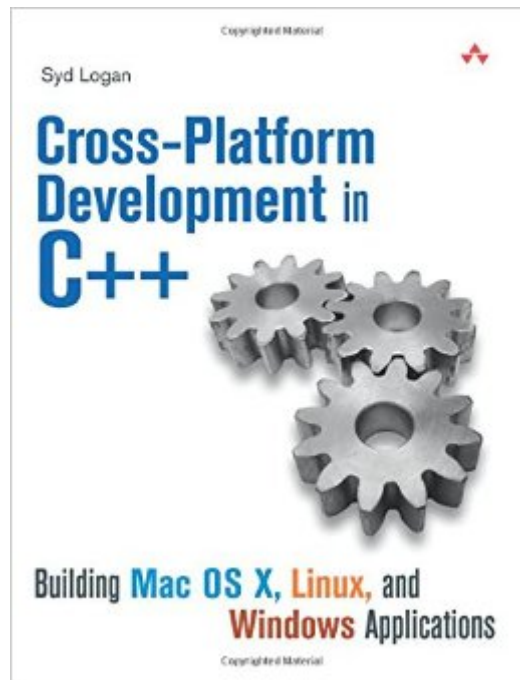# Cross-Platform Development In C++: Building Mac OS X, Linux, And Windows Applications

Synopsis

Cross-Platform Development in C++ is the definitive guide to developing portable C/C++ application code that will run natively on Windows, Macintosh, and Linux/Unix platforms without compromising functionality, usability, or quality. Â Long-time Mozilla and Netscape developer Syd Logan systematically addresses all the technical and management challenges associated with software portability from planning and design through coding, testing, and deployment. Drawing on his extensive experience with cross-platform development, Logan thoroughly covers issues ranging from the use of native APIs to the latest strategies for portable GUI development. Along the way, he demonstrates how to achieve feature parity while avoiding the problems inherent to traditional cross-platform development approaches. Â This book will be an indispensable resource for every software professional and technical manager who is building new cross-platform software, porting existing C/C++ software, or planning software that may someday require cross-platform support. Â Build Cross-Platform Applications without Compromise Â Throughout the book, Logan illuminates his techniques with realistic scenarios and extensive, downloadable code examples, including a complete cross-platform GUI toolkit based on Mozillaâ ™s XUL that you can download, modify, and learn from. Coverage includesÂ Policies and procedures used by Netscape, enabling them to ship Web browsers to millions of users on Windows, Mac OS, and Linux Delivering functionality and interfaces that are consistent on all platforms Understanding key similarities and differences among leading platform-specific GUI APIs, including Win32/.NET, Cocoa, and Gtk+ Determining when and when not to use native IDEs and how to limit their impact on portability Leveraging standards-based APIs, including POSIX and STL Avoiding hidden portability pitfalls associated with floating point, char types, data serialization, and types in C++ Utilizing platform abstraction libraries such as the Netscape Portable Runtime (NSPR) Establishing an effective cross-platform bug reporting and tracking system Creating builds for multiple platforms and detecting build failures across platforms when they occur Understanding the native runtime environment and its impact on installation Utilizing wxWidgets to create multi-platform GUI applications from a single code base Thoroughly testing application portability Understanding cross-platform GUI toolkit design with Trixul

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Customer Reviews

To be honest this one of the few technical computer books I've read from cover to cover. I usually just use them for reference. On the subject of cross platform development this is currently the best and most up-to-date however there were a few areas I would have liked to seen covered better most notably the build environment and makes. Mr Logan does touch on these subjects but they are not given as much focus as I would have like to have seen which is why I'm taking one star away. With that said if I was asked to recommend a book on cross-platform development it would be Syd Logan's, hands down..

Logan tackles a lot of little complications that are the bane and reality of programmers writing multiplatform C++. This is not a book about learning C++ from scratch. Conceptually, it helps to think of this book as about 1 level above writing C++ code. For example, it discusses compiling, linking and running, where needed libraries might be missing.The book describes 3 platforms. Microsoft Windows, Macintosh and unix/linux. Strictly, the Macintosh is nowadays using a unix variant. But it's done differently enough, and the Mac is popular enough, that Logan stands it separate from other unix/linux environments.Perhaps the best recommendation of the book is to use a platform abstraction library. So that you can far more easily maintain a common code base. The suggested choice of library is NSPR. One simple way that it helps is in how it makes explicit the byte lengths of various C/C++ variables. This legacy C ambiguity is still with us, and causes much porting pain. It is no accident that newer languages like Java and C# make these definitions explicit. But many of us still have to write in C and C++.

This was a good book to reference and augment your C++ portability skills. I have been porting code for years and found a few nuggets in this book I did not have to find out through trial by fire.As

a previous reviewer mentioned, it does not cover Java or C#/Mono, which by the name of the title makes sense. Java and C#/Mono are good tools, but if you need to be where the metal meets the meat and need the squeeze out all your MIPS you can, you'll have to move down the language hierarchy to C++ and assembly.By setting up a nice abstract layer and firewalling you system calls and platform dependencies, you can usually build quite large sustainable C++ cross platform frameworks on many systems without the need for a VM level language.

This book is utterly worthless. One of the greatest differences in developing for one operating system versus another is how libraries are handled. This topic isn't even covered by this book. Save you money.

i like it

Cross-Platform Development in C++: Building Mac OS X, Linux, and Windows Applications Cross-Platform Development in C++: Building Mac OS X, Linux, and Windows Applications (Adobe Reader) Cross Stitch: for Beginners - Cross Stitch Patterns - Cross Stitch Guide - Cross Stitch Explained for Starters (Cross Stitch Books for Dummies - Cross Stitch Tips - Cross Stitch 101) LINUX: Linux Command Line, Cover all essential Linux commands. A complete introduction to Linux Operating System, Linux Kernel, For Beginners, Learn Linux in easy steps, Fast! A Beginner's Guide Cross-Platform Development mit Delphi XE4 / XE5 & Firemonkey fÃƒÂ   r Windows & MAC OS X (German Edition) Linux: Linux Guide for Beginners: Command Line, System and Operation (Linux Guide, Linux System, Beginners Operation Guide, Learn Linux Step-by-Step) Windows 10: Windows10 Mastery. The Ultimate Windows 10 Mastery Guide (Windows Operating System, Windows 10 User Guide, User Manual, Windows 10 For Beginners, Windows 10 For Dummies, Microsoft Office) The Complete Beginners Guide to Mac OS X El Capitan: (For MacBook, MacBook Air, MacBook Pro, iMac, Mac Pro, and Mac Mini) Linux: Linux Mastery. The Ultimate Linux Operating System and Command Line Mastery (Operating System, Linux) Programming HTML5 Applications: Building Powerful Cross-Platform Environments in JavaScript Windows 10: The Ultimate Guide For Beginners (Windows 10 for dummies, Windows 10 Manual, Windows 10 Complete User Guide, Learn the tips and tricks of Windows 10 Operating System) Windows 8.1: Learn Windows 8.1 in Two Hours: The Smart and Efficient Way to Learn Windows 8.1 (Windows 8.1, Windows 8.1 For Beginners) Development with the Force.com Platform: Building Business Applications in the Cloud (3rd Edition) (Developer's Library) Exploring Mac App Development

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