C Gui Programming With Qt4 2nd Edition

An advanced guide to creating powerful high-performance GUIs for modern, media-rich applications in various domains such as business and game development Key FeaturesGain comprehensive knowledge of Python GUI development using PyQt 5.12Explore advanced topics including multithreaded programming, 3D animation, and SQL databasesBuild cross-platform GUIs for Windows, macOS, Linux, and Raspberry PiBook Description PyQt5 has long been the most powerful and comprehensive GUI framework available for Python, yet there is a lack of cohesive resources available to teach Python programmers how to use it. This book aims to remedy the problem by providing comprehensive coverage of GUI development with PyQt5. You will get started with an introduction to PyQt5, before going on to develop stunning GUIs with modern features. You will then learn how to build forms using QWidgets and learn about important aspects of GUI development such as layouts, size policies, and event-driven programming. Moving ahead, you'll discover PyQt5's most powerful features through chapters on audio-visual programming with QtMultimedia, database-driven software with QtSQL, and web browsing with QtWebEngine. Next, in-depth coverage of multithreading and asynchronous programming will help you run tasks asynchronously and build high-concurrency processes with ease. In later chapters, you'll gain insights into QOpenGLWidget, along with mastering techniques for creating 2D graphics with QPainter. You'll also explore PyQt on a Raspberry Pi and interface it with remote systems using QtNetwork. Finally, you will learn how to distribute your applications using setuptools and PyInstaller. By the end of this book, you will have the skills you need to develop robust GUI applications using PyQt. What you will learnGet to grips with the inner workings of PyQt5Learn how elements in a GUI application communicate with signals and slotsLearn techniques for styling an applicationExplore database-driven applications with the QtSQL moduleCreate 2D graphics with QPainterDelve into 3D graphics with QOpenGLWidgetBuild network and web-aware applications with QtNetwork and QtWebEngineWho this book is for This book is for programmers who want to create attractive, functional, and powerful GUIs using the Python language. You'll also find this book useful if you are a student, professional, or anyone who wants to start exploring GUIs or take your skills to the next level. Although prior knowledge of the Python language is assumed, experience with PyQt, Qt, or GUI programming is not required.

Master C++ "The Qt Way" with Modern Design Patterns and Efficient Reuse This fully updated, classroom-tested book teaches C++ "The Qt Way," emphasizing design patterns and efficient reuse. Readers will master both the C++ language and Qt libraries, as they learn to develop maintainable software with well-defined code layers and simple, reusable classes and functions. Every chapter of this edition has been improved with new content, better organization, or both. Readers will find extensively revised coverage of QObjects, Reflection, Widgets, Main Windows, Models and Views, Databases, Multi-Threaded Programming, and Reflection. This edition introduces the powerful new Qt Creator IDE; presents new multimedia APIs; and offers extended coverage of Qt Designer and C++ Integration. It has been restructured to help readers start writing software immediately and write robust, effective software sooner. The authors introduce several new design patterns, add many quiz questions and labs, and present more efficient solutions relying on new Qt features and best practices. They also provide an up-to-date C++ reference section and a complete application case study. Master C++ keywords, literals, identifiers, declarations, types, and type conversions. Understand classes and objects, organize them, and describe their interrelationships. Learn consistent programming style and naming rules. Use lists, functions, and other essential techniques. Define inheritance relationships to share code and promote reuse. Learn how code libraries are designed, built, and reused. Work with QObject, the base class underlying much of Qt. Build graphical user interfaces with Qt widgets. Use templates to write generic functions and classes. Master advanced reflective programming techniques. Use the Model-View framework to cleanly separate data and GUI classes. Validate input using regular expressions and other techniques. Parse XML data with SAX, DOM, and QXmlStreamReader. Master today's most valuable creational and structural design patterns. Create, use, monitor, and debug processes and threads. Access databases with Qt's SQL classes. Manage memory reliably and efficiently. Understand how to effectively manage QThreads and use QtConcurrent algorithms. Click here to obtain supplementary materials for this book.

A comprehensive guide that will get you up and running with embedded software development using Qt5 Key Features Learn to create fluid, cross-platform applications for embedded devices Achieve optimum performance in your applications with QT Lite project Explore the implementation of Qt with IoT using QtMqtt, QtKNX, and QtWebSockets Book Description Qt is an open-source toolkit suitable for cross-platform and embedded application development. This book uses inductive teaching to help you learn how to create applications for embedded and Internet of Things (IoT) devices with Qt 5. You'll start by learning to develop your very first application with Qt. Next, you'll build on the first application by understanding new concepts through hands-on projects and written text. Each project will introduce new features that will help you transform your basic first project into a connected IoT application running on embedded hardware. In addition to practical experience in developing an embedded Qt project, you will also gain valuable insights into best practices for Qt development, along with exploring advanced techniques for testing, debugging, and monitoring the performance of Qt applications. Through the course of the book, the examples and projects are demonstrated in a way so that they can be run both locally and on an embedded platform. By the end of this book, you will have the skills you need to use Qt 5 to confidently develop modern embedded applications. What you will learn Understand how to develop Qt applications using Qt Creator under Linux Explore various Qt GUI technologies to build resourceful and interactive applications Understand Qt's threading model to maintain a responsive UI Get to grips with remote target load and debug under Qt Creator Become adept at writing IoT code using Qt Learn a variety of software best practices to ensure that your code is efficient Who this book is for This book is for software and hardware professionals with experience in different domains who are seeking new career opportunities in embedded systems and IoT. Working knowledge of the C++ Linux command line will be useful to get the most out of this book.

Whether you're building GUI prototypes or full-fledged cross-platform GUI applications with native look-and-feel, PyQt 4 is your fastest, easiest, most powerful solution. Qt expert Mark Summerfield has written the definitive best-practice guide to PyQt 4 development. With Rapid GUI Programming with Python and Qt you'll learn how to build efficient GUI applications that run on all major operating systems, including Windows, Mac OS X, Linux, and many versions of Unix, using the same source code for all of them. Summerfield systematically introduces every core GUI development technique: from dialogs and windows to data handling; from events to printing; and more. Through the book's realistic examples you'll discover a completely new PyQt 4-based programming approach, as well as coverage of many new topics, from PyQt 4's rich text engine to advanced model/view and graphics/view programming. Every key concept is illuminated with realistic, downloadable examples–all tested on Windows, Mac OS X, and Linux with Python 2.5, Qt 4.2, and PyQt 4.2, and on Windows and Linux with Qt 4.3 and PyQt 4.3.

Programming with Qt

Foundations of Qt Development

Practical recipes for building cross-platform GUI applications, widgets, and animations with Qt 5, 2nd Edition

Practical Techniques for Building Better Software

Tools and Techniques for Building with Embedded Linux

Application Development with Qt Creator, 2nd Edition

In-depth instruction and practical techniques for building with the BeagleBone embedded Linux platform Exploring BeagleBone is a hands-on guide to bringing gadgets, gizmos, and robots to life using the popular BeagleBone embedded Linux platform. Comprehensive content and deep detail provide more than just a BeagleBone instruction manual—you ' ll also learn the underlying engineering techniques that will allow you to create your own projects. The book begins with a foundational primer on essential skills, and then gradually moves into communication, control, and advanced applications using C/C++, allowing you to learn at your own pace. In addition, the book ' s companion website features instructional videos, source code, discussion forums, and more, to ensure that you have everything you need. The BeagleBone ' s small size, high performance, low cost, and extreme adaptability have made it a favorite development platform, and the Linux software base allows for complex yet flexible functionality. The BeagleBone has applications in smart buildings, robot control, environmental sensing, to name a few; and, expansion boards and peripherals dramatically increase the possibilities. Exploring BeagleBone provides a reader-friendly guide to the device, including a crash course in computer engineering. While following step by step, you can: Get up to speed on embedded Linux, electronics, and programming Master interfacing electronic circuits, buses and modules, with practical examples Explore the Internet-connected BeagleBone and the BeagleBone with a display Apply the BeagleBone to sensing applications, including video and sound Explore the BeagleBone ' s Programmable Real-Time Controllers Hands-on learning helps ensure that your new skills stay with you, allowing you to design with electronics, modules, or peripherals even beyond the BeagleBone. Insightful guidance and online peer support help you transition from beginner to expert as you master the techniques presented in Exploring BeagleBone, the practical handbook for the popular computing platform.

Describes how to use wxWidgets, an open-source C++ API, to write GUI applications.

Build efficient and fast Qt applications, target performance problems, and discover solutions to refine your code Key FeaturesBuild efficient and concurrent applications in Qt to create cross-platform applicationsIdentify performance bottlenecks and apply the correct algorithm to improve application performanceDelve into parallel programming and memory management to optimize your codeBook Description Achieving efficient code through performance tuning is one of the key challenges faced by many programmers. This book looks at Qt programming from a performance perspective. You'll explore the performance problems encountered when using the Qt framework and means and ways to resolve them and optimize performance. The book highlights performance improvements and new features released in Qt 5.9, Qt 5.11, and 5.12 (LTE). You'll master general computer performance best practices and tools, which can help you identify the reasons behind low performance, and the most common performance pitfalls experienced when using the Qt framework. In the following chapters, you ' ll explore multithreading and asynchronous programming with C++ and Qt and learn the importance and efficient use of data structures. You'll also get the opportunity to work through techniques such as memory management and design guidelines, which are essential to improve application performance. Comprehensive sections that cover all these concepts will prepare you for gaining hands-on experience of some of Qt's most exciting application fields - the mobile and embedded development domains. By the end of this book, you'll be ready to build Qt applications that are more efficient, concurrent, and performance-oriented in nature What you will learnUnderstand classic performance best practicesGet to grips with modern hardware architecture and its performance impactImplement tools and procedures used in performance optimizationGrasp Qt-specific work techniques for graphical user interface (GUI) and platform programmingMake Transmission Control Protocol (TCP) and Hypertext Transfer Protocol (HTTP) performant and use the relevant Qt classesDiscover the improvements Qt 5.9 (and the upcoming versions) holds in storeExplore Qt's graphic engine architecture, strengths, and weaknessesWho this book is for This book is designed for Qt developers who wish to build highly performance applications for desktop and embedded devices. Programming Experience with C++ is required.

Master Qt's Most Powerful APIs, Patterns, and Development Practices Qt has evolved into a remarkably powerful solution for cross-platform desktop, Web, and mobile development. However, even the most experienced Qt programmers only use a fraction of its capabilities. Moreover, practical information about Qt's newest features has been scarce--until now. Advanced Qt Programming shows developers exactly how to take full advantage of Qt 4.5's and Qt 4.6's most valuable new APIs, application patterns, and development practices. Authored by Qt expert Mark Summerfield, this book concentrates on techniques that offer the most power and flexibility with the least added complexity. Summerfield focuses especially on model/view and graphics/view programming, hybrid desktop/Web applications, threading, and applications incorporating media and rich text. Throughout, he presents realistic, downloadable code examples, all tested on Windows, Mac OS X, and Linux using Qt 4.6 (and most tested on Qt 4.5) and designed to anticipate future versions of Qt. The book Walks through using Qt with WebKit to create innovative hybrid desktop/Internet applications Shows how to use the Phonon framework to build powerful multimedia applications Presents state-of-the-art techniques for using model/view table and tree models, QStandardItemModels, delegates, and views, and for creating custom table and tree models, delegates, and views Explains how to write more effective threaded programs with the QtConcurrent module and with the QThread class Includes detailed coverage of creating rich text editors and documents Thoroughly covers graphics/view programming: architecture, windows, widgets, layouts, scenes, and more Introduces Qt 4.6's powerful animation and state machine frameworks

Cross-Platform Development with Qt 6 and Modern C++

Programming in Python 3

Develop high performance applications for embedded systems with C++ and Qt 5

Hands-On Embedded Programming with Qt

The Book of Qt 4

Build stunning cross-platform applications and widgets with the most powerful GUI framework

Learn GUI programming using Qt4, the powerful crossplatform framework, with the only official Qt book approved by Trolltech.

An In-depth guide updated with the latest version of Qt 5.11 including new features such as Quick Controls and Qt Gamepad Key Features Unleash the power of Qt 5.11 with C++ Build applications using Qt Widgets (C++) or Qt Quick (QML) Create cross-platform applications for mobile and desktop platforms with Qt 5 Book Description Qt 5.11 is an app development framework that provides a great user experience and develops full capability applications with Qt Widgets, QML, and even Qt 3D. Whether you're building GUI prototypes or fully-fledged cross-platform GUI applications with a native look and feel, Mastering Qt 5 is your fastest, easiest, and most powerful solution. This book addresses various challenges and teaches you to successfully develop cross-platform applications using the Qt framework, with the help of well-organized projects. Working through this book, you will gain a better understanding of the Qt framework, as well as the tools required to resolve serious issues, such as linking, debugging, and multithreading. You'll start off your journey by discovering the new Qt 5.11 features, soon followed by exploring different platforms and learning to tame them. In addition to this, you'll interact with a gamepad using Qt Gamepad. Each chapter is a logical step for you to complete in order to master Qt. By the end of this book, you'll have created an application that has been tested and is ready to be shipped. What you will learn Create stunning UIs with Qt Widgets and Qt Quick 2 Develop powerful, cross-platform applications with the Qt framework Design GUIs with the Qt Designer and build a library in it for UI previews Handle user interaction with the Qt signal or slot mechanism in C++ Prepare a cross-platform project to host a third-party library Use the Qt Animation framework to display stunning effects Deploy mobile apps with Qt and embedded platforms Interact with a gamepad using Qt Gamepad Who this book is for Mastering Qt 5 is for developers and programmers who want to build GUI-based applications. C++ knowledge is necessary, and knowing QT basics will help you get the most out of this book.

Your Hands-On Guide to Go, the Revolutionary New Language Designed for Concurrency, Multicore Hardware, and Programmer Convenience Today ' s most exciting new programming language, Go, is designed from the ground up to help you easily leverage all the power of today ' s multicore hardware. With this guide, pioneering Go programmer Mark Summerfield shows how to write code that takes full advantage of Go ' s breakthrough features and idioms. Both a tutorial and a language reference, Programming in Go brings together all the knowledge you need to evaluate Go, think in Go, and write high-performance software with Go. Summerfield presents multiple idiom comparisons showing exactly how Go improves upon older languages, calling special attention to Go ' s key innovations. Along the way, he explains everything from the absolute basics through Go ' s lock-free channel-based concurrency and its flexible and unusual duck-typing type-safe approach to object-orientation. Throughout, Summerfield ' s approach is thoroughly practical. Each chapter offers multiple live code examples designed to encourage experimentation and help you quickly develop mastery. Wherever possible, complete programs and packages are presented to provide realistic use cases, as well as exercises. Coverage includes Quickly getting and installing Go, and building and running Go programs Exploring Go ' s syntax, features, and extensive standard library Programming Boolean values, expressions, and numeric types Creating, comparing, indexing, slicing, and formatting strings Understanding Go ' s highly efficient built-in collection types: slices and maps Using Go as a procedural programming language Discovering Go ' s unusual and flexible approach to object orientation Mastering Go ' s unique, simple, and natural approach to fine-grained concurrency Reading and writing binary, text, JSON, and XML files Importing and using standard library packages, custom packages, and third-party packages Creating, documenting, unit testing, and benchmarking custom packages

Master application development by writing succinct, robust, and reusable code with Qt 5 About This Book Unleash the power of Qt 5 with C++14 Integrate useful third-party libraries such as OpenCV Package and deploy your application on multiple platforms Who This Book Is For This book will appeal to developers and programmers who would like to build GUI-based applications. Knowledge of C++ is necessary and the basics of Qt would be helpful. What You Will Learn Create stunning UIs with Qt Widget and Qt Quick Develop powerful, cross-platform applications with the Qt framework Design GUIs with the Qt Designer and build a library in it for UI preview Handle user interaction with the Qt signal/slot mechanism in C++ Prepare a cross-platform project to host a third-party library Build a Qt application using the OpenCV API Use the Qt Animation framework to display stunning effects Deploy mobile apps with Qt and embedded platforms In Detail Qt 5.7 is an application development framework that provides a great user experience and develops full-capability applications with Qt Widgets, QML, and even Qt 3D. This book will address challenges in successfully developing cross-platform applications with the Qt framework. Cross-platform development needs a well-organized project. Using this book, you will have a better understanding of the Qt framework and the tools to resolve serious issues such as linking, debugging, and multithreading. Your journey will start with the new Qt 5 features. Then you will explore different platforms and learn to tame them. Every chapter along the way is a logical step that you must take to master Qt. The journey will end in an application that has been tested and is ready to be shipped. Style and approach This is an easy-to-follow yet comprehensive guide to building applications in Qt. Each chapter covers increasingly advanced topics, with subjects grouped according to their complexity as well as their usefulness. Packed with practical examples and explanations, Mastering Qt contains everything you need to take your applications to the next level.

Design and build applications with modern graphical user interfaces without worrying about platform dependency

A Complete Introduction to the Python Language

C++ GUI Programming with Qt3

Create stunning cross-platform applications using C++ with Qt Widgets and QML with Qt Quick, 2nd Edition

An Introduction to Design Patterns in C++ with Qt 4

Creating Applications for the 21st Century

This book teaches computer programming to the complete beginner using the native C language. As such, it assumes you have no knowledge whatsoever about programming. The main goal of this book is to teach fundamental programming principles using C, one of the most widely used programming languages in the world today. We discuss only those features and statements in C that are necessary to achieve our goal. Once you learn the principles well, they can be applied to any language. If you are worried that you are not good at high-school mathematics, don't be. It is a myth that you must be good at mathematics to learn programming. C is considered a 'modern' language even though its roots date back to the 1970s. Originally, C was designed for writing 'systems' programs—things like operating systems, editors, compilers, assemblers and input/output utility programs. But, today, C is used for writing all kinds of applications programs as well—word processing programs, spreadsheet programs, database management programs, accounting programs, games, robots, embedded systems/electronics (i.e., Arduino), educational software—the list is endless. Note: Appendices A-D are available as part of the free source code download at the Apress website. What You Will Learn: How to get started with programming using the C language How to use the basics of C How to program with sequence, selection and repetition logic How to work with characters How to work with functions How to use arrays Who This Book Is For: This book is intended for anyone who is learning programming for the first time.

Winner of the 2014 Jolt Award for "Best Book" "Whether you are an experienced programmer or are starting your career, Python in Practice is full of valuable advice and example to help you improve your craft by thinking about problems from different perspectives, introducing tools, and detailing techniques to create more effective solutions." —Doug Hellmann, Senior Developer, DreamHost If you're an experienced Python programmer, Python in Practice will help you improve the quality, reliability, speed, maintainability, and usability of all your Python programs. Mark Summerfield focuses on four key themes: design patterns for coding elegance, faster processing through concurrency and compiled Python (Cython), high-level networking, and graphics. He identifies well-proven design patterns that are useful in Python, illuminates them with expert-quality code, and explains why some object-oriented design patterns are irrelevant to Python. He also explodes several counterproductive myths about Python programming—showing, for example, how Python can take full advantage of multicore hardware. All examples, including three complete case studies, have been tested with Python 3.3 (and, where possible, Python 3.2 and 3.1) and crafted to maintain compatibility with future Python 3.x versions. All code has been tested on Linux, and most code has also been tested on OS X and Windows. All code may be downloaded at www.qtrac.eu/pipbook.html. Coverage includes Leveraging Python's most effective creational, structural, and behavioral design patterns Supporting concurrency with Python's multiprocessing, threading, and concurrent.futures modules Avoiding concurrency problems using thread-safe queues and futures rather than fragile locks Simplifying networking with high-level modules, including xmlrpclib and RPyC Accelerating Python code with Cython, C-based Python modules, profiling, and other techniques Creating modern-looking GUI applications with Tkinter Leveraging today's powerful graphics hardware via the OpenGL API using pyglet and PyOpenGL

Use Qt5 to design and build a graphical user interface that is functional, appealing, and user-friendly for your software application About This Book Learn to make use of Qt5 to design and customize the look-and-feel of your application Improve the visual quality of your application by utilizing the graphic rendering system and animation system provided by Qt5 A good balance of visual presentation and its contents will make an application appealing yet functional Who This Book Is For This book intended for those who want to develop software using Qt5. If you want to improve the visual quality and content presentation of your software application, this book is best suited to you. What You Will Learn Customize the look and feel of your application using the widget editor provided by Qt5 Change the states of the GUI elements to make them appear in a different form Animating the GUI elements using the built-in animation system provided by Qt5 Draw shapes and 2D images in your application using Qt5's powerful rendering system Draw 3D graphics in your application by implementing OpenGL, an industry-standard graphical library to your project Build a mobile app that supports touch events and export it to your device Parse and extract data from an XML file, then present it on your software's GUI Display web content on your program and interact with it by calling JavaScript functions from C++, or calling C++ functions from the web content Access to MySQL and SQLite databases to retrieve data and display it on your software's GUI In Detail With the advancement of computer technology, the software market is exploding with tons of software choices for the user, making their expectations higher in terms of functionality and the look and feel of the application. Therefore, improving the visual quality of your application is vital in order to overcome the market competition and stand out from the crowd. This book will teach you how to develop functional and appealing software using Qt5 through multiple projects that are interesting and fun. This book covers a variety of topics such as look-and-feel customization, GUI animation, graphics rendering, implementing Google Maps, and more. You will learn tons of useful information, and enjoy the process of working on the creative projects provided in this book. Style and approach This book focuses on customizing the look and feel and utilizing the graphical features provided by Qt5. It takes a step-by-step approach, providing tons of screenshots and sample code for you to follow and learn. Each topic is explained sequentially and

placed in context.
Qt has evolved into a remarkably powerful solution for cross-platform desktop, Web, and mobile development. However, even the most experienced Qt programmers only use a fraction of its capabilities. Moreover, practical information about Qt's newest features has been scarceùuntil now Advanced Qt Programming shows developers exactly how to take full advantage of Qt 4.5's and Qt 4.6's most valuable new APIs, application patterns, and development practices. Authored by Qt expert Mark Summerfield, this book concentrates on techniques that offer the most power and flexibility with the least added complexity. Summerfield focuses especially on model/view and graphics/view programming, hybrid desktop/Web applications, threading, and applications incorporating media and rich text. Throughout, he presents realistic, downloadable code examples, all tested on Windows, Mac OS X, and Linux using Qt 4.6 (and most tested on Qt 4.5) and designed to anticipate future versions of Qt. The book Walks through using Qt with WebKit to create innovative hybrid desktop/Internet applications Shows how to use the Phonon framework to build powerful multimedia applications Presents state-of-the-art techniques for using model/view table and tree models, QStandardItemModels, delegates, and views, and for creating custom table and tree models, delegates, and views -Explains how to write more effective threaded programs with the QtConcurrent module and with the QThread class Includes detailed coverage of creating rich text editors and documents Thoroughly covers graphics/view programming: architecture, windows, widgets, layouts, scenes, and more Introduces Qt 4.6's powerful animation and state machine frameworks "A good book on advanced Qt programming has been missing in the arsenal of Qt programmers. I'm very happy that Mark has written one. He is a fantastic technical writer with all the necessary background to write authoritatively about Qt programming...In other words: You are in for a treat! You are holding in your hands an excellent opportunity to expand on your knowledge of all the cool stuff you can do with Qt."-Eirik Chambe-Eng, cocreator of Qt
Create Better Programs Using Concurrency, Libraries, and Patterns
GUI Programming with Python
Writing Portable GUI applications on Unix and Win32
The Definitive Guide to PyQt Programming
Writing Portable GUI Applications on Unix and Win32
PySide GUI Application Development
Enhance your cross-platform programming abilities with the powerful features and capabilities of Qt 6 Key FeaturesLeverage Qt and C++ capabilities to create modern, cross-platform applications that can run on a wide variety of software applicationsExplore what's new in Qt 6 and understand core concepts in depthBuild professional customized GUI applications with the help of Qt CreatorBook Description Qt is a cross-platform application development framework widely used for developing applications that can run on a wide range of hardware platforms with little to no change in the underlying codebase. If you have basic knowledge of C++ and want to build desktop or mobile applications with a modern graphical user interface (GUI), Qt is the right choice for you. Cross-Platform Development with Qt 6 and Modern C++ helps you understand why Qt is one of the favorite GUI frameworks adopted by industries worldwide, covering the essentials of programming GUI apps across a multitude of platforms using the standard C++17 and Qt 6 features. Starting with the fundamentals of the Qt framework, including the features offered by Qt Creator, this practical guide will show you how to create classic user interfaces using Qt Widgets and touch-friendly user interfaces using Qt Quick. As you advance, you'll explore the Qt Creator IDE for developing applications for multiple desktops as well as for embedded and mobile platforms. You will also learn advanced concepts about signals and slots. Finally, the book takes you through debugging and testing your app with Qt Creator IDE. By the end of this book, you'll be able to build cross-platform applications with a modern GUI along with the speed and power of native apps. What you will learnWrite cross-platform code using the Qt framework to create interactive applicationsBuild a desktop application using Qt WidgetsCreate a touch-friendly user interface with Qt QuickDevelop a mobile application using Qt and deploy it on different platformsGet to grips with Model/View programming with Qt Widgets and Qt QuickDiscover Qt's graphics framework and add animations to your user interfaceWrite test cases using the Qt Test framework and debug codeBuild a translation-aware applicationFollow best practices in Qt to write high-performance codeWho this book is for This book is for application developers who want to use C++ and Qt to create modern, responsive applications that can be deployed to multiple operating systems such as Microsoft Windows, Apple macOS, and Linux desktop platforms. Although no prior knowledge of Qt is expected, beginner-level knowledge of the C++ programming language and object-oriented programming system (OOPs) concepts will be helpful.
Written in a concise and easy-to-follow approach, this book will guide you to develop your first application with Qt with illustrated examples and screenshots.If you are a developer who is new to Qt and Qt Creator and is interested in harnessing the power of Qt for cross-platform development, this book is great for you. If you have basic experience programming in C++, you have what it takes to create great cross-platform applications using Qt and Qt Creator!
Presenting hints on developing user-friendly applications, Molkentin explores tools needed to create dialog boxes, steps to follow when developing a GUI-based application, and how to visualize data using Qt's "model-view concept.
Explore Qt Creator, Qt Quick, and QML to design and develop applications that work on desktop, mobile, embedded, and IoT platforms Key FeaturesBuild a solid foundation in Qt by learning about its core classes, multithreading, File I/O, and networkingLearn GUI programming and build custom interfaces using Qt Widgets, Qt Designer, and QMLUse the latest features of C++17 for improving the performance of your Qt applicationsBook Description Qt is a powerful development framework that serves as a complete toolset for building cross-platform applications, helping you reduce development time and improve productivity. Completely revised and updated to cover C++17 and the latest developments in Qt 5.12, this comprehensive guide is the third edition of Application Development with Qt Creator. You'll start by designing a user interface using Qt Designer and learn how to instantiate custom messages, forms, and dialogues. You'll then understand Qt's support for multithreading, a key tool for making applications responsive, and the use of Qt's Model-View-Controller (MVC) to display data and content. As you advance, you'll learn to draw images on screen using Graphics View Framework and create custom widgets that interoperate with Qt Widgets. This Qt programming book takes you through Qt Creator's latest features, such as Qt Quick Controls 2, enhanced CMake support, a new graphical editor for SCXML, and a model editor. You'll even work with multimedia and sensors using Qt Quick, and finally develop applications for mobile, IoT, and embedded devices using Qt Creator. By the end of this Qt book, you'll be able to create your own cross-platform applications from scratch using Qt Creator and the C++ programming language. What you will learnCreate programs from scratch using the Qt framework and C++ languageCompile and debug your Qt Quick and C++ applications using Qt CreatorImplement map view with your Qt application and display device location on the mapUnderstand how to call Android and iOS native functions from Qt C++ codeLocalize your application with Qt LinguistExplore various Qt Quick components that provide access to audio and video playbacksDevelop GUI applications using both Qt and Qt QuickWho this book is for If you are a beginner looking to harness the power of Qt and the Qt Creator framework for cross-platform development, this book is for you. Although no prior knowledge of Qt and Qt Creator is required, basic knowledge of C++ programming is assumed.
Build modern, responsive cross-platform desktop applications with Qt, C++, and QML
Qt5 C++ GUI Programming Cookbook
Getting Started with Qt 5
Mastering Qt 5
Hands-On High Performance Programming with Qt 5
Python in Practice
This is an insightful guide to efficient, practical solutions to real-world C++ problems. Concrete case studies run throughput the book and show how to develop quality C++ software.
Python 3 is the best version of the language yet: It is more powerful, convenient, consistent, and expressive than ever before. Now, leading Python programmer Mark Summerfield demonstrates how to write code that takes full advantage of Python 3 ' s features and idioms. The first book written from a completely " Python 3 " viewpoint, Programming in Python 3 brings together all the knowledge you need to write any program, use any standard or third-party Python 3 library, and create new library modules of your own. Summerfield draws on his many years of Python experience to share deep insights into Python 3 development you won ' t find anywhere else. He begins by illuminating Python ' s " beautiful heart ": the eight key elements of Python you need to write robust, high-performance programs. Building on these core elements, he introduces new topics designed to strengthen your practical expertise—one concept and hands-on example at a time. This book ' s coverage includes Developing in Python using procedural, object-oriented, and functional programming paradigms Creating custom packages and modules Writing and reading binary, text, and XML files, including optional compression, random access, and text and XML parsing Leveraging advanced data types, collections, control structures, and functions Spreading program workloads across multiple processes and threads Programming SQL databases and key-value DBM files Utilizing Python ' s regular expression mini-language and module Building usable, efficient, GUI-based applications Advanced programming techniques, including generators, function and class decorators, context managers, descriptors, abstract base classes, metaclasses, and more Programming in Python 3 serves as both tutorial and language reference, and it is accompanied by extensive downloadable example code—all of it tested with the final version of Python 3 on Windows, Linux, and Mac OS X.
Learn the fundamentals of QT 5 framework to develop interactive cross-platform applications Key Features A practical guide on the fundamentals of application development with QT 5 Learn to write scalable, robust and adaptable C++ code with QT Deploy your application on different platforms such as Windows, Mac OS, and Linux Book Description Qt is a mature and powerful framework for delivering sophisticated applications across a multitude of platforms. It has a rich history in the Linux world, is widely used in embedded devices, and has made great strides in the Mobile arena over the past few years. However, in the Microsoft Windows and Apple Mac OS X worlds, the dominance of C#/.NET and Objective-C/Cocoa means that Qt is often overlooked. This book demonstrates the power and flexibility of the Qt framework for desktop application development and shows how you can write your application once and deploy it to multiple operating systems. Build a complete real-world line of business (LOB) solution from scratch, with distinct C++ library, QML user interface, and QtTest-driven unit-test projects. This is a suite of essential techniques that cover the core requirements for most LOB applications and will empower you to progress from a blank page to shipped application. What you will learn · Install and configure the Qt Framework and Qt Creator IDE · Create a new multi-project solution from scratch and control every aspect of it with QMake · Implement a rich user interface with QML · Learn the fundamentals of QtTest and how to integrate unit testing · Build self-aware data entities that can serialize themselves to and from JSON · Manage data persistence with SQLite and CRUD operations · Reach out to the internet and consume an RSS feed · Produce application packages for distribution to other users Who this book is for This book is for application developers who want a powerful and flexible framework to create modern, responsive applications on Microsoft Windows, Apple Mac OS X, and Linux desktop platforms. You should be comfortable with C++ but no prior knowledge of Qt or QML is required.
Qt is one of the most influential graphical toolkits for the Linux operating system and is quickly being adopted on other platforms (Windows, Mac OS) as well. It is necessary to learn for all Linux programmers. This book takes the reader step by step through the complexities of Qt, laying the groundwork that allows the reader to make the step from novice to professional. This book is full of real world examples that can be quickly integrated into a developer ' s project. While the reader is assumed to be a beginner at Qt development, they are required to have a working knowledge of C++ programming.
Hands-On GUI Programming with C++ and Qt5
Exploring BeagleBone
Programming Windows
Game Programming Using Qt: Beginner's Guide
Learn Qt 5
C++ GUI Programming with Qt 4
Use Qt 5 to design and build functional, appealing, and user-friendly graphical user interfaces (GUIs) for your applications. Key FeaturesLearn to use Qt 5 to design and customize the look and feel of your applicationImprove the visual quality of an application by using graphics rendering and animationUnderstand the balance of presentation and web content that will make an application appealing yet functionalBook Description With the growing need to develop GUIs for multiple targets and multiple screens, improving the visual quality of your application becomes important so that it stands out from your competitors. With its cross-platform ability and the latest UI paradigms, Qt makes it possible to build intuitive, interactive, and user-friendly user interfaces for your applications. Qt5 C++ GUI Programming Cookbook, Second Edition teaches you how to develop functional and appealing user interfaces using the latest version of QT5 and C++. This book will help you learn a variety of topics such as GUI customization and animation, graphics rendering, implementing Google Maps, and more. You will also be taken through advanced concepts like asynchronous programming, event handling using signals and slots, network programming, various aspects of optimizing your application. By the end of the book, you will be confident to design and customize GUI applications that meet your clients' expectations and have an understanding of best practice solutions for common problems. What you will learnAnimate GUI elements using Qt5's built-in animation systemDraw shapes and 2D images using Qt5's powerful rendering systemImplement an industry-standard OpenGL library in your projectBuild a mobile app that supports touch events and exports it onto devicesParse and extract data from an XML file and present it on your GUIInteract with web content by calling JavaScript functions from C++Access MySQL and SQLite databases to retrieve data and display it on your GUIWho this book is for This intermediate-level book is designed for those who want to develop software using Qt 5. If you want to improve the visual quality and content presentation of your software application, this book is for you. Prior experience of C++ programming is required.
Master Qt ' s Most Powerful APIs, Patterns, and Development Practices Qt has evolved into a remarkably powerful solution for cross-platform desktop, Web, and mobile development. However, even the most experienced Qt programmers only use a fraction of its capabilities. Moreover, practical information about Qt ' s newest features has been scarce—until now. Advanced Qt Programming shows developers exactly how to take full advantage of Qt 4.5 ' s and Qt 4.6 ' s most valuable new APIs, application patterns, and development practices. Authored by Qt expert Mark Summerfield, this book concentrates on techniques that offer the most power and flexibility with the least added complexity. Summerfield focuses especially on model/view and graphics/view programming, hybrid desktop/Web applications, threading, and applications incorporating media and rich text. Throughout, he presents realistic, downloadable code examples, all tested on Windows, Mac OS X, and Linux using Qt 4.6 (and most tested on Qt 4.5) and designed to anticipate future versions of Qt. The book Walks through using Qt with WebKit to create innovative hybrid desktop/Internet applications Shows how to use the Phonon framework to build powerful multimedia applications Presents state-of-the-art techniques for using model/view table and tree models, QStandardItemModels, delegates, and views, and for creating custom table and tree models, delegates, and views Explains how to write more effective threaded programs with the QtConcurrent module and with the QThread class Includes detailed coverage of creating rich text editors and documents Thoroughly covers graphics/view programming: architecture, windows, widgets, layouts, scenes, and more Introduces Qt 4.6 ' s powerful animation and state machine frameworks
The Only Official, Best-Practice Guide to Qt 4.3 Programming Using Trolltech's Qt you can build industrial-strength C++ applications that run natively on Windows, Linux/Unix, Mac OS X, and embedded Linux without source code changes. Now, two Trolltech insiders have written a start-to-finish guide to getting outstanding results with the latest version of Qt: Qt 4.3. Packed with realistic examples and in-depth advice, this is the book Trolltech uses to teach Qt to its own new hires. Extensively revised and expanded, it reveals today's best Qt programming patterns for everything from implementing model/view architecture to using Qt 4.3's improved graphics support. You'll find proven solutions for virtually every GUI development task, as well as sophisticated techniques for providing database access, integrating XML, using subclassing, composition, and more. Whether you're new to Qt or upgrading from an older version, this book can help you accomplish everything that Qt 4.3 makes possible. Completely updated throughout, with significant new coverage of databases, XML, and Qtopia embedded programming Covers all Qt 4.2/4.3 changes, including Windows Vista support, native CSS support for widget styling, and SVG file generation Contains separate 2D and 3D chapters, coverage of Qt 4.3's new graphics view classes, and an introduction to QPainter's OpenGL back-end Includes new chapters on look-and-feel customization and application scripting Illustrates Qt 4's model/view architecture, plugin support, layout management, event processing, container classes, and much more Presents advanced techniques covered in no other book—from creating plugins to interfacing with native APIs Includes a new appendix on Qt Jambi, the new Java version of Qt
Create visually appealing and feature-rich applications by using Qt 5 and the C++ language Key Features Explore Qt 5 ' s powerful features to easily design your GUI application Leverage Qt 5 to build attractive cross-platform applications Work with Qt modules for multimedia, networking, and location, to customize your Qt applications Book Description Qt 5, the latest version of Qt, enables you to develop applications with complex user interfaces for multiple targets. It provides you with faster and smarter ways to create modern UIs and applications for multiple platforms. This book will teach you to design and build graphical user interfaces that are functional, appealing, and user-friendly. In the initial part of the book, you will learn what Qt 5 is and what you can do with it. You will explore the Qt Designer, discover the different types of widgets generally used in Qt 5, and then connect your application to the database to perform dynamic operations. Next, you will be introduced to Qt 5 chart which allows you to easily render different types of graphs and charts and incorporate List View Widgets in your application. You will also work with various Qt modules, like QtLocation, QtWebEngine, and the networking module through the course of the book. Finally, we will focus on cross-platform development with QT 5 that enables you to code once and run it everywhere, including mobile platforms. By the end of this book, you will have successfully learned about high-end GUI applications and will be capable of building many more powerful, cross-platform applications. What you will learn Implement tools provided by Qt 5 to design a beautiful GUI Understand different types of graphs and charts supported by Qt 5 Create a web browser using the Qt 5 WebEngine module and web view widget Connect to the MySQL database and display data obtained from it onto the Qt 5 GUI Incorporate the Qt 5 multimedia and networking module in your application Develop Google Map-like applications using Qt 5 ' s location module Discover cross-platform development by exporting the Qt 5 application to different platforms Uncover the secrets behind debugging Qt 5 and C++ applications Who this book is for This book will appeal to developers and programmers who would like to build GUI-based applications. Basic knowledge of C++ is necessary and the basics of Qt would be helpful.
Advanced Qt Programming
Applied C++
Application Development with Qt Creator
Intro Desig Patte C++ Qt _2
Build cross-platform applications using concurrency, parallel programming, and memory management
Cross-platform GUI Programming with WxWidgets
A complete guide to designing and building fun games with Qt and Qt Quick 2 using associated toolsets About This Book Learn to create simple 2D to complex 3D graphics and games using all possible tools and widgets available for game development in Qt Understand technologies such as QML, Qt Quick, OpenGL, and Qt Creator, and learn the best practices to use them to design games Learn Qt with the help of many sample games introduced step-by-step in each chapter Who This Book Is For If you want to create great graphical user interfaces and astonishing games with Qt, this book is ideal for you. Any previous knowledge of Qt is not required, however knowledge of C++ is mandatory. What You Will Learn Install Qt on your system Understand the basic concepts of every Qt game and application Develop 2D object-oriented graphics using Qt Graphics View Build multiplayer games or add a chat function to your games with Qt's Network module Script your game with Qt Script Program resolution-independent and fluid UI using QML and Qt Quick Control your game flow as per the sensors of a mobile device See how to test and debug your game easily with Qt Creator and Qt Test In Detail Qt is the leading cross-platform toolkit for all significant desktop, mobile, and embedded platforms and is becoming more popular by the day, especially on mobile and embedded devices. Despite its simplicity, it's a powerful tool that perfectly fits game developers' needs. Using Qt and Qt Quick, it is easy to build fun games or shiny user interfaces. You only need to create your game once and deploy it on all major platforms like iOS, Android, and WinRT without changing a single source file. The book begins with a brief introduction to creating an application and preparing a working environment for both desktop and mobile platforms. It then dives deeper into the basics of creating graphical interfaces and Qt core concepts of data processing and display before you try creating a game. As you progress through the chapters, you'll learn to enrich your games by implementing network connectivity and employing scripting. We then delve into Qt Quick, OpenGL, and various other tools to add game logic, design animation, add game physics, and build astonishing UI for the games. Towards the final chapters, you'll learn to exploit mobile device features such as accelerators and sensors to build engaging user experiences. If you are planning to learn about Qt and its associated toolsets to build apps and games, this book is a must have. Style and approach This is an easy-to-follow, example-based, comprehensive introduction to all the major features in Qt. The content of each chapter is explained and organized around one or multiple simple game examples to learn Qt in a fun way.
Straight from Trolltech, this book covers all one needs to build industrial-strength applications with Qt 3.2.x and C++--applications that run natively on Windows, Linux/UNIX, Mac OS X, and embedded Linux with no source code changes. Includes a CD with the Qt 3.2 toolset and Borland C++ compilers--including a noncommercial Qt 3.2 for Windows available nowhere else.
This book is great for developers who are new to Qt and Qt Creator and who are interested in harnessing the power of Qt for cross-platform development. If you have basic experience programming in C++, you have what it takes to create engaging cross-platform applications using Qt and Qt Creator!
The popular open source KDE desktop environment for Unix was built with Qt, a C++ class library for writing GUI applications that run on Unix, Linux, Windows 95/98, Windows 2000, and Windows NT platforms. Qt emulates the look and feel of Motif, but is much easier to use. Best of all, after you have written an application with Qt, all you have to do is recompile it to have a version that works on Windows. Qt also emulates the look and feel of Windows, so your users get native-looking interfaces.Platform independence is not the only benefit. Qt is flexible and highly optimized. You'll find that you need to write very little, if any, platform-dependent code because Qt already has what you need. And Qt is free for open source and Linux development.Although programming with Qt is straightforward and feels natural once you get the hang of it, the learning curve can be steep. Qt comes with excellent reference documentation, but beginners often find the included tutorial is not enough to really get started with Qt. That's whereProgramming with Qt steps in. You'll learn how to program in Qt as the book guides you through the steps of writing a simple paint application. Exercises with fully worked out answers help you deepen your understanding of the topics. The book presents all of the GUI elements in Qt, along with advice about when and how to use them, so you can make full use of the toolkit. For seasoned Qt programmers, there's also lots of information on advanced 2D transformations, drag-and-drop, writing custom image file filters, networking with the new Qt Network Extension, XML processing, Unicode handling, and more.Programming with Qt helps you get the most out of this powerful, easy-to-use, cross-platform toolkit. It's been completely updated for Qt Version 3.0 and includes entirely new information on rich text, Unicode/double byte characters, internationalization, and network programming.
Programming in Go
Using the Qt Toolkit
Learn to Program with C

Develop impressive cross-platform GUI applications with PyQt
Qt5 C++ GUI Programming Cookbook - Second Edition
Build cross-platform applications and GUIs using Qt 5 and C++, 3rd Edition

Use Qt 5 to design and build functional, appealing, and user-friendly graphical user interfaces (GUIs) for your applications. Key Features Learn to use Qt 5 to design and customize the look and feel of your application Improve the visual quality of an application by using graphics rendering and animation Understand the balance of presentation and web content that will make an application appealing yet functional Book Description With the growing need to develop GUIs for multiple targets and multiple screens, improving the visual quality of your application becomes important so that it stands out from your competitors. With its cross-platform ability and the latest UI paradigms, Qt makes it possible to build intuitive, interactive, and user-friendly user interfaces for your applications. Qt5 C++ GUI Programming Cookbook, Second Edition teaches you how to develop functional and appealing user interfaces using the latest version of QT5 and C++. This book will help you learn a variety of topics such as GUI customization and animation, graphics rendering, implementing Google Maps, and more. You will also be taken through advanced concepts like asynchronous programming, event handling using signals and slots, network programming, various aspects of optimizing your application. By the end of the book, you will be confident to design and customize GUI applications that meet your clients' expectations and have an understanding of best practice solutions for common problems. What you will learn Animate GUI elements using Qt5's built-in animation system Draw shapes and 2D images using Qt5's powerful rendering system Implement an industry-standard OpenGL library in your project Build a mobile app that supports touch events and exports it onto devices Parse and extract data from an XML file and present it on your GUI Interact with web content by calling JavaScript functions from C++ Access MySQL and SQLite databases to retrieve data and display it on your GUI Who this book is for This intermediate-level book is designed for those who want to develop software using Qt 5. If you want to improve the visual quality and content presentation of your software application, this book is for you. Prior experience of C++ programming is required. Downloading the example code for this book You can download the example code files for all Packt books you have purchased from your account at http://www.PacktPub.com. If you purchased this book elsewhere, you can visit http: ...

This complete tutorial and reference assumes no previous knowledge of C, C++, objects, or patterns. Readers will walk through every core concept, one step at a time, learning through an extensive collection of Qt 4.1-tested examples and exercises.

An definitive overview of Qt explains how to use this powerful, cross-platform GUI toolkit to create applications for the UNIX and Win32 environments, detailing the GUI elements in Qt and how to use them, and includes information on 2D transformations, drag-and-drop, and custom image file filters. Original. (Advanced).

Develop more dynamic and robust GUI applications using PySide, an open source cross-platform UI framework About This Book Designed for beginners to help you get started with GUI application development Develop your own applications by creating customized widgets and dialogs Written in a simple and elegant structure so you easily understand how to program various GUI components Who This Book Is For This book is written for Python programmers who want to learn about GUI programming. It is also suitable for those who are new to Python but are familiar with object-oriented programming. What You Will Learn Program GUI applications in an easy and efficient way Download and install PySide, a cross-platform GUI development toolkit for Python Create menus, toolbars, status bars, and child windows Develop a text editor application on your own Connect your GUI to a database and manage it Execute SQL queries by handling databases In Detail Elegantly-built GUI applications are always a massive hit among users. PySide is an open source software project that provides Python bindings for the Qt cross-platform UI framework. Combining the power of Qt and Python, PySide provides easy access to the Qt framework for Python developers and also acts as an excellent rapid application development platform. This book will take you through everything you need to know to develop UI applications. You will learn about installing and building PySide in various major operating systems as well as the basics of GUI programming. The book will then move on to discuss event management, signals and slots, and the widgets and dialogs available with PySide. Database interaction and manipulation is also covered. By the end of this book, you will be able to program GUI applications efficiently and master how to develop your own applications and how to run them across platforms. Style and approach This is an accessible and practical guide to developing GUIs for Python applications.

Introduction to Design Patterns in C++ with Qt
Mastering GUI Programming with Python
Creating Great Software with C++ and Qt 4
Rapid GUI Programming with Python and Qt
C++ GUI Programming with Qt4
The Art of Building Qt Applications

Begin writing graphical user interface(GUI) applications for building human machine interfaces with a clear understanding of key concepts of the Qt framework Key FeaturesLearn how to write, assemble, and build Qt application from the command lineUnderstand key concepts like Signals and Slots in QtBest practices and effective techniques for designing graphical user interfaces using Qt 5Book Description Qt is a cross-platform application framework and widget toolkit that is used to create GUI applications that can run on different hardware and operating systems. The main aim of this book is to introduce Qt to the reader. Through the use of simple examples, we will walk you through building blocks without focusing too much on theory. Qt is a popular tool that can be used for building a variety of applications, such as web browsers, media players such as VLC, and Adobe Photoshop. Following Qt installation and setup, the book dives straight into helping you create your first application. You will be introduced to Widgets, Qt's interface building block, and the many varieties that are available for creating GUIs. Next, Qt's core concept of signals and slots are well illustrated with sufficient examples. The book further teaches you how to create custom widgets, signals and slots, and how to communicate useful information via dialog boxes. To cap everything off, you will be taken through writing applications that can connect to databases in order to persist data. By the end of the book, you should be well equipped to start creating your own Qt applications and confident enough to pick up more advanced Qt techniques and materials to hone your skills. What you will learnSet up and configure your machine to begin developing Qt applications Discover different widgets and layouts for constructing UIsUnderstand the key concept of signals and slots Understand how signals and slots help animate a GUIExplore how to create customized widgets along with signals and slots Understand how to subclass and create a custom windows applicationUnderstand how to write applications that can talk to databases.Who this book is for Anyone trying to start development of graphical user interface application will find this book useful. One does not need prior exposure to other toolkits to understand this book. In order to learn from this book you should have basic knowledge of C++ and a good grasp of Object Oriented Programming. Familiarity with GNU/Linux will be very useful though it's not a mandatory skill.

Qt is a C++ class library that lets users write GUI applications that run on UNIX systems, as well as on Windows 95/98 and Windows NT. This book provides an in-depth tutorial on the multitude of features available in Qt and will teach readers how to take full advantage of this powerful, easy-to-use, cross-platform toolkit.

“Look it up in Petzold” remains the decisive last word in answering questions about Windows development. And in PROGRAMMING WINDOWS, FIFTH EDITION, the esteemed Windows Pioneer Award winner revises his classic text with authoritative coverage of the latest versions of the Windows operating system—once again drilling down to the essential API heart of Win32 programming. Topics include: The basics—input, output, dialog boxes An introduction to Unicode Graphics—drawing, text and fonts, bitmaps and metafiles The kernel and the printer Sound and music Dynamic-link libraries Multitasking and multithreading The Multiple-Document Interface Programming for the Internet and intranets Packed as always with definitive examples, this newest Petzold delivers the ultimate sourcebook and tutorial for Windows programmers at all levels working with Microsoft Windows 95, Windows 98, or Microsoft Windows NT. No aspiring or experienced developer can afford to be without it. An electronic version of this book is available on the companion CD. For customers who purchase an ebook version of this title, instructions for downloading the CD files can be found in the ebook.

Introduction to programming Qt 5 for cross-platform application development