Pro Office 2007 Development with VSTO

Ty Anderson

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About the Author



■TY ANDERSON is a partner at Cogent Company in Dallas, Texas. He spends his time consulting and building software using Microsoft technologies. In addition to consulting, Ty writes frequently about Microsoft products, including VSTO, SharePoint, Office, and SQL Server. His work has been published on MSDN, DevX, DevSource, Simple-Talk, and CIO. Those who know Ty best stand in awe and amazement of two things: 1) his incredible good looks and 2) his cynical and sarcastic (and sometimes offensive) behavior. Look for him at any tech conference; he will be wearing his yellow Oakland A's hat. Say hello, as he might just offer to buy you a pint.

In the meantime, you can read his latest ramblings on all things technical at his blog, http://www.officedeveloper.net. And if you need some great consultants who know Microsoft's stack inside and out, visit his company's web site at http://www.cogentcompany.com, and give them a ring.

About the Technical Reviewer



■JOHN MUELLER is a freelance author and technical editor. He has writing in his blood, having produced 81 books and more than 300 articles to date. The topics range from networking to artificial intelligence and from database management to heads-down programming. His current project is *LINQ for Dummies* (Wiley Publishing, 2008). His technical editing skills have helped more than 58 authors refine the content of their manuscripts. You can reach John on the Internet at JMueller@mwt.net and on his web site at http://www.mwt.net/~jmueller/.

Acknowledgments

love books and have surrounded myself with them throughout my office and my house. It's ridiculous, really, as I own more books than I could possibly read in the next few years. However, this fact doesn't prevent me from visiting the local bookstore to see what gems I can find. To me, books have always been a bit mysterious and magical. They calm my soul.

Likewise, the process of writing a book fascinates me. For example, what causes a writer to put words to paper (or whatever the equivalent phrasing is in the computer age)? How does a writer organize his thoughts and then have the discipline to sit at his desk, day after neverending day, typing word after word to the point that his fingers cramp and ball into fists and his wrists ache and he wants to scream "Mama!"? Who would put up with the insufferable writer while he neglects all other responsibilities in favor of his beloved keyboard? Good questions all.

The answers to these questions have the potential of stripping the luster off the word *author*. Books are a bit magical, but there is absolutely nothing magical about the process of writing them. It is a long and lonely business meant for fools. I am such a fool.

What you hold in your hands is not mine alone. It was produced by the efforts of many, and I hold everyone involved in high esteem. To each of you, I extend my gratitude for your efforts on my behalf.

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To my wife, Amy, who is my best friend and absolutely kicks it!

Introduction

The 2007 Microsoft Office system is ubiquitous. Or as they say in Lubbock, Texas, "It's everywhere!" No one disputes that Office is the de facto business productivity suite. Business people all over the world use Office every day. Most people are familiar with it, and even those who aren't can learn how to use it quickly. Given Office's popularity, it only makes sense to build solutions that extend Office applications and make the lives of Office users everywhere a bit easier.

Microsoft includes Visual Studio Tools for the Microsoft Office System (VSTO) as part of Visual Studio 2008. It's the preferred Office development tool of professionals, providing a way to write managed code and attach the resulting assemblies to Office applications and files (although only Word and Excel support document-level solutions).

Who Is This Book For?

This book is for anyone interested in building applications using managed code and Microsoft Office. This book is not intended for beginners, as I do not spend any time explaining the basics of using Office, Visual Studio, or the .NET Framework. A base level of knowledge regarding these topics is assumed. That said, I do not expect you to know anything about VSTO or the basics of Excel, Word, and Outlook development. I cover these topics and more in this book. So if you want to harness the power and goodness of the 2007 Microsoft Office system using VSTO, this book is for you.

How Is This Book Structured?

This book is written to allow you to move about freely and read the topics that interest you most. If you're new to Office development topics and VSTO, I recommend reading the initial two chapters first. The structure of the book is as follows.

Chapter 1: Introduction to VSTO 2008

This chapter introduces VSTO and discusses how to identify projects that fit VSTO. It explains the different VSTO project add-in types as well as VSTO's features.

Chapter 2: Getting Started with Excel, Word, and Outlook

This chapter provides a primer for understanding core development concepts related to Excel, Word, and Outlook. It covers the core objects in each application's object model, and it provides numerous code samples that illustrate how to perform common tasks with the objects.

Chapter 3: Understanding the Office Fluent User Interface and Action and Task Panes

Office offers a rich user interface for use in your projects. This chapter covers each of the UI elements VSTO and Office provide, such as the Fluent UI (aka, the Ribbon), action panes, task panes, and the traditional Office menu and toolbar. The chapter includes code examples for creating custom versions of each UI element.

Chapter 4: Building VSTO Excel Add-Ins

This chapter includes two sample VSTO add-in projects that illustrate how to work with Excel to build a solution. Both an application-level add-in sample and a document-level add-in sample are included. In addition, it covers the Excel host controls provided by VSTO.

Chapter 5: Building VSTO Word Add-Ins

This chapter also includes two sample VSTO add-in projects, but here the topic is Word-based solutions. An application-level add-in sample and a document-level add-in sample, as well as Word host controls, are included.

Chapter 6: Building VSTO Outlook Add-Ins

Completing the trio of chapters that provide in-depth sample code walk-throughs, this chapter includes four VSTO Outlook sample projects. Each project focuses on a separate Outlook topic, such as customizing form regions, using Outlook search, and integrating with other Office applications.

Chapter 7: Building SharePoint Workflows

VSTO provides the capability to build custom SharePoint workflows. This chapter explains how to build both sequential workflows and state machine workflows.

Chapter 8: Building Office Business Applications

Microsoft considers Office to be a development platform. Office Business Applications (OBAs) integrate data with Office and allow end users to work with data from external applications within Office. This chapter explains how to build an Outlook-based OBA that integrates data from a sales system and an accounting system.

Chapter 9: Deploying VSTO Solutions

This chapter explains VSTO's support of ClickOnce deployment. It provides a walkthrough of a sample VSTO project.

What Do You Need to Use This Book?

Office system 2007 and Visual Studio 2008 Professional Edition or Team System are all you need to build VSTO solutions. I recommend installing any available service packs for Office 2007 and Visual Studio as well. Chapter 7 covers building SharePoint workflows; you will need access to a SharePoint site (either Office SharePoint Server or Windows SharePoint Server) to work with that chapter's code.