GetAccounts();

accounts.Sort(delegate(Account one, Account two)
{
    // Descending
    return ((int)(two.Balance - one.Balance));
}));

decimal totalBalance = 0.0m;

accounts.ForEach(delegate(Account account)
{
    totalBalance += account.Balance;
});

// etc...
```

sort

loop

sum

- ▶ Why not build better support for this?

# Why Have LINQ?

- ▶ Access to common data like XML or SQL is harder than accessing in memory objects;

```
SqlCommand com = new SqlCommand(
    "select customerId from customers " +
    "where country='UK'");
SqlCommand hope!

SqlDataReader reader = com.ExecuteReader();

while (reader.Read())
{
    Console.WriteLine((string)reader["customerId"]);
}
pray! hope!
```

- ▶ Why not have better API's than this?

# Language Integrated Query

```
from      data in someDataSource
join      otherData in someOtherSource
on        keyExpr equals keyExpr (into itemName)?
let       someVariable = someExpression
where     somePredicate
orderby   (expression (ascending | descending)?)*
select    expression
group
into
```

Language Features ( C# V3 and VB V9 )

.NET Framework V3.5

Custom

Objects

XML

SQL

# LINQ to objects demo

# How Does LINQ Work?

```
var query = from data in myData  
            select data;
```

- Compiler rewrites as method calls

```
myData.Select(d => d);
```

- No need to implement **Select()** etc. if **myData** is either

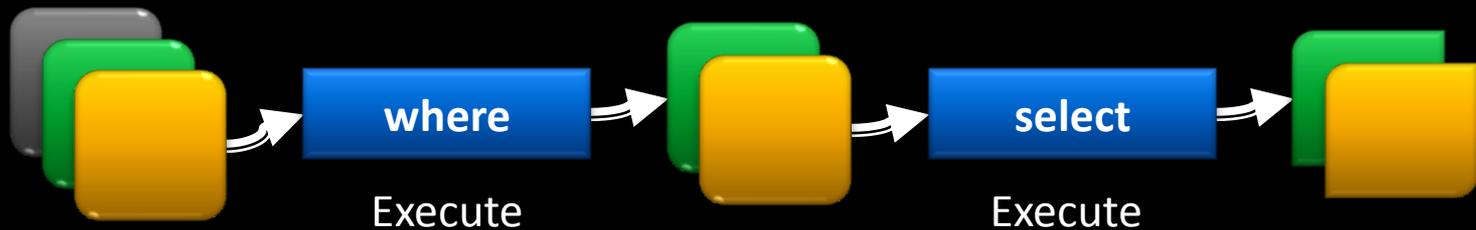
IEnumerable

IQueryable

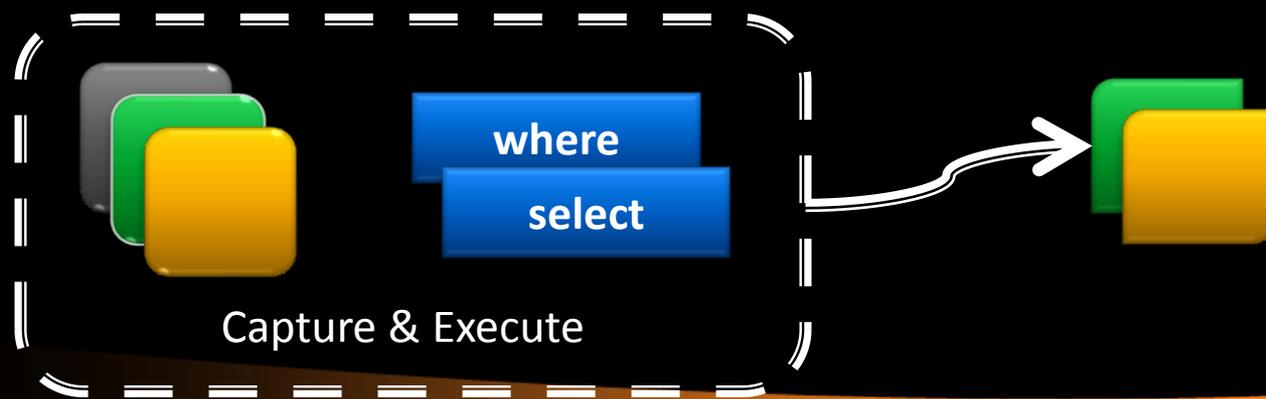
- Implementations already present in the .NET Framework for those cases

# IEnumerable & IQueryable?

- IEnumerable – query executed serially, one operator at a time

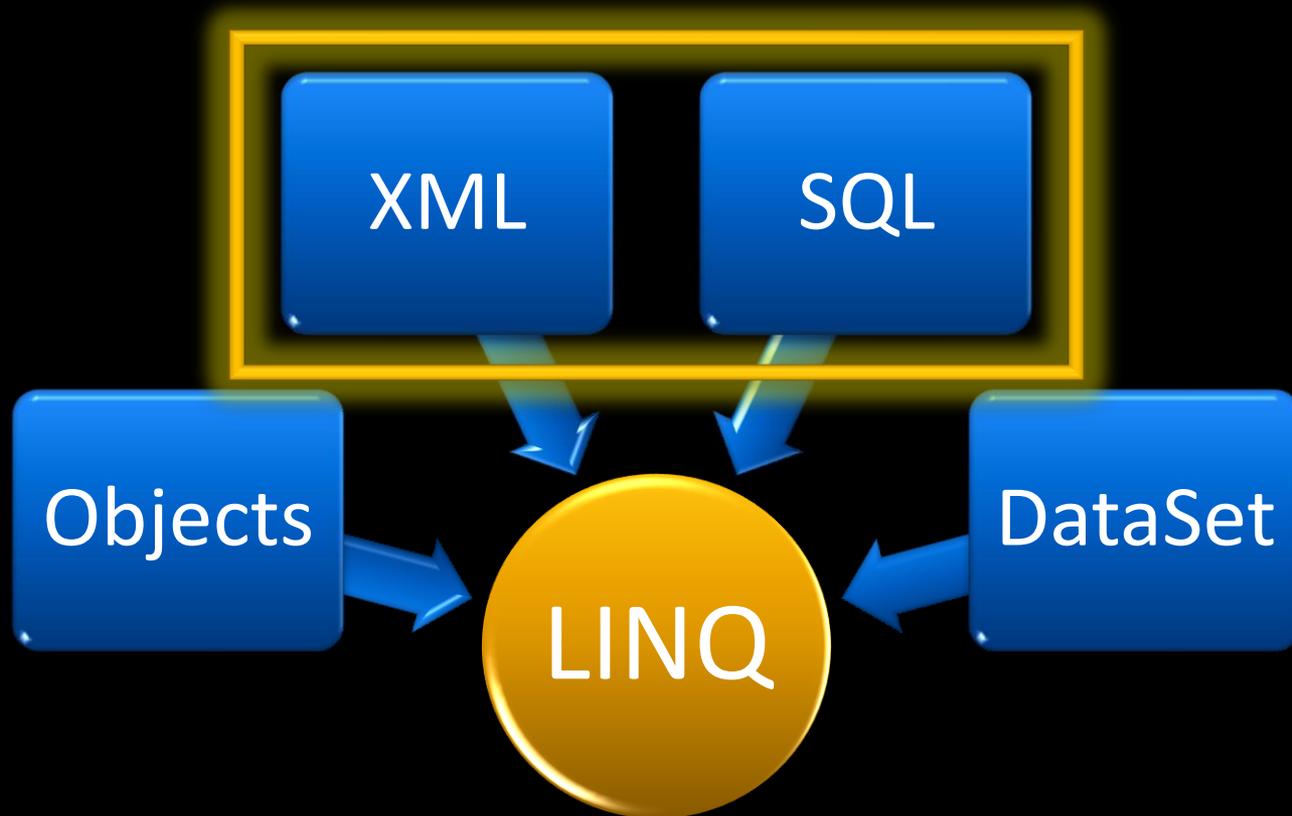


- IQueryable – whole query passed to implementation for execution



# Queryable vs Enumerable demo

# LINQ in .NET Framework V3.5



# LINQ to XML, LINQ to SQL demo

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