

Projects Using C

Extensively revised and updated to encompass the latest developments in the PIC 18FXXX series, this book demonstrates how to develop a range of microcontroller applications through a project-based approach. After giving an introduction to programming in C using the popular mikroC Pro for PIC and MPLAB XC8 languages, this book describes the project development cycle in full. The book walks you through fully tried and tested hands-on projects, including many new, advanced topics such as Ethernet programming, digital signal processing, and RFid technology. This book is ideal for engineers, technicians, hobbyists and students who have knowledge of the basic principles of PIC microcontrollers and want to develop more advanced applications using the PIC18F series. This book Includes over fifty projects which are divided into three categories: Basic, Intermediate, and Advanced. New projects in this edition: Logic probe Custom LCD font design Hi/Lo game Generating various waveforms in real-time Ultrasonic height measurement Frequency counter Reaction timer GPS projects Closed-loop ON/OFF temperature control Bluetooth projects (master and slave) RFid projects Clock using Real-time-clock (RTC) chip RTC alarm project Graphics LCD (GLCD) projects Barometer+thermometer+altimeter project Plotting temperature on GLCD Ethernet web browser based control Ethernet UDP based control Digital signal processing (Low Pass Filter design) Automotive LIN bus project Automotive CAN bus project Multitasking projects (using both cooperative and Round-robin scheduling) Unipolar stepper motor projects Bipolar stepper motor projects Closed-loop ON/OFF DC motor control A clear introduction to the PIC 18FXXX microcontroller's architecture Covers developing wireless and sensor network applications, SD card projects, and multi-tasking; all demonstrated with the block and circuit diagram, program description in PDL, program listing, and program description Includes more than 50 basic, intermediate, and advanced projects

Delve into practical computer vision and image processing projects and get up to speed with advanced object detection techniques and machine learning algorithms Key Features Discover best practices for engineering and maintaining OpenCV projects Explore important deep learning tools for image classification Understand basic image matrix formats and filters Book Description OpenCV is one of the best open source libraries available and can help you focus on constructing complete projects on image processing, motion detection, and image segmentation. This Learning Path is your guide to understanding OpenCV concepts and algorithms through real-world examples and activities. Through various projects, you'll also discover how to use complex computer vision and machine learning algorithms and face detection to extract the maximum amount of information from images and videos. In later chapters, you'll learn to enhance your videos and images with optical flow analysis and background subtraction. Sections in the Learning Path will help you get to grips with text segmentation and recognition, in addition to guiding you through the basics of the new and improved deep learning modules. By the end of this Learning Path, you will have mastered commonly used computer vision techniques to build OpenCV projects from scratch. This Learning Path includes content from the following Packt books: Mastering OpenCV 4 - Third Edition by Roy Shilkrot and David Millán Escrivá Learn OpenCV 4 By Building Projects - Second Edition by David Millán Escrivá, Vinícius G. Mendonça, and Prateek Joshi What you will learn Stay up-to-date with algorithmic design approaches for complex computer vision tasks Work with OpenCV's most up-to-date API through various projects Understand 3D scene reconstruction and Structure from Motion (SfM) Study camera calibration and overlay augmented reality (AR) using the ArUco module Create CMake scripts to compile your C++ application Explore segmentation and feature extraction techniques Remove backgrounds from static scenes to identify moving objects for surveillance Work with new OpenCV functions to detect and recognize text with Tesseract Who this book is for If you are a software

developer with a basic understanding of computer vision and image processing and want to develop interesting computer vision applications with OpenCV, this Learning Path is for you. Prior knowledge of C++ and familiarity with mathematical concepts will help you better understand the concepts in this Learning Path.

To support the broadening spectrum of project delivery approaches, PMI is offering A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Sixth Edition as a bundle with its latest, the Agile Practice Guide. The PMBOK® Guide – Sixth Edition now contains detailed information about agile; while the Agile Practice Guide, created in partnership with Agile Alliance®, serves as a bridge to connect waterfall and agile. Together they are a powerful tool for project managers. The PMBOK® Guide – Sixth Edition – PMI's flagship publication has been updated to reflect the latest good practices in project management. New to the Sixth Edition, each knowledge area will contain a section entitled Approaches for Agile, Iterative and Adaptive Environments, describing how these practices integrate in project settings. It will also contain more emphasis on strategic and business knowledge—including discussion of project management business documents—and information on the PMI Talent Triangle™ and the essential skills for success in today's market. Agile Practice Guide has been developed as a resource to understand, evaluate, and use agile and hybrid agile approaches. This practice guide provides guidance on when, where, and how to apply agile approaches and provides practical tools for practitioners and organizations wanting to increase agility. This practice guide is aligned with other PMI standards, including A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Sixth Edition, and was developed as the result of collaboration between the Project Management Institute and the Agile Alliance.

Now in its second edition, this book focuses on practical algorithms for mining data from even the largest datasets.

During more than 30 years, as a collaborator with American, European and Latin American electronics magazines (*), has published a large assortment of practical circuits using common parts. In 1999 he included the first selection in a volume published by Prompt Publications in USA. The idea was to proceed with the series, publishing many volumes more. But, Prompt closed his activities and the idea was forgotten although the first volume became a best seller. Now with his own publishing house (NCB Publications) the author returned with the idea of make many volumes more of the series. So, the second volume is here proceeding with the same idea: give simple projects to the experimenters who want learn electronics using common parts and with no need of special knowledge about electronics. So, as in the first volume, many of the projects collected by the author are included in this volume, most of which you can build in one evening. The projects range from fun types through practical types to amusement types. Of course, there are other devices that can be used to teach you something about circuits and components. An important feature of these projects are the ideas to Explore, intended for students looking for projects in science or to use in practical research. This ideal can be complemented by our book Science Fair and Technology Education Projects, also published in English by the author. We can consider this book as a source book of the easiest and fun-to-make of hundreds of projects created and published by the author during his life. (see more about Newton C. Braga in "about the author" in his site).

This book is ideal for the engineer, technician, hobbyist and student who have knowledge of the basic principles of PIC microcontrollers and want to develop more advanced applications using the 18F series. The architecture of the PIC 18FXXX series as well as typical oscillator, reset, memory, and input-output circuits is completely detailed. After giving an introduction to programming in C, the book describes the project development cycle in full, giving details of the process of editing, compilation, error handling, programming and the use of specific development tools. The bulk of the book gives full details of tried and tested hands-on projects, such as the 12C BUS, USB BUS, CAN BUS, SPI BUS and real-time operating systems. A

Read Book Projects Using C

clear introduction to the PIC 18FXXX microcontroller's architecture 20 projects, including developing wireless and sensor network applications, using I2C BUS, USB BUS, CAN BUS and the SPI BUS, which give the block and circuit diagram, program description in PDL, program listing and program description Numerous examples of using developmental tools: simulators, in-circuit debuggers (especially ICD2) and emulators

Like a pianist who practices from a book of études, readers of Programming Projects in C for Students of Engineering, Science, and Mathematics will learn by doing. Written as a tutorial on how to think about, organize, and implement programs in scientific computing, this book achieves its goal through an eclectic and wide-ranging collection of projects. Each project presents a problem and an algorithm for solving it. The reader is guided through implementing the algorithm in C and compiling and testing the results. It is not necessary to carry out the projects in sequential order. The projects contain suggested algorithms and partially completed programs for implementing them to enable the reader to exercise and develop skills in scientific computing; require only a working knowledge of undergraduate multivariable calculus, differential equations, and linear algebra; and are written in platform-independent standard C; the Unix command-line is used to illustrate compilation and execution.

This book was designed to make concepts as easy as possible, while explaining how programming works. This guide is different from others in that it includes a variety of different exercises that readers can learn from.

The second edition of the Impact Evaluation in Practice handbook is a comprehensive and accessible introduction to impact evaluation for policy makers and development practitioners. First published in 2011, it has been used widely across the development and academic communities. The book incorporates real-world examples to present practical guidelines for designing and implementing impact evaluations. Readers will gain an understanding of impact evaluations and the best ways to use them to design evidence-based policies and programs. The updated version covers the newest techniques for evaluating programs and includes state-of-the-art implementation advice, as well as an expanded set of examples and case studies that draw on recent development challenges. It also includes new material on research ethics and partnerships to conduct impact evaluation. The handbook is divided into four sections: Part One discusses what to evaluate and why; Part Two presents the main impact evaluation methods; Part Three addresses how to manage impact evaluations; Part Four reviews impact evaluation sampling and data collection. Case studies illustrate different applications of impact evaluations. The book links to complementary instructional material available online, including an applied case as well as questions and answers. The updated second edition will be a valuable resource for the international development community, universities, and policy makers looking to build better evidence around what works in development.

This book is a thoroughly practical way to explore the 8051 and discover C programming through project work. Through graded projects, Dogan Ibrahim introduces the reader to the fundamentals of microelectronics, the 8051 family, programming in C, and the use of a C compiler. The specific device used for examples is the AT89C2051 - a small, economical chip with re-writable memory,

readily available from the major component suppliers. A working knowledge of microcontrollers, and how to program them, is essential for all students of electronics. In this rapidly expanding field many students and professionals at all levels need to get up to speed with practical microcontroller applications. Their rapid fall in price has made microcontrollers the most exciting and accessible new development in electronics for years - rendering them equally popular with engineers, electronics hobbyists and teachers looking for a fresh range of projects. Microcontroller Projects in C for the 8051 is an ideal resource for self-study as well as providing an interesting, enjoyable and easily mastered alternative to more theoretical textbooks. Practical projects that enable students and practitioners to get up and running straight away with 8051 microcontrollers

A hands-on introduction to practical C programming
A wealth of project ideas for students and enthusiasts

PIC Projects and Applications Using C details how to program the PIC microcontroller in the C language. The book takes a learn-by-doing approach, with applications covering topics such as inputs, outputs, keypads, alphanumeric displays, analogue-to-digital conversion, radio transmitters and receivers, data EEPROM, interrupts and timing. To aid debugging, the book provides a section detailing the use of the simulator and in-circuit debugger. With this book you will learn:

- How to program the PIC microcontroller in C
- Techniques for using the simulator and debuggers to find faults on your code
- The ins and outs of interfacing circuits, such as radio modules and liquid crystal displays
- How to use the PIC on-board functions, such as interrupts and timing modules, and make analogue measurements
- Relevant parts of the language are introduced and explained when required for those new to the subject
- Core principles are introduced gradually for self-paced learning
- Explains how and why a software program works, and how to alter and expand the code

Build projects on exciting topics like game development, virtual reality, web assembly, emulators, GUI, and Linux/kernel development. By the end of the book, you will know how to choose the right framework or library for your needs.

• New York Times bestseller • The 100 most substantive solutions to reverse global warming, based on meticulous research by leading scientists and policymakers around the world “At this point in time, the Drawdown book is exactly what is needed; a credible, conservative solution-by-solution narrative that we can do it. Reading it is an effective inoculation against the widespread perception of doom that humanity cannot and will not solve the climate crisis. Reported by-effects include increased determination and a sense of grounded hope.” —Per Espen Stoknes, Author, *What We Think About When We Try Not To Think About Global Warming* “There’s been no real way for ordinary people to get an understanding of what they can do and what impact it can have. There remains no single, comprehensive, reliable compendium of carbon-reduction solutions across sectors. At least until now. . . . The public is hungry for this kind of practical wisdom.” —David Roberts, *Vox* “This is the ideal environmental

sciences textbook—only it is too interesting and inspiring to be called a textbook.”
—Peter Kareiva, Director of the Institute of the Environment and Sustainability, UCLA
In the face of widespread fear and apathy, an international coalition of researchers, professionals, and scientists have come together to offer a set of realistic and bold solutions to climate change. One hundred techniques and practices are described here—some are well known; some you may have never heard of. They range from clean energy to educating girls in lower-income countries to land use practices that pull carbon out of the air. The solutions exist, are economically viable, and communities throughout the world are currently enacting them with skill and determination. If deployed collectively on a global scale over the next thirty years, they represent a credible path forward, not just to slow the earth’s warming but to reach drawdown, that point in time when greenhouse gases in the atmosphere peak and begin to decline. These measures promise cascading benefits to human health, security, prosperity, and well-being—giving us every reason to see this planetary crisis as an opportunity to create a just and livable world.

Despite using them every day, most software engineers know little about how programming languages are designed and implemented. For many, their only experience with that corner of computer science was a terrifying "compilers" class that they suffered through in undergrad and tried to blot from their memory as soon as they had scribbled their last NFA to DFA conversion on the final exam. That fearsome reputation belies a field that is rich with useful techniques and not so difficult as some of its practitioners might have you believe. A better understanding of how programming languages are built will make you a stronger software engineer and teach you concepts and data structures you'll use the rest of your coding days. You might even have fun. This book teaches you everything you need to know to implement a full-featured, efficient scripting language. You'll learn both high-level concepts around parsing and semantics and gritty details like bytecode representation and garbage collection. Your brain will light up with new ideas, and your hands will get dirty and calloused. Starting from `main()`, you will build a language that features rich syntax, dynamic typing, garbage collection, lexical scope, first-class functions, closures, classes, and inheritance. All packed into a few thousand lines of clean, fast code that you thoroughly understand because you wrote each one yourself.

Introduces the features of the C programming language, discusses data types, variables, operators, control flow, functions, pointers, arrays, and structures, and looks at the UNIX system interface

Programming Projects in C for Students of Engineering, Science, and MathematicsSIAM

This book is a clear, comprehensive book designed only for you, no-matter whether you are a student, a teacher, a professional programmer or others. Simplicity is the hallmark of this book. It assumes no necessities for you to have the background knowledge on C Programming Language. Firstly, it helps you to understand the basic fundamentals of C Programming and then about the stronger part of C and ultimately master the various features that C offers. It is written in a style and level of detail to capture the entire field, it admirably meets the needs of

Read Book Projects Using C

students of science and technology specially the computer engineering students as a textbook and of professionals as a basic reference volume. Ideal for self-study and certification exam. Includes solution of more than 160 programs Broad in-depth coverage of C Programming Language.

The topic is of prime importance to software professionals involved in large development efforts such as databases, operating systems, compilers, and frameworks. This volume explains the process of decomposing large systems into physical (not inheritance) hierarchies of small, manageable components. Concepts and techniques are illustrated with "war stories" from the development firm, Mentor Graphics, as well as with a large-scale example comprising some 12,000 lines of code. Annotation copyright by Book News, Inc., Portland, OR

This projects book is designed for individuals in an introductory C++ programming course. It provides a condensed review of important topics, along with an assortment of programming projects and exercises. The end-of-section programming projects ask students to add functionality to an existing C++ program or to enhance the performance of an existing C++ program, and/or find syntax errors and logic errors in existing C++ programs. End-of-unit projects are larger in scale, and many are written to build on one another. By the end of the course, a student will have completed a rather large programming project. Other projects are stand-alone and some are group projects in which several students work on the solution as a team.

Supplement any course on C++ with C++ Programming Projects. This workbook provides extra programming activities and opportunities for users to learn the important topics of C++ programming concepts and techniques.

Get up to speed with using C# 8 and .NET Core 3.0 features to build real-world .NET Core applications Key Features Learn the core concepts of web applications, serverless computing, and microservices Create an ASP.NET Core MVC application using controllers, routing, middleware and authentication Build modern applications using cutting-edge services from Microsoft Azure Book Description .NET Core is a general-purpose, modular, cross-platform, and opensource implementation of .NET. The latest release of .NET Core 3 comes with improved performance and security features, along with support for desktop applications. .NET Core 3 is not only useful for new developers looking to start learning the framework, but also for legacy developers interested in migrating their apps. Updated with the latest features and enhancements, this updated second edition is a step-by-step, project-based guide. The book starts with a brief introduction to the key features of C# 8 and .NET Core 3. You'll learn to work with relational data using Entity Framework Core 3, before understanding how to use ASP.NET Core. As you progress, you'll discover how you can use .NET Core to create cross-platform applications. Later, the book will show you how to upgrade your old WinForms apps to .NET Core 3. The concluding chapters will then help you use SignalR effectively to add real-time functionality to your applications, before demonstrating how to implement MongoDB in your apps. Finally, you'll delve into serverless computing and how to build microservices using Docker and Kubernetes. By the end of this book, you'll be proficient in developing applications using .NET Core 3. What you will learn Understand how to incorporate the Entity Framework Core 3 to build ASP.NET Core MVC applications Create a real-time chat application using Azure's SignalR service Gain hands-on experience of working with Cosmos DB Develop an Azure Function and interface it with an Azure Logic App Explore user authentication with Identity Server and OAuth2 Understand how to use Azure Cognitive Services to add advanced functionalities with minimal code Get to grips with running a .NET Core application with Kubernetes Who this book is for This book is for developers and programmers of all levels who want to build real-world projects and explore the new features of .NET Core 3. Developers working on legacy desktop software who are looking to migrate to .NET Core 3 will also find this book useful. Basic knowledge of .NET Core and C# is assumed.

This updated reference offers a clear description of make, a central engine in many programming projects that simplifies the process of re-linking a program after re-compiling source files. Original. (Intermediate)

These projects are fun to build and fun to use Make lights dance to music, play with radio remote control, or build your own metal detector Who says the Science Fair has to end? If you love building gadgets, this book belongs on your radar. Here are complete directions for building ten cool creations that involve light, sound, or vibrations -- a weird microphone, remote control gizmos, talking toys, and more, with full parts and tools lists, safety guidelines, and wiring schematics. Check out ten cool electronics projects, including * Chapter 8 -- Surfing the Radio Waves (how to make your own radio) * Chapter 9 -- Scary Pumpkins (crazy Halloween decorations that have sound, light, and movement) * Chapter 12 -- Hitting Paydirt with an Electronic Metal Detector (a project that can pay for itself) Discover how to * Handle electronic components safely * Read a circuit diagram * Troubleshoot circuits with a multimeter * Build light-activated gadgets * Set up a motion detector * Transform electromagnetic waves into sound Companion Web site * Go to www.dummies.com/go/electronicprojectsfd * Explore new projects with other electronics hobbyists * Find additional information and project opportunities

This book focuses on one of the important issues in large C++ development: the architecture of C++ classes. It emphasizes programming techniques which avoid complex tendencies between objects, and explains how development, testing, and maintenance are all simplified if code is structured in layers of classes.

These techniques can improve almost any C++ project.

Five Lines of Code teaches refactoring that's focused on concrete rules and getting any method down to five lines or less! There's no jargon or tricky automated-testing skills required, just easy guidelines and patterns illustrated by detailed code samples. In Five Lines of Code you will learn: The signs of bad code Improving code safely, even when you don't understand it Balancing optimization and code generality Proper compiler practices The Extract method, Introducing Strategy pattern, and many other refactoring patterns Writing stable code that enables change-by-addition Writing code that needs no comments Real-world practices for great refactoring Improving existing code—refactoring—is one of the most common tasks you'll face as a programmer. Five Lines of Code teaches you clear and actionable refactoring rules that you can apply without relying on intuitive judgements such as "code smells." Following the author's expert perspective—that refactoring and code smells can be learned by following a concrete set of principles—you'll learn when to refactor your code, what patterns to apply to what problem, and the code characteristics that indicate it's time for a rework. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Every codebase includes mistakes and inefficiencies that you need to find and fix. Refactor the right way, and your code becomes elegant, easy to read, and

easy to maintain. In this book, you'll learn a unique approach to refactoring that implements any method in five lines or fewer. You'll also discover a secret most senior devs know: sometimes it's quicker to hammer out code and fix it later!

About the book *Five Lines of Code* is a fresh look at refactoring for developers of all skill levels. In it, you'll master author Christian Clausen's innovative approach, learning concrete rules to get any method down to five lines—or less! You'll learn when to refactor, specific refactoring patterns that apply to most common problems, and characteristics of code that should be deleted altogether.

What's inside

- The signs of bad code
- Improving code safely, even when you don't understand it
- Balancing optimization and code generality
- Proper compiler practices

About the reader

For developers of all skill levels. Examples use easy-to-read Typescript, in the same style as Java and C#.

About the author

Christian Clausen works as a Technical Agile Coach, teaching teams how to refactor code.

Table of Contents

- 1 Refactoring refactoring
- 2 Looking under the hood of refactoring

PART 1 LEARN BY REFACTORIZING A COMPUTER GAME

- 3 Shatter long function
- 4 Make type codes work
- 5 Fuse similar code together
- 6 Defend the data

PART 2 TAKING WHAT YOU HAVE LEARNED INTO THE REAL WORLD

- 7 Collaborate with the compiler
- 8 Stay away from comments
- 9 Love deleting code
- 10 Never be afraid to add code
- 11 Follow the structure in the code
- 12 Avoid optimizations and generality
- 13 Make bad code look bad
- 14 Wrapping up

If you want to write or construct or program C++ mini-project and do not know how or from where to start buy this simple e-book.

This lab manual is designed for students in an introductory C++ programming course. It is written to accompany any introductory C++ text. The manual provides a condensed review of important topics, along with an assortment of laboratory programming projects and exercises. Each section provides the instructor with a choice of paper and pencil exercises and small programming problems that reinforce the topic covered in the section. The end-of-section programming projects ask students to add functionality to an existing C++ program or to enhance the performance of an existing C++ program, and/or find syntax errors and logic errors in existing C++ programs. End-of-unit projects are larger in scale, and many are written to build on one another. By the end of the course, a student will have completed a rather large programming project. Other projects are stand-alone and several will be group projects in which several students will work on the solution as a team.

A detailed handbook for experienced developers explains how to get the most out of Microsoft's Visual Studio .NET, offering helpful guidelines on how to use its integrated development environment, start-up templates, and other features and tools to create a variety of applications, including Web services. Original.

(Advanced)

A practical guide to building PIC and STM32 microcontroller board applications with C and C++ programming

Key Features

- Discover how to apply microcontroller boards in real life to create interesting IoT projects
- Create innovative solutions to help improve the lives of people affected

by the COVID-19 pandemic Design, build, program, and test microcontroller-based projects with the C and C++ programming language Book Description We live in a world surrounded by electronic devices, and microcontrollers are the brains of these devices. Microcontroller programming is an essential skill in the era of the Internet of Things (IoT), and this book helps you to get up to speed with it by working through projects for designing and developing embedded apps with microcontroller boards. DIY Microcontroller Projects for Hobbyists are filled with microcontroller programming C and C++ language constructs. You'll discover how to use the Blue Pill (containing a type of STM32 microcontroller) and Curiosity Nano (containing a type of PIC microcontroller) boards for executing your projects as PIC is a beginner-level board and STM-32 is an ARM Cortex-based board. Later, you'll explore the fundamentals of digital electronics and microcontroller board programming. The book uses examples such as measuring humidity and temperature in an environment to help you gain hands-on project experience. You'll build on your knowledge as you create IoT projects by applying more complex sensors. Finally, you'll find out how to plan for a microcontroller-based project and troubleshoot it. By the end of this book, you'll have developed a firm foundation in electronics and practical PIC and STM32 microcontroller programming and interfacing, adding valuable skills to your professional portfolio. What you will learn Get to grips with the basics of digital and analog electronics Design, build, program, and test a microcontroller-based system Understand the importance and applications of STM32 and PIC microcontrollers Discover how to connect sensors to microcontroller boards Find out how to obtain sensor data via coding Use microcontroller boards in real life and practical projects Who this book is for This STM32 PIC microcontroller book is for students, hobbyists, and engineers who want to explore the world of embedded systems and microcontroller programming. Beginners, as well as more experienced users of digital electronics and microcontrollers, will also find this book useful. Basic knowledge of digital circuits and C and C++ programming will be helpful but not necessary.

Learn multi-DBMS programming and get a jump start on dozens of Windows database products This groundbreaking book/disk set gives you a solid working knowledge of database design concepts, Windows programming, and object-oriented techniques. Supported by an abundance of technical information and programming examples, you'll learn how to craft an unprecedented range of feature-rich, multi-DBMS applications. Windows Multi-DBMS Programming: Shows you how to write database and multi-database software using Microsoft ODBC and intersolv/qelib Presents broad spectrum coverage of Windows database and client/server software tools and techniques Supplies source code in a variety of languages, sample databases, and scripts for SQL servers and engines for Windows, Windows NT, and NetWare Includes numerous examples for database and client/server software development using: Visual C++ SQLWindows FoxPro VBX libraries Visual Basic Borland C++ Qelib and many other Access Oracle Glue InfoModeler developer tools ObjectView Visual AppBuilder ProtoView PowerBuilder Integra VDB WindowsMAKER Companion disk includes: Full example programs for all sample code included in the book.

If you are new to C++ programming, C++ Primer Plus, Fifth Edition is a friendly and easy-to-use self-study guide. You will cover the latest and most useful language enhancements, the Standard Template Library and ways to streamline object-oriented programming with C++. This guide also illustrates how to handle input and output, make programs perform repetitive tasks, manipulate data, hide information, use functions and build flexible, easily modifiable programs. With the help of this book, you will: Learn C++ programming from the ground up. Learn through real-world, hands-on examples. Experiment with concepts, including classes, inheritance, templates and exceptions. Reinforce knowledge gained through end-of-chapter review questions and practice programming exercises. C++ Primer Plus, Fifth Edition makes learning and using important object-oriented programming concepts understandable. Choose

this classic to learn the fundamentals and more of C++ programming.

Summary Functional Programming in C++ teaches developers the practical side of functional programming and the tools that C++ provides to develop software in the functional style. This in-depth guide is full of useful diagrams that help you understand FP concepts and begin to think functionally. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Well-written code is easier to test and reuse, simpler to parallelize, and less error prone. Mastering the functional style of programming can help you tackle the demands of modern apps and will lead to simpler expression of complex program logic, graceful error handling, and elegant concurrency. C++ supports FP with templates, lambdas, and other core language features, along with many parts of the STL. About the Book Functional Programming in C++ helps you unleash the functional side of your brain, as you gain a powerful new perspective on C++ coding. You'll discover dozens of examples, diagrams, and illustrations that break down the functional concepts you can apply in C++, including lazy evaluation, function objects and invocables, algebraic data types, and more. As you read, you'll match FP techniques with practical scenarios where they offer the most benefit. What's inside Writing safer code with no performance penalties Explicitly handling errors through the type system Extending C++ with new control structures Composing tasks with DSLs About the Reader Written for developers with two or more years of experience coding in C++. About the Author Ivan ?uki? is a core developer at KDE and has been coding in C++ since 1998. He teaches modern C++ and functional programming at the Faculty of Mathematics at the University of Belgrade. Table of Contents Introduction to functional programming Getting started with functional programming Function objects Creating new functions from the old ones Purity: Avoiding mutable state Lazy evaluation Ranges Functional data structures Algebraic data types and pattern matching Monads Template metaprogramming Functional design for concurrent systems Testing and debugging This Book Gives You A Better Reason To Eye Such Sleek Software With Confidence. The First Book Of Its Kind, C Projects Is A Veritable Treasure For All Those Who Have A Working Knowledge Of C, And An Incentive To Learn C For Those Who Haven'T. It Puts The Unbounded Potential Of C To Work In A Wide Range Of Software's. C Projects Gives You More Than 16000 Lines Of C Source Code. And That'S A Lot Of Code! No Longer Are These Software'S Out Of Reach; You Can Now Enter The Fascinating World Of Creating Professional Level Software's, And Greet The Arrival Of Any New Package With The Wisdom Of One Who Knows!

Authored by two of the leading authorities in the field, this guide offers readers the knowledge and skills needed to achieve proficiency with embedded software.

C#Builder Kick Start provides a rapid overview of the C#Builder tool, a Borland developer's introduction to C# explaining the new forms and interfaces, and set of examples illustrating the power of C#, C#Builder, and .NET development. Special attention is paid to differences between existing Borland tools and development strategies and C#Builder.

[Copyright: da5813d340c89c50a818c73c500745b6](http://da5813d340c89c50a818c73c500745b6)