C

ALL-IN-ONE DESK REFERENCE FOR DUMMIES®

by Dan Gookin

Wiley Publishing, Inc.

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About the Author

Dan Gookin has been writing about technology for 20 years. He has contributed articles to numerous high-tech magazines and written more than 90 books about personal computing technology, many of them accurate.

He combines his love of writing with his interest in technology to create books that are informative and entertaining, but not boring. Having sold more than 14 million titles translated into more than 30 languages, Dan can attest that his method of crafting computer tomes does seem to work.

Perhaps Dan's most famous title is the original *DOS For Dummies,* published in 1991. It became the world's fastest-selling computer book, at one time moving more copies per week than the *New York Times* number-one best seller (although, because it's a reference book, it could not be listed on the *NYT* best seller list). That book spawned the entire line of *For Dummies* books, which remains a publishing phenomenon to this day.

Dan's most recent titles include *PCs For Dummies,* 9th Edition; *Buying a Computer For Dummies,* 2005 Edition; *Troubleshooting Your PC For Dummies; Dan Gookin's Naked Windows XP;* and *Dan Gookin's Naked Office.* He publishes a free weekly computer newsletter, "Weekly Wambooli Salad," and also maintains the vast and helpful Web site `www.wambooli.com`.

Dan holds a degree in communications and visual arts from the University of California, San Diego. He lives in the Pacific Northwest, where he enjoys spending time with his four boys in the gentle woods of Idaho.

Publisher's Acknowledgments

We're proud of this book; please send us your comments through our online registration form located at www.dummies.com/register/.

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Introduction

Congratulations on your purchase of *C All-in-One Desk Reference For Dummies* — a tome that not only sits fat and looks impressive on your computer bookshelf, but also teaches you a heck of a lot about the C programming language.

Because few people read book introductions, I have decided to fill the following six pages with filthy limericks, most of which are patronizing to immigrants and women.

Seriously, now that I have your attention, I thought that I would ramble on briefly about this book and what you can expect from its contents.

This book provides a solid overview of the C programming language, from the basics on up through advanced concepts and topics that third-year university students would pay real money to have someone else suffer through.

Despite the *For Dummies* text on the cover, this book takes a swifter approach to learning the C language than my book *C For Dummies,* 2nd Edition. This massive work assumes, for example, that you may have a wee bit of programming experience or are just more eager to find out more about the C language or perhaps need that extra training in those advanced topics that are skimpily covered in other programming books. If that's you, you have found your book! If that's not you, you should still buy this book because three of my kids need braces badly.

Above all, the bottom line in this book is about having fun. I take things easy, introducing the C language one tidbit at a time. Rare is the long, involved program in this book. Short, punchy (and often silly) programs make finding out about C quick and easy. After all, you need only a few lines of text to see how a function or concept in C works. And, everything is peppered with a modicum of irreverence and a dash of humor. Or, could it be the other way around? Anyway, you get the idea.

Why Bother with C When C++ Is Obviously Blah-Blah-Blah?

The C programming language is like the Latin of the computer world. As with Latin, if you know C, learning other programming languages is a snap. Each of the following programming languages (and many more) has its base in C:

- C++
- Perl
- Java
- Python

When you know C, learning any of these languages is simple and painless.

Unlike Latin, however, the C language is far from dead. As one of the older computer languages, C has a rich history and a full library of routines, programs, documentation, help, and other whatnot — a rich treasure of resources for you to draw on. Rare is the program that cannot be written using simple C programming. From graphics to games and from networking to building new operating systems, you have no limitation on what you can do in C.

Most of my C language students use my books as a foundation for leaping into C++ programming — mostly because many C++ books lack the gentle hand-holding approach that my books have. In fact, if you read this book from cover to cover, I promise you that any C++ (or other programming language) book will be that much easier for you to grasp. It may not be written with my dynamic wit, but the concepts will be easier to understand.

The bottom line, of course, is *programming*. Becoming a programmer means that you have ultimate control over your computer. *You* are finally in charge, telling the dang thing exactly what to do with itself. And, like the fast idiot it is, the computer dutifully obeys your every whim.

Plus, programming gives you instant feedback. Some folks find that benefit so addicting that they end up growing beards; wearing sandals and Hawaiian shirts; consuming coffee, stale doughnuts and Doritos; and never leaving the confines of their house. And that's just the women!

About This Here Dummies Approach

Don't you hate buying a programming book and having to read through 50 pages of this and that, background information, trivia, why the author thinks he's important, and all that other crap, only to discover that the first program in the book is five pages long and really (honestly) doesn't teach you one single thing about programming?

Yeah! I hate that too!