

Access™ 2007 VBA Programmer's Reference

Teresa Hennig
Rob Cooper
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Wiley Publishing, Inc.

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I dedicate my work, passion, and energies to my brother. Kirk is an inspiration, mentor, and good friend, and he leads by example in his unstinting support of the Spinal Cord Society's research to cure paralysis. And to my Mom and Papa and my Dad, who encourage me, laugh with me, and share in my joys, struggles, and jubinations as I take on extraordinary challenges such as climbing Mt. Rainier, riding 220 miles on a bike, and even writing this book.

And I dedicate this book to all the people who are just learning about Access and about VBA. Access 2007 has some phenomenal new features that empower users and give Access a more universal appeal. I am privileged to help you on your journey.

— Teresa

To my Mom, for her love and encouragement over the years and for instilling in me the passion to find the things I enjoy. To Karen and Chris, for reminding me where I come from. And in loving memory of my dad Marvin, who continues to drive me in my search for meaning.

— Rob

To my wife Jamie, for all the love and support you have given me. To my family: Mom, Dad, Cara, Sean, Ariana, and Army, for the encouragement, knowledge, and strength you have given me. My deepest gratitude does not even begin to define my love and appreciation for each of you.

— Geoff

To my wife Lori. Our work and interests are often so different, but I couldn't ask for a better partner.

— Armen

About the Authors

Teresa Hennig loves challenges, solving problems, and making things happen. Her company, Data Dynamics NW, reflects her dynamic personality and her innate ability to quickly grasp a situation and formulate a solution.

Teresa is president of both the Pacific Northwest Access Developer Group and the Seattle Access Group, and is host for INETA's monthly webcasts. She was the coordinating author for Access 2003 VBA Programmer's reference, and continues to publish two monthly Access newsletters. In recognition of her expertise and dedication to the Access community, Teresa was awarded Microsoft Access MVP.

Rob Cooper is a test lead on the Access team at Microsoft. He started at Microsoft as a support engineer in Charlotte, North Carolina, in 1998 and joined the Access 2003 test team in Redmond in 2001. During the Access 2007 release, he led the security efforts across the test team and worked on several new features including disabled mode, database encryption, Office Trust Center, and sorting, grouping and totals. Rob also led efforts around the Access object model and continues to provide direction around programmability and security in Access.

A long-time fan of Access, Rob is a frequent speaker at the Seattle Access Group and PNWADG meetings and has written for the Microsoft Knowledge Base and Access Advisor. Aside from writing code in Access and C#, he also enjoys spending time with his family watching movies, going to the zoo and aquarium, and hanging out in and around Seattle.

Geoffrey Griffith is an avid Access user who was raised in the Boulder, Colorado, area. He holds a Bachelor of Science degree in Computer Science from University of Colorado, where he studied software engineering. Now living in the Seattle, Washington, area and employed by Microsoft, he contributed to the Access 2007 product as a Software Design Engineer in Test for the Microsoft Office Access team. He enjoys participating in software community events by attending and speaking for local users groups and helping all those who would seek it.

Armen Stein is a Microsoft Access MVP and the president of J Street Technology, Inc., a team of database application developers in Redmond, Washington. J Street also offers web design, web hosting, and CartGenie, a complete web storefront and shopping cart system. Armen is President Emeritus of the Pacific Northwest Access Developers Group, and has also spoken at Seattle Access and Portland Access Users Group meetings. He has taught database classes at Bellevue Community College, and also developed and taught one-day training classes on Access and Access/SQL Server development. Armen earned a Business Administration/Computer Science degree from Western Washington University, and has been developing computer applications since 1984. His other interests include activities with his family, backgammon, Mariners baseball, and driving his 1969 Ford Bronco in the sun.

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Writing this book has been a challenging and incredibly rewarding experience. It was only possible because of teamwork and the contributions of others. So, thank you all!

— The Authors

I have to start by saying that it has been an honor and privilege to lead such an amazing team of authors and tech editors. Their combined expertise, experience, and passion for Access is unprecedented. This may have been the most challenging version to write about, and thanks to your devotion and team spirit our book will set a new standard for technical accuracy. As shocking as this may be, I'm at a loss for words to adequately express my heartfelt appreciation.

Of course, I have to thank the Access team for going all out for Access 2007 and for their seemingly tireless dedication to supporting the Access community. It's only through their efforts that we have so many new features. I can hardly wait to feel the excitement as people start to use Access 2007. That being said, I want to thank the members of my Access groups and all of the people who are using our book to get more out of Access. You are my motivation, and our team wrote this book for you.

I want to thank my family and special friends for their understanding and support through the roller coaster ride of writing this book. You were always available to listen to my stories and graciously accepted the many times that I was "unavailable." And, I am so fortunate to have the most amazing clients. Thank you for hanging in there when my time was consumed by the book and I had to defer your projects. You'll recognize Randy from our last book; although he was unable to officially join our team this time, Randy has my undying gratitude for helping me with Chapter 10. And no matter how immersed I became, I could always count on my friends Marc, David, Randy, Andi, and Mike. Ahhh,

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yes, there it is again, the M word. So yes, my world is still filled with Mikes and Michaels. I wouldn't want it any other way <g>.

To friends, challenges, and opportunities. May we learn to celebrate them all.

— Teresa

First, I'd like to thank my wife Sandi for her support during all of the late nights and weekends. To my children Isabel and Gillian for being so understanding at such a young age while Daddy was working and not playing soccer or hanging out on the weekends. And to my oldest Taryn for being there on many occasions while I was not. The sushi is still better on the left-coast!

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— Rob

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— Geoff

Thanks to my team at J Street Technology for their dedication to quality database applications: Steve, Sandra, Tyler, Matt, Stacey and Jessica. And thanks to my wife Lori and kids Lauren and Jonathan, who always support me in everything I do.

— Armen

Foreword

When I saw the list of authors Teresa brought together for this second edition of the *Access VBA Programmer's Reference*, I was very impressed. I have known each of the authors for several years, and they each have valuable insight. Teresa Hennig and Armen Stein are both Microsoft MVPs who have served the Access community in the Seattle area for many years. Rob Cooper is one of the top testers on the Access team and has a long history with the Access product as a support engineer. Geoffrey Griffith is an up-and-coming tester on the Access team who carries a lot of passion for the product. I have worked closely with him since his first day at Microsoft. Even the technical editors for this book have extremely strong resumes. Both Michael Brotherton and Michael Tucker have worked at Microsoft for more than 10 years and were testers on the Access 2007 team.

Not only was this book written and reviewed by a strong cast of authors, it nicely covers a wide spectrum of topics that you will encounter as you build your solutions in Access. It has topics for people new to Access or new to programming as well as topics that will improve the skills of seasoned veterans. This book teaches about many of the latest innovations as well as illustrating several commonly used techniques.

You will not just learn how to properly use VBA, but you will also see several new features in Access 2007 that eliminate or reduce the need for VBA code. Ultimately, you have a job to get done, and this book shows you the tools that are at your disposal. It is full of sample code that can help you get started, and it teaches you solid techniques that will help your code become easier to maintain in the long run.

This is a great book for anyone wanting to learn the depth and breadth of Access 2007. It is also an excellent reference and something that you will surely want to keep close at hand.

Tim Getsch
Program Manager, Microsoft Access

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