

Ruby 2nd Edition Beginners Crash Course Ruby For Beginners Guide To Ruby Programming Ruby On Rails Rails Programming Data Structures Data Science Computer Science Computer Book 1

The Complete Guide to Writing More Maintainable, Manageable, Pleasing, and Powerful Ruby Applications Ruby's widely admired ease of use has a downside: Too many Ruby and Rails applications have been created without concern for their long-term maintenance or evolution. The Web is awash in Ruby code that is now virtually impossible to change or extend. This text helps you solve that problem by using powerful real-world object-oriented design techniques, which it thoroughly explains using simple and practical Ruby examples. Sandi Metz has distilled a lifetime of conversations and presentations about object-oriented design into a set of Ruby-focused practices for crafting manageable, extensible, and pleasing code. She shows you how to build new applications that can survive success and repair existing applications that have become impossible to change. Each technique is illustrated with extended examples, all downloadable from the companion Web site, poodr.info. The first title to focus squarely on object-oriented Ruby application design, Practical Object-Oriented Design in Ruby will guide you to superior outcomes, whatever your previous Ruby experience. Novice Ruby programmers will find specific rules to live by; intermediate Ruby programmers will find valuable principles they can flexibly interpret and apply; and advanced Ruby programmers will find a common language they can use to lead development and guide their colleagues. This guide will help you Understand how object-oriented programming can help you craft Ruby code that is easier to maintain and upgrade Decide what belongs in a single Ruby class Avoid entangling objects that should be kept separate Define flexible interfaces among objects Reduce programming overhead costs with duck typing Successfully apply inheritance Build objects via composition Design cost-effective tests Solve common problems associated with poorly designed Ruby code

Thirty clearly defined lessons take the reader from understanding the parts of an Excel application into building applications to work with data, formulas, charts, and the enhanced XML capabilities of the new Excel "X" Book is designed to teach the core concepts of Excel over a weekend or in just fifteen hours, with each session being thirty minutes Applicable to Excel 2000, Excel 2002, and the latest release, Excel 2003 Helps Excel power users in fields such as accounting, finance, operations management, and market research to begin automating data manipulation in Excel quickly, so they can handle real-world projects A how-to guide to using Excel's programmability to create custom data-processing and analysis solutions Covers security, debugging, and error handling Companion Web site includes sample files, projects, and test engine with self-assessment exam

Learn to build Rails-based web applications using all the latest features offered in Rails 5.2. Author Stefan Wintermeyer begins by teaching the basics of Ruby 2.5 before proceeding through all aspects of Rails, utilizing clean, succinct examples - rather than a single large application. This book covers topics including Active Storage, Credentials, Active Record, Scaffolding, REST, Routing, Bundler, Forms, Cookies, and Sessions, all of which are vital for modern Rails web applications. To complement these topics you'll also learn about test-driven development, Action Cable, Active Job, Action Mailer, 118n, Asset Pipeline, and caching. Finally, you'll see a how-to for a production web server with nginx. This complete set of skills will set you up for a future of efficient and elegant Rails coding. What You Will Learn Use the Ruby on Rails web development framework Install and manage the Rails framework Persist data for your web application with Active Record Work with forms Apply a test-driven development approach to your Rails-based web applications Discover many Rails secrets and tips Who This Book Is For Beginners with at least some prior programming experience. Ruby experience is helpful, but not required.

Ruby is famous for being easy to learn, but most users only scratch the surface of what it can do. While other books focus on Ruby's trendier features, The Book of Ruby reveals the secret inner workings of one of the world's most popular programming languages, teaching you to write clear, maintainable code. You'll start with the basics—types, data structures, and control flows—and progress to advanced features like blocks, mixins, metaclasses, and beyond. Rather than bog you down with a lot of theory, The Book of Ruby takes a hands-on approach and focuses on making you productive from day one. As you follow along, you'll learn to: -Leverage Ruby's succinct and flexible syntax to maximize your productivity -Balance Ruby's functional, imperative, and object-oriented features -Write self-modifying programs using dynamic programming techniques -Create new fibers and threads to manage independent processes concurrently -Catch and recover from execution errors with robust exception handling -Develop powerful web applications with the Ruby on Rails framework Each chapter includes a "Digging Deeper" section that shows you how Ruby works under the hood, so you'll never be caught off guard by its deceptively simple scoping, multithreading features, or precedence rules. Whether you're new to programming or just new Ruby, The Book of Ruby is your guide to rapid, real-world software development with this unique and elegant language.

The Rails 3 Way

Ruby Wizardry

Automate the Boring Stuff with Python, 2nd Edition

UX for Beginners

Talking Directly to the Kernel and C Library

Learning Ruby Internals Through Experiment

Eloquent Ruby

Updated for Ruby 2.2, this handy reference offers brief yet clear explanations of Ruby's core elements—from operators to blocks to documentation creation—and highlights the key features you may work with every day. Need to know the correct syntax for of that String method? This book is organized to help you find the facts fast. Ruby Pocket Reference, 2nd Edition is ideal for experienced programmers who are new to Ruby. Whether you've come to Ruby because of Rails, or you want to take advantage of expressive language for other applications, this reference will help you easily pinpoint the information you need. You'll find detailed reference material for: Keywords, operators, comments, numbers, and symbols Variables, pre-defined global variables, and regular expressions Conditional statements, method use, classes, and exception handling Methods for the BasicObject, Object, Kernel, String, Array, and Hash classes Time formatting directives New syntax since Ruby 1.9

This reader-friendly textbook presents a concise and easy to follow introduction to Scala. Scala is an ideal first programming language, which permits programming in multiple paradigms, and enables developers to be more productive with modern computing distributed environments. Topics and features: provides review questions and problem-solving exercises (with solutions) in each chapter, inspired by real-world applications; addresses each topic in a self-contained manner, highlighting how Scala can be evolved to meet the developer's needs; presents examples from a broad range of different application domains, including consumer electronics, online payment, retail, vehicle manufacturing, and healthcare; encourages an innovation-oriented mind-set, and the development of new tools draws from the author's extensive experience in industrial software development, academic research, and university teaching. This accessible and hands-on guide will embolden professional software engineers to make the switch to Scala. Instructors teaching computer science courses will also find this textbook popular among their students.

Presents an introduction to the open-source electronics prototyping platform.

Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems. You'll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a practical, modern introduction to data science tools in Python. It's ideal for analysts new to Python and programmers new to data science and scientific computing. Data files and related material are available on GitHub. Use the IPython shell and Jupyter notebook for exploratory computing Learn basic and advanced features in NumPy (Numerical Python) Get started with tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data how to solve real-world data analysis problems with thorough, detailed examples

Data Wrangling with Pandas, NumPy, and IPython

Detailed Solutions in Eight Programming Languages

Arduino: A Quick-Start Guide

Language Exploration

Powerful Object-Oriented Programming

Ruby on Rails Enterprise Application Development

Learn Ruby in 24 Hours Or Less - A Beginner's Guide To Learning Ruby Programming Now

Annotation: Everyone in the Ruby world seems to be talking about metaprogramming—how you can use it to remove duplication in your code and write elegant, beautiful programs. Now you can get in on the action as well. This book describes metaprogramming as an essential component of Ruby. Once you understand the principles of Ruby, including the object model, scopes, and eigenclasses, you're on your way to applying metaprogramming both in your daily work and in your fun, after-hours projects. Learning metaprogramming doesn't have to be difficult or boring. By taking you on a Monday-through-Friday workweek adventure with a pair of programmers, Paolo Perrotta helps make mastering the art of metaprogramming both straightforward and entertaining. The book is packed with: Pragmatic examples of metaprogramming in action, many of which come straight from popular libraries or frameworks, such as Rails. Programming challenges that let you experiment and play with some of the most fun, "out-there" metaprogramming concepts. Metaprogramming "spells"—34 practical recipes and idioms that you can study and apply right now, to write code that is sure to impress. Whether you're a Ruby apprentice on the path to mastering the language or a Ruby wiz in search of new tips, this book is for you.

Get a comprehensive, in-depth introduction to the core Python language with this hands-on book. Based on author Mark Lutz's popular training course, this updated fifth edition will help you quickly write efficient, high-quality code with Python. It's an ideal way to begin, whether you're new to programming or a professional developer versed in other languages. Complete with quizzes, exercises, and helpful illustrations, this easy-to-follow, self-paced tutorial gets you started with both Python 2.7 and 3.3—the latest releases in the 3.X and 2.X lines—plus all other releases in common use today. You'll also learn some advanced language features that recently have become more common in Python code. Explore Python's major built-in object types such as numbers, lists, and dictionaries Create and process objects with Python statements, and learn Python's general syntax model Use functions to avoid code redundancy and package code for reuse Organize statements, functions, and other tools into larger components with modules Dive into classes: Python's object-oriented programming tool for structuring code Write large programs with Python's exception-handling model and development tools Learn advanced Python tools, including decorators, descriptors, metaclasses, and Unicode processing

The free book "Fundamentals of Computer Programming with C#" is a comprehensive computer programming tutorial that teaches programming, logical thinking, data structures and algorithms, problem solving and high quality code with lots of examples in C#. It starts with the first steps in programming and software development like variables, data types, conditional statements, loops and arrays and continues with other basic topics like methods, numeral systems, strings and string processing, exceptions, classes and objects. After the basics this fundamental programming book enters into more advanced programming topics like recursion, data structures (lists, trees, hash-tables and graphs), high-quality code, unit testing and refactoring, object-oriented principles (inheritance, abstraction, encapsulation and polymorphism) and their implementation the C# language. It also covers fundamental topics that each good developer should know like algorithm design, complexity of algorithms and problem solving. The book uses C# language and Visual Studio to illustrate the programming concepts and explains some C# / .NET specific technologies like lambda expressions, extension methods and LINQ. The book is written by a team of developers lead by Svetlin Nakov who has 20+ years practical software development experience. It teaches the major programming concepts and way of thinking needed to become a good software engineer and the C# language in the meantime. It is a great start for anyone who wants to become a skillful software engineer. The books does not teach technologies like databases, mobile and web development, but shows the true way to master the basics of programming regardless of the languages, technologies and tools. It is good for beginners and intermediate developers who want to put a solid base for a successful career in the software engineering industry. The book is accompanied by free video lessons, presentation slides and mind maps, as well as hundreds of exercises and live examples. Download the free C# programming book, videos, presentations and other resources from <http://introprogramming.info>. Title: Fundamentals of Computer Programming with C# (The Bulgarian C# Programming Book) ISBN: 9789544007737 ISBN-13: 978-954-400-773-7 (9789544007737) ISBN-10: 954-400-773-3 (9544007733) Author: Svetlin Nakov & Co. Pages: 1132 Language: English Published: Sofia, 2013 Publisher: Faber Publishing, Bulgaria Web site: <http://www.introprogramming.info> License: CC-Attribution-Share-Alike Tags: free, programming, book, computer programming, programming fundamentals, ebook, book programming, C#, CSharp, C# book, tutorial, C# tutorial; programming concepts, programming fundamentals, compiler, Visual Studio, .NET, .NET Framework, data types, variables, expressions, statements, console, conditional statements, control-flow logic, loops, arrays, numeral systems, methods, strings, text processing, StringBuilder, exceptions, exception handling, stack trace, streams, files, text files, linear data structures, list, linked list, stack, queue, tree, balanced tree, graph, depth-first search, DFS, breadth-first search, BFS, dictionaries, hash tables, associative arrays, sets, algorithms, sorting algorithm, searching algorithms, recursion, combinatorial algorithms, algorithm complexity, OOP, object-oriented programming, classes, objects, constructors, fields, properties, static members, abstraction, interfaces, encapsulation, inheritance, virtual methods, polymorphism, cohesion, coupling, enumerations, generics, namespaces, UML, design patterns, extension methods, anonymous types, lambda expressions, LINQ, code quality, high-quality code, high-quality classes, high-quality methods, code formatting, self-documenting code, code refactoring, problem solving, problem solving methodology, 9789544007737, 9544007733

You don't have to accept slow Ruby or Rails performance. In this comprehensive guide to Ruby optimization, you'll learn how to write faster Ruby code—but that's just the beginning. See exactly what makes Ruby and Rails code slow, and how to fix it. Alex Dymo will guide you through perils of memory and CPU optimization, profiling, measuring, performance testing, garbage collection, and tuning. You'll find that all those "hard" things aren't so difficult after all, and your code will run orders of magnitude faster. This is the first book ever that consolidates all the Ruby performance optimization advice in one place. It's your comprehensive guide to memory optimization, CPU optimization, garbage collector tuning, profiling, measurements, performance testing, and more. You'll go from performance rookie to expert. First, you'll learn the best practices for writing Ruby code that's easy not only on the CPU, but also on memory, and that doesn't trigger the dreaded garbage collector. You'll find out that garbage collection accounts for 80% of slowdowns, and often takes more than 50% of your program's execution time. And you'll discover the bottlenecks in Rails code and learn how selective attribute loading and preloading can mitigate the performance costs of ActiveRecord. As you advance to Ruby performance expert, you'll learn how profile your code, how to make sense out of profiler reports, and how to make optimization decisions based on them. You'll make sure slow code doesn't creep back into your Ruby application by writing performance tests, and you'll learn the right way to benchmark Ruby. And finally, you'll dive into the Ruby interpreter internals to really understand why garbage collection makes Ruby so slow, and how you can tune it up. What You Need: Some version of Ruby. The advice from this book applies to all modern Ruby versions from 1.9 to 2.2. 80% of the material will also be useful for legacy Ruby 1.8 users, and there is 1.8-specific advice as well.

Why Ruby is Slow, and How to Fix It

Getting Started with Arduino

Learn to Program

Python Crash Course, 2nd Edition

The Bulgarian C# Book

Practical Object-oriented Design in Ruby

Ruby on Rails 5.0 for Autodidacts

It's easy to write correct Ruby code, but to gain the fluency needed to write great Ruby code, you must go beyond syntax and absorb the “Ruby way” of thinking and problem solving. In Eloquent Ruby, Russ Olsen helps you write Ruby like true Rubyists do—so you can leverage its immense, surprising power. Olsen draws on years of experience internalizing the Ruby culture and teaching Ruby to other programmers. He guides you to the “Ah Ha!” moments when it suddenly becomes clear why Ruby works the way it does, and how you can take advantage of this language's elegance and expressiveness. Eloquent Ruby starts small, answering tactical questions focused on a single statement, method, test, or bug. You'll learn how to write code that actually looks like Ruby (not Java or C#); why Ruby has so many control structures; how to use strings, expressions, and symbols; and what dynamic typing is really good for. Next, the book addresses bigger questions related to building methods and classes. You'll discover why Ruby classes contain so many tiny methods, when to use operator overloading, and when to avoid it. Olsen explains how to write Ruby code that writes its own code—and why you'll want to. He concludes with powerful project-level features and techniques ranging from gems to Domain Specific Languages. A part of the renowned Addison-Wesley Professional Ruby Series, Eloquent Ruby will help you “put on your Ruby-colored glasses” and get results that make you a true believer.

Take the guesswork out of using regular expressions. With more than 140 practical recipes, this cookbook provides everything you need to solve a wide range of real-world problems. Novices will learn basic skills and tools, and programmers and experienced users will find a wealth of detail. Each recipe provides samples you can use right away. This revised edition covers the regular expression flavors used by C#, Java, JavaScript, Perl, PHP, Python, Ruby, and VB.NET. You'll learn powerful new tricks, avoid flavor-specific gotchas, and save valuable time with this huge library of practical solutions. Learn regular expressions basics through a detailed tutorial Use code listings to implement regular expressions with your language of choice Understand how regular expressions differ from language to language Handle common user input with recipes for validation and formatting Find and manipulate words, special characters, and lines of text Detect integers, floating-point numbers, and other numerical formats Parse source code and process log files Use regular expressions in URLs, paths, and IP addresses Manipulate HTML, XML, and data exchange formats Discover little-known regular expression tricks and techniques

This book concentrates on application development as a whole process and is intended to complement existing Rails tutorials. Each chapter deals with a key feature or functional area of a complex, full-scale Rails application. This book is aimed at developers who want to find out how to rapidly build easily-deployed, easily-supported business applications. It is for developers who have learned Ruby on Rails, probably from one of the tutorial books, and want to apply that knowledge to effectively build full, realistic applications.

Elevate your Ruby skills to an advanced level by deepening your understanding of the design principles, best practices, and trade-offs involved in implementation approaches to future-proof your Ruby applications Key FeaturesLearn Ruby web application design principles and strategies for databases, security, and testing from a Ruby committer Understand the design principles behind polished Ruby code and trade-offs between implementation approachesUse metaprogramming and DSLs to reduce the amount of code needed without decreasing maintainabilityBook Description Anyone striving to become an expert Ruby programmer needs to be able to write maintainable applications. Polished Ruby Programming will help you get better at designing scalable and robust Ruby programs, so that no matter how big the codebase grows, maintaining it will be a breeze. This book takes you on a journey through implementation approaches for many common programming situations, the trade-offs inherent in each approach, and why you may choose to use different approaches in different situations. You'll start by refreshing Ruby fundamentals, such as correctly using core classes, class and method design, variable usage, error handling, and code formatting. Then you'll move on to higher-level programming principles, such as library design, use of metaprogramming and domain-specific languages, and refactoring. Finally, you'll learn principles specific to web application development, such as how to choose a database and web framework, and how to use advanced security features. By the end of this Ruby programming book, you'll be a well rounded web developer with a deep understanding of Ruby. While most code examples and principles discussed in the book apply to all Ruby versions, some examples and principles are specific to Ruby 3.0, the latest release at the time of publication. What you will learnUse Ruby's core classes and design custom classes effectivelyExplore the principles behind variable usage and method argument choiceImplement advanced error handling approaches such as exponential backoffDesign extensible libraries and plugin systems in RubyUse metaprogramming and DSLs to avoid code redundancyImplement different approaches to testing and understand their trade-offsDiscover design patterns, refactoring, and optimization with RubyExplore database design principles and advanced web app securityWho this book is for This book is for Ruby programmers who are comfortable in coding with Ruby but want to advance their skills by mastering the deeper principles and best practices behind writing maintainable, scalable, optimized, and well-structured Ruby code.This book won't teach you the basics of Ruby - you'll need intermediate knowledge and practical experience before you can dive in.

A Brain-Friendly Guide

C++: A Beginner's Guide, Second Edition

Learn Web Development with Rails

Learn Rails 5.2

Head First Ruby

Metaprogramming Ruby 2

Programming with Scala

A step by step guide to learn Ruby on Rails 5.0. It includes a basic tutorial for Ruby 2.3 and is written for programmers who know at least one other programming language and are familiar with HTML. It covers Active Record, Scaffolding, REST, Routing, Bundler, Test Driven Development, Cookies, Sessions, Action Mailer, I18n, Asset Pipeline, JavaScript, Caching, Templates and of course the new 5.0 features Action Cable and Active Job.

You Will Learn Python 3! Zed Shaw has perfected the world's best system for learning Python 3. Follow it and you will succeed—just like the millions of beginners Zed has taught to date! You bring the discipline, commitment, and persistence; the author supplies everything else. In Learn Python 3 the Hard Way, you'll learn Python by working through 52 brilliantly crafted exercises. Read them. Type their code precisely. (No copying and pasting!) Fix your mistakes. Watch the programs run. As you do, you'll learn how a computer works; what good programs look like; and how to read, write, and think about code. Zed then teaches you even more in 5+ hours of video where he shows you how to break, fix, and debug your code—live, as he's doing the exercises. Install a complete Python environment Organize and write code Fix and break code Basic mathematics Variables Strings and text Interact with users Work with files Looping and logic Data structures using lists and dictionaries Program design Object-oriented programming Inheritance and composition Modules, classes, and objects Python packaging Automated testing Basic game development Basic web development It'll be hard at first. But soon, you'll just get it—and that will feel great! This course will reward you for every minute you put into it. Soon, you'll know one of the world's most powerful, popular programming languages. You'll be a Python programmer. This Book Is Perfect For Total beginners with zero programming experience Junior developers who know one or two languages Returning professionals who haven't written code in years Seasoned professionals looking for a fast, simple, crash course in Python 3

The Rails™ 3 Way is a comprehensive resource that digs into the new features in Rails 3 and perhaps more importantly, the rationale behind them. —Yehuda Katz, Rails Core The Bible for Ruby on Rails Application Development Ruby on Rails strips complexity from the development process, enabling professional developers to focus on what matters most: delivering business value via clean and maintainable code. The Rails™ 3 Way is the only comprehensive, authoritative guide to delivering production-quality code with Rails 3. Pioneering Rails expert Obie Fernandez and a team of leading experts illuminate the entire Rails 3 API, along with the idioms, design approaches, and libraries that make developing applications with Rails so powerful. Drawing on their unsurpassed experience and track record, they address the real challenges development teams face, showing how to use Rails 3 to maximize your productivity. Using numerous detailed code examples, the author systematically covers Rails 3 key capabilities and subsystems, making this book a reference that you will turn to again and again. He presents advanced Rails programming techniques that have been proven effective in day-to-day usage on dozens of production Rails systems and offers important insights into behavior-driven development and production considerations such as scalability. Dive deep into the Rails 3 codebase and discover why Rails is designed the way it is—and how to make it do what you want it to do. This book will help you learn what's new in Rails 3 Increase your productivity as a web application developer Realize the overall joy in programming with Rails Leverage Rails' powerful capabilities for building REST-compliant APIs Drive implementation and protect long-term maintainability usingRSpec Design and manipulate your domain layer using Active Record Understand and program complex program flows using Action Controller Master sophisticated URL routing concepts Use Ajax techniques via Rails 3 support for unobtrusive JavaScript Learn to extend Rails with popular gems and plugins, and how to write your own Extend Rails with the best third-party plug-ins and write your own Integrate email services into your applications with Action Mailer Improve application responsiveness with background processing Create your own non-Active Record domain classes using Active Model Master Rails' utility classes and extensions in Active Support

It's easier to learn how to program a computer than it has ever been before. Now everyone can learn to write programs for themselves - no previous experience is necessary. Chris Pine takes a thorough, but lighthearted approach that teaches you the fundamentals of computer programming, with a minimum of fuss or bother. Whether you are interested in a new hobby or a new career, this book is your doorway into the world of programming. Computers are everywhere, and being able to program them is more important than it has ever been. But since most books on programming are written for other programmers, it can be hard to break in. At least it used to be. Chris Pine will teach you how to program. You'll learn to use your computer better, to get it to do what you want it to do. Starting with small, simple one-line programs to calculate your age in seconds, you'll see how to write interactive programs, to use APIs to fetch live data from the internet, to rename your photos from your digital camera, and more. You'll learn the same technology used to drive modern dynamic websites and large, professional applications. Whether you are looking for a fun new hobby or are interested in entering the tech world as a professional, this book gives you a solid foundation in programming. Chris teaches the basics, but also shows you how to think like a programmer. You'll learn through tons of examples, and through programming challenges throughout the book. When you finish, you'll know how and where to learn more - you'll be on your way. What You Need: All you need to learn how to program is a computer (Windows, macOS, or Linux) and an internet connection. Chris Pine will lead you through setting set up with the software you will need to start writing programs of your own.

An Agile Primer

Learn Python 3 the Hard Way

Solutions and Techniques in Ruby Programming

A Hands-On, Project-Based Introduction to Programming

Instant Help for Ruby Programmers

Ruby on Rails Tutorial

Ruby Under a Microscope

The book is written in beginner's guide style with each aspect of NumPy demonstrated with real world examples and required screenshots.If you are a programmer, scientist, or engineer who has basic Python knowledge and would like to be able to do numerical computations with Python, this book is for you. No prior knowledge of NumPy is required.

Arduino is an open-source platform that makes DIY electronics projects easier than ever. Gone are the days when you had to learn electronics theory and arcane programming languages before you could even get an LED to blink. Now, with this new edition of the bestsellingArduino: A Quick-Start Guide, readers with no electronics experience can create their first gadgets quickly. This book is up-to-date for the new Arduino Zero board, with step-by-step instructions for building a universal remote, a motion-sensing game controller, and many other fun, useful projects. This Quick-Start Guide is packed with fun, useful devices to create, with step-by-step instructions and photos throughout. You'll learn how to connect your Arduino to the Internet and program both client and server applications. You'll build projects such as your own motion-sensing game controller with a three-axis accelerometer, create a universal remote with an Arduino and a few cheap parts, build your own burglar alarm that emails you whenever someone's moving in your living room, build binary dice, and learn how to solder. In one of several new projects in this edition, you'll create your own video game console that you can connect to your TV set. This book is completely updated for the new Arduino Zero board and the latest advances in supporting software and tools for the Arduino. Sidebars throughout the book point you to exciting real-world projects using the Arduino, exercises extend your skills, and "What If It Doesn't Work" sections help you troubleshoot common problems. With this book, beginners can quickly join the worldwide community of hobbyists and professionals who use the Arduino to prototype and develop fun, useful inventions. What You Need: This is the full list of all parts you'd need for all projects in the book; some of these are provided as part of various kits that are available on the web, or you can purchase individually. Sources include adafruit.com, makershed.com, radioshack.com, sparkfun.com, and mouser.com. Please note we do not support or endorse any of these vendors, but we list them here as a convenience for you. Arduino Zero (or Uno or Duemilanove or Decimila) board USB cable Half-size breadboard Pack of LEDs (at least 3, 10 or more is a good idea) Pack of 100 ohm, 10k ohm, and 1k ohm resistors Four pushbuttons Breadboard jumper wire / connector wire Parallax Ping))) sensor Passive Infrared sensor An infrared LED A 5V servo motor Analog Devices TMP36 temperature sensor ADXL335 accelerometer breakout board 6 pin 0.1" standard header (might be included with the ADXL335) Nintendo Nunchuk Controller Arduino Ethernet shield Arduino Proto shield and a tiny breadboard (optional but recommended) Piezo speaker/buzzer (optional) Tilt sensor (optional) A 25-30 Watts soldering iron with a tip (preferably 1/16") A soldering stand and a sponge A standard 60/40 solder (rosin-core) spool for electronics work

"An under-the-hood look at how the Ruby programming language runs code. Extensively illustrated with complete explanations and hands-on experiments. Covers Ruby 2.x"--

Offers a Ruby tutorial featuring fifty-two exercises that cover such topics as installing the Ruby environment, organizing and writing code, strings and text, object-oriented programming, debugging and automated testing, and basic game development.

Accelerated Web Development with Ruby on Rails

The Ruby Way

Program Like the Ruby Pros

Beginning Ruby

Excel Programming Weekend Crash Course

The Book of Ruby

The second edition of the best-selling Python book in the world (over 1 million copies sold!). A fast-paced, no-nonsense guide to programming in Python. Updated and thoroughly revised to reflect the latest in Python code and practices. Python Crash Course is the world's best-selling guide to the Python programming language. This fast-paced, thorough introduction to programming with Python will have you writing programs, solving problems, and making things that work in no time. In the first half of the book, you'll learn basic programming concepts, such as variables, lists, classes, and loops, and practice writing clean code with exercises for each topic. You'll also learn how to make your programs interactive and test your code safely before adding it to a project. In the second half, you'll put your new knowledge into practice with three substantial projects: a Space Invaders-inspired arcade game, a set of data visualizations with Python's handy libraries, and a simple web app you can deploy online. As you work through the book, you'll learn how to:

- Use powerful Python libraries and tools, including Pygame, Matplotlib, Plotly, and Django
- Make 2D games that respond to keypresses and mouse clicks, and that increase in difficulty
- Use data to generate interactive visualizations
- Create and customize web apps and deploy them safely online
- Deal with mistakes and errors so you can solve your own programming problems

If you've been thinking about digging into programming, Python Crash Course will get you writing real programs fast. Why wait any longer? Start your engines and code! What will you learn from this book? What's all the buzz about this Ruby language? Is it right for you? Well, ask yourself: are you tired of all those extra declarations, keywords, and compilation steps in your other language? Do you want to be a more productive programmer? Then you'll love Ruby. With this unique hands-on learning experience, you'll discover how Ruby takes care of all the details for you, so you can simply have fun and get more done with less code. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Ruby uses a visually rich format to engage your mind, rather than a text-heavy approach to put you to sleep. Why waste your time struggling with new concepts? This multi-sensory learning experience is designed for the way your brain really works.

Learn Ruby In 24 Hours Or Less! In this book you will find the fundamental aspects of the Ruby programming language. It will explain theories and lessons through detailed instructions and practical examples. With this eBook, you'll learn how to get Ruby, how to write Ruby statements, and how to use this language in creating your own programs. If you're searching for a comprehensive learning material for Ruby, this is the book you need. With the help of the important ideas and practical examples contained within, you will be able to master Ruby quickly even if you have never programmed anything before. By reading this material, you will become an effective Ruby programmer in 24 hours (or even less). Here are some of the things you'll learn from this eBook: How to download the right version of Ruby for your computer The fundamental principles of Ruby programming The methods that you can use in Ruby How to handle program exceptions The syntax of Ruby commands How to create loops, iterators, classes, objects, variables, and many more You can certainly benefit from this eBook even if you have never programmed anything before. This eBook will teach you the basics of Ruby programming and give you the syntax of important Ruby commands. If you want to become a skilled Ruby programmer in just 24 hours, get this eBook now and read it carefully. In addition you will find inside:

Collections Of Data The Sharing Functionalities Of Ruby The Regular Expressions The Methods Of The Ruby Language Ruby Expressions The Basic I/O Of Ruby And Much, Much More... Get Your Copy Right Now!

Essential skills made easy! Written by Herb Schildt, the world's leading programming author, this step-by-step book is ideal for first-time programmers or those new to C++. The modular approach of this series, including sample projects and progress checks, makes it easy to learn to use C++ at your own pace.

Ruby Pocket Reference

Python for Data Analysis

Python Crash Course

A Simple and Idiomatic Introduction to the Imaginative World of Computational Thinking with Code

An Introduction to Programming for Kids

Learn Ruby the Hard Way

Ruby Programming for the Absolute Beginner

The Ruby programming language is perfect for beginners: easy to learn, powerful, and fun to use! But wouldn't it be more fun if you were learning with the help of some wizards and dragons? Ruby Wizardry is a playful, illustrated tale that will teach you how to program in Ruby by taking you on a fantastical journey. As you follow the adventures of young heroes Ruben and Scarlet, you'll learn real programming skills, like how to: –Use fundamental concepts like variables, symbols, arrays, and strings –Work with Ruby hashes to create a programmable breakfast menu –Control program flow with loops and conditionals to help the Royal Plumber –Test your wild and crazy ideas in IRB and save your programs as scripts –Create a class of mini-wizards, each with their own superpower! –Organize and reuse your code with methods and lists –Write your own amazing interactive stories using Ruby Along the way, you'll meet colorful characters from around the kingdom, like the hacker Queen, the Off-White Knight, and Wherefore the minstrel. Ruby Wizardry will have you (or your little wizard) hooked on programming in no time. For ages 10+ (and their parents!)

You Will Learn Python! Zed Shaw has perfected the world's best system for learning Python. Follow it and you will succeed—just like the hundreds of thousands of beginners Zed has taught to date! You bring the discipline, commitment, and persistence; the author supplies everything else. In Learn Python the Hard Way, Third Edition, you'll learn Python by working through 52 brilliantly crafted exercises. Read them. Type their code precisely. (No copying and pasting!) Fix your mistakes. Watch the programs run. As you do, you'll learn how software works; what good programs look like; how to read, write, and think about code; and how to find and fix your mistakes using tricks professional programmers use. Most importantly, you'll learn the following, which you need to start writing excellent Python software of your own: Installing a complete Python environment Organizing and writing code Basic mathematics Variables Strings and text Interacting with users Working with files Looping and logic Data structures using lists and dictionaries Program design Object-oriented programming Inheritance and composition Modules, classes, and objects Python packaging Debugging Automated testing Basic game development Basic web development It'll be hard at first. But soon, you'll just get it—and that will feel great! This tutorial will reward you for every minute you put into it. Soon, you'll know one of the world's most powerful, popular programming languages. You'll be a Python programmer. Watch Zed, too! The accompanying DVD contains 5+ hours of passionate, powerful teaching: a complete Python video course!

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Used by sites as varied as Twitter, GitHub, Disney, and Airbnb, Ruby on Rails is one of the most popular frameworks for developing web applications, but it can be challenging to learn and use. Whether you're new to web development or new only to Rails, Ruby on Rails™ Tutorial, Fourth Edition, is the solution. Best-selling author and leading Rails developer Michael Hartl teaches Rails by guiding you through the development of three example applications of increasing sophistication. The tutorial's examples focus on the general principles of web development needed for virtually any kind of website. The updates to this edition include full compatibility with Rails 5, a division of the largest chapters into more manageable units, and a huge number of new exercises interspersed in each chapter for maximum reinforcement of the material. This indispensable guide provides integrated tutorials not only for Rails, but also for the essential Ruby, HTML, CSS, and SQL skills you need when developing web applications. Hartl explains how each new technique solves a real-world problem, and then he demonstrates it with bite-sized code that's simple enough to understand, yet novel enough to be useful. Whatever your previous web development experience, this book will guide you to true Rails mastery. This book will help you Install and set up your Rails development environment, including pre-installed integrated development environment (IDE) in the cloud Go beyond generated code to truly understand how to build Rails applications from scratch Learn testing and test-driven development (TDD) Effectively use the Model-View-Controller (MVC) pattern Structure applications using the REST architecture Build static pages and transform them into dynamic ones Master the Ruby programming skills all Rails developers need Create high-quality site layouts and data models Implement registration and authentication systems, including validation and secure passwords Update, display, and delete users Upload images in production using a cloud storage service Implement account activation and password reset, including sending email with Rails Add social features and microblogging, including an introduction to Ajax Record version changes with Git and create a secure remote repository at Bitbucket Deploy your applications early and often with Heroku

UNIX, UNIX LINUX & UNIX TCL/TK. Write software that makes the most effective use of the Linux system, including the kernel and core system libraries. The majority of both Unix and Linux code is still written at the system level, and this book helps you focus on everything above the kernel, where applications such as Apache, bash, cp, vim, Emacs, gcc, gdb, glibc, ls, mv, and X exist. Written primarily for engineers looking to program at the low level, this updated edition of Linux System Programming gives you an

understanding of core internals that makes for better code, no matter where it appears in the stack. -- Provided by publisher.

Learn Ruby 2.3 and Rails 5.0

Practical Programming for Total Beginners

Fundamentals of Computer Programming with C#

Ruby

NumPy Beginner's Guide (Second Edition)

Plan, Program, Extend

Regular Expressions Cookbook

Ruby on Rails TutorialLearn Web Development with RailsAddison-Wesley Professional

Apps! Websites! Rubber Ducks! Naked Ninjas! This book has everything. If you want to get started in user experience design (UX), you've come to the right place: 100 self-contained lessons that cover the whole spectrum of fundamentals. Forget dry, technical material. This book—based on the wildly popular UX Crash Course from Joel Marsh ' s blog The Hipper Element—is laced with the author's snarky brand of humor, and teaches UX in a simple, practical way. Becoming a professional doesn ' t have to be boring. Follow the real-life UX process from start-to-finish and apply the skills as you learn, or refresh your memory before the next meeting. UX for Beginners is perfect for non-designers who want to become designers, managers who teach UX, and programmers, salespeople, or marketers who want to learn more. Start from scratch: the fundamentals of UX Research the weird and wonderful things users do The process and science of making anything user-friendly Use size, color, and layout to help and influence users Plan and create wireframes Make your designs feel engaging and persuasive Measure how your design works in the real world Find out what a UX designer does all day

Python Crash Course is a fast-paced, thorough introduction to Python that will have you writing programs, solving problems, and making things that work in no time. In the first half of the book, you ' ll learn about basic programming concepts, such as lists, dictionaries, classes, and loops, and practice writing clean and readable code with exercises for each topic. You ' ll also learn how to make your programs interactive and how to test your code safely before adding it to a project. In the second half of the book, you ' ll put your new knowledge into practice with three substantial projects: a Space Invaders-inspired arcade game, data visualizations with Python ' s super-handly libraries, and a simple web app you can deploy online. As you work through Python Crash Course you ' ll learn how to: –Use powerful Python libraries and tools, including matplotlib, NumPy, and Pygal –Make 2D games that respond to keypresses and mouse clicks, and that grow more difficult as the game progresses –Work with data to generate interactive visualizations –Create and customize Web apps and deploy them safely online –Deal with mistakes and errors so you can solve your own programming problems If you ' ve been thinking seriously about digging into programming, Python Crash Course will get you up to speed and have you writing real programs fast. Why wait any longer? Start your engines and code! Uses Python 2 and 3

Provides instructions for writing programs using the Ruby programming language.

A Crash Course in 100 Short Lessons

Learning Python

Linux System Programming

Build better software with more intuitive, maintainable, scalable, and high-performance Ruby code

A Very Simple Introduction to the Terrifyingly Beautiful World of Computers and Code

Ruby Performance Optimization

Learn Python the Hard Way

Based on the bestselling first edition, Beginning Ruby: From Novice to Professional, Second Edition is the leading guide for every type of reader who wants to learn Ruby from the ground up. The new edition of this book

provides the same excellent introduction to Ruby as the first edition plus updates for the newest version of Ruby, including the addition of the Sinatra and Ramaze web application frameworks and a chapter on GUI development so developers can take advantage of these new trends. Beginning Ruby starts by explaining the principles behind object-oriented programming and within a few chapters builds toward creating a full Ruby application. By the end of the book, in addition to in-depth knowledge of Ruby, you'll also have basic understanding of many ancillary technologies such as SQL, XML, web frameworks, and networking. Introduces readers to the Ruby programming language Takes readers from basic programming skills to web development with topics like Ruby-based frameworks and GUI programming Covers many ancillary technologies in order to provide a broader picture (e.g., databases, XML, network daemons)

For more than a decade, Ruby developers have turned to The Ruby Way for reliable "how-to" guidance on effective Ruby programming. Now, Hal Fulton and André Arko have thoroughly updated this classic guide to cover new language enhancements and developers' experiences through Ruby 2.1. The new edition illuminates Ruby 2.1 through 400+ examples, each answering the question: "How do I do this in Ruby?" For each example, they present both a task description and realistic technical constraints. Next, they walk step-by-step through presenting one good solution, offering detailed explanations to promote deeper understanding. Conveniently organized by topic, The Ruby Way, Third Edition makes it easier than ever to find the specific solution you want—and to write better code by reflecting Ruby's unique philosophy and spirit. Coverage includes Ruby 2.1 overview: terminology, philosophy, and basic principles Best practices for strings and regular expressions Efficiently internationalizing your code Performing calculations (including trigonometry, calculus, statistics, and time/date calculations) Working with "Rubyesque" objects such as symbols and ranges Using arrays, hashes, stacks, queues, trees, graphs, and other data structures Efficiently storing data with YAML, JSON, and SQLite3 Leveraging object-oriented and dynamic features, from multiple constructors to program inspection Building GUIs with Shoes 4, Ruby/Tk, Ruby/GTK3, QtRuby, and other toolkits Improving thread performance by understanding Ruby's synchronization methods and avoiding its pitfalls Automating system administration with Ruby Data formats: JSON, XML, RSS, Atom, RMagick, PDF, and more Testing and debugging with RSpec, Minitest, Cucumber, byebug, and pry Measuring Ruby program performance Packaging and distributing code, and managing dependencies with Bundler Network programming: clients, time servers, POP, SMTP, IMAP, Open-URI Web applications: HTTP servers, Rails, Sinatra, HTML generation, and more Writing distributed Ruby software with drb Choosing modern development tools that maximize your productivity All source code for this book may be downloaded at www.rubyhacker.com. informat.com/aw informat.com/ruby rubyhacker.com therubyway.com therubyway.io

The second edition of this best-selling Python book (over 500,000 copies sold!) uses Python 3 to teach even the technically uninclined how to write programs that do in minutes what would take hours to do by hand. There is no prior programming experience required and the book is loved by liberal arts majors and geeks alike. If you've ever spent hours renaming files or updating hundreds of spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? In this fully revised second edition of the best-selling classic Automate the Boring Stuff with Python, you'll learn how to use Python to write programs that do in minutes what would take you hours to do by hand--no prior programming experience required. You'll learn the basics of Python and explore Python's rich library of modules for performing specific tasks, like scraping data off websites, reading PDF and Word documents, and automating clicking and typing tasks. The second edition of this international fan favorite includes a brand-new chapter on input validation, as well as tutorials on automating Gmail and Google Sheets, plus tips on automatically updating CSV files. You'll learn how to create programs that effortlessly perform useful feats of automation to:

- Search for text in a file or across multiple files
- Create, update, move, and rename files and folders
- Search the Web and download online content
- Update and format data in Excel spreadsheets of any size
- Split, merge, watermark, and encrypt PDFs
- Send email responses and text notifications
- Fill out online forms

Step-by-step instructions walk you through each program, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Don't spend your time doing work a well-trained monkey could do. Even if you've never written a line of code, you can make your computer do the grunt work. Learn how in Automate the Boring Stuff with Python, 2nd Edition.

A guide to Ruby programming covers such topics as working with objects, strings, and variables; implementing conditional logic; working with Regular Expressions; object-oriented programming; and debugging.

Why's (Poignant) Guide to Ruby

Polished Ruby Programming

From Novice to Professional

A Hands-On Guide for the Adventurous