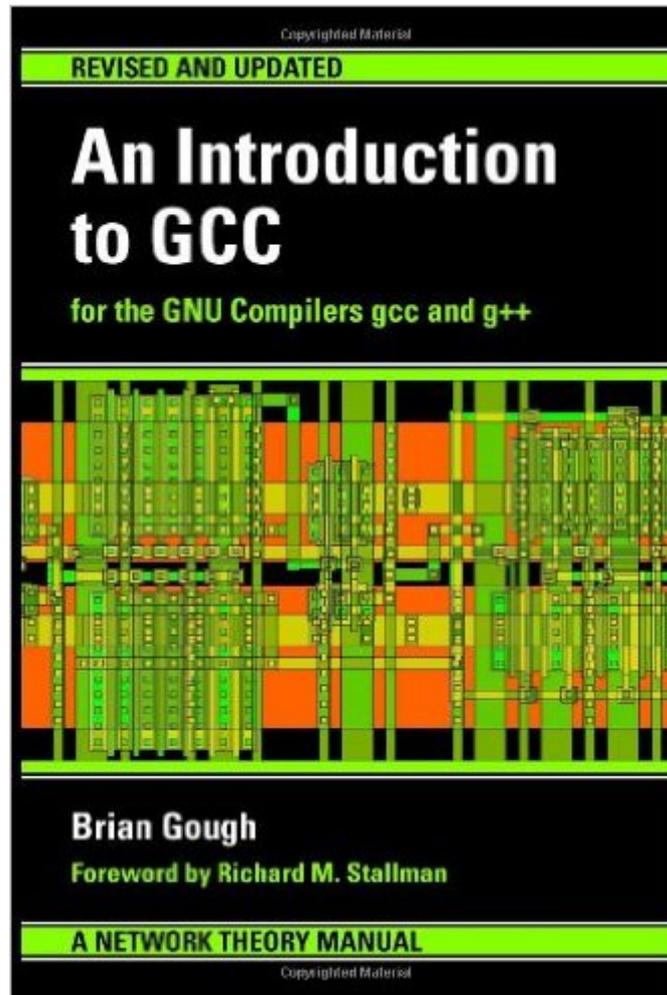# An Introduction To GCC: For The GNU Compilers GCC And G++

Synopsis

This manual provides a complete tutorial introduction to the GNU C and C++ compilers, gcc and g++. Many books teach the C and C++ languages, this book teaches you how to use the compiler itself. All the common problems and error messages encountered by new users of GCC are carefully explained, with numerous easy-to-follow "Hello World" examples. Topics covered include: compiling C and C++ programs using header files and libraries, warning options, use of the preprocessor, static and dynamic linking, debugging, optimization, platform-specific options, profiling and coverage testing, paths and environment variables, and the C++ standard library and templates. Features a special foreword by Richard M. Stallman, principal developer of GCC and founder of the GNU Project. All the money raised from the sale of this book will support the development of free software and documentation.

Book Information

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Customer Reviews

I recently started learning C++ with the freely-available GNU tools (gcc/g++/make, etc). This book was instrumental in my early success - it clearly and concisely explains the GNU C/C++ compilers, and how to use them. It is very well written and is packed with useful (essential) information. One very illustrative and important example explains the process of splitting up the classic introductory program 'Hello World!' into multiple source files, using a header file to do so. While adepts may sniff at this level of detail, when you start out you don't know how (or why) to take this step - and explanations are hard to come by. I was delighted to see this covered in this book.This book started

me out on my C++ adventure - thanks to it I am now at least competent with g++ and am still learning. My thanks to Gough and Stallman for such a helpful book - very highly recommended.

The clear and concise writing style makes GCC easy to understand for anyone. Those new to compilation with GCC and friends should start here. I wish I had an introduction like this when I was getting started. It could have save me a lot of research and confusion.Most readers will move through the 87 pages comfortably. Gough explains the basics skipped by others. Goug's writing in concise and crystal clear. Each chapter has a couple of simple examples that really get the concepts across. Even someone who types slowly could get through this text and all the examples with ease. Those who choose this book will be rewarded with a clear understanding of GCC basics. Other commands covered include g++, ar, as, nm, file, ldd, ld, gcov, gprof, and cpp. Topics include compiling C compilation options, preprocessor, debugging, optimizing, C++, platform specific options, related tools, and troubleshooting.I say four stars, because I'm going to need more detail on some things. However, this book is probably sufficient for many. The writing is great and the price is right. I'd buy it again.

You might choose to regard this book by Gough as a natural complement to Stallman's 'Using GCC: The GNU Compiler Collection Reference Manual for GCC 3.3.1'. As you may know, Stallman wrote the original gcc. Gough pitches his book at a new user of gcc, or, for that matter, for a programmer new to C itself. Whereas the aforementioned book by Stallman is for experienced users.Gough writes concisely. You should be able to quickly absorb the entire contents of the book. During which, learning about how to use gcc with various libraries and header files might also prove instructive in laying out a program, to be scattered across various *.c and *.h files. For those of you who strongly support the concept of open source code, there is the extra incentive that royalties from this book will go to those ends.

This is an excellent book if you are new with command line compiling with C/C++. It shows you step by step commands and switches to learn. More importantly, it gives you a no non-sense explanation of what is happening during the process. After reading this book, you will have a clear understanding of compiling, linking, objects, libraries, make utility and where everything fits in. I wish I would have picked up this book when I was studying C Programming. Its targeted for beginner's new to command line compiliing using GNU tools. New C-Programmers using IDE GUI tools may expand their horizon with the command line details.

Many positives here -- the book is:1. Small and concentrated. Doesn't take much time to read, doesn't waste your time with a mind-destroying excess verbiage intended to make the book thicker and thus looking more valuable (as so many books do).2. Very true to the title: it is indeed an introduction.3. Well written (this overlaps with (1) somewhat but is important in its own right, I feel; at least to someone like me -- I really know all of this, but since I work mostly with Windows, there usually are long stretches of time between my *NIX forays, and I forget a lot of dry detail. This book is perfect for me as a streamlined, fluid refresher.4. An HTML version is available online for free (as all books by this publisher are). You can check it out first and see how you like it (you will, I think, but see for yourself).5. Inexpensive.6. Beats the older FSF book by Stallman. Let's be honest, Stallman's a great guy, but he's a dork and can't communicate. FSF books read like a man page: you can see there's a lot of info there, but making sense of them requires fatidic gifts in the reader to compensate for gaps, disjointedness, and bad English.Bottomline: A totally deserving book. Do I recommend you buy a copy? Yes: first, you will support open source this way; and second, reading from a paper page is far more agreeable than staring at a screen, at least to my taste. Plus you can scribble, highlihgt, and what not. Thumbs up!

I was so frustrated by all this build tool stuff until I read this book. This is just the tip of the iceberg, but it really helped me understand the basics so I could teach myself the rest. Also not bloated with too many examples or overly descriptive prose. Short and to the point. Examples help you understand key concepts -- no "build your own music library" example you have to follow along the whole book.

An Introduction to GCC: For the GNU Compilers GCC and G++ GNAT User's Guide - GNAT The GNU Ada Compiler: Manual For Gcc Version 4.3.3 GNAT Reference Manual - GNAT The GNU Ada Compiler: Manual For Gcc Version 4.3.3 Using GNU Fortran for GCC 5.2 Implementing Programming Languages. an Introduction to Compilers and Interpreters (Texts in Computing) An Introduction to the Theory of Optimizing Compilers: with performance measurements on POWER Provably Correct Systems: Modelling of Communication Languages and Design of Optimized Compilers (The Mcgraw-Hill International Series in Software) Valgrind 3.3 - Advanced Debugging and Profiling for Gnu/Linux Applications GNU, Rpm, and Solaris Software Packages By M. Tim Jones - GNU/Linux Application Programming: 1st (first) Edition GuÃƒÂa de clase de: Sistemas InformÃƒÂ¡ticos Monousuario y Multiusuario. Volumen I: GNU/Linux. (Spanish Edition) Debugging

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