

## Pragmatic Guide To Javascript The Bookshelf

Node.js is the platform of choice for creating modern web services. This fast-paced book gets you up to speed on server-side programming with Node.js 8, as you develop real programs that are small, fast, low-profile, and useful. Take JavaScript beyond the browser, explore dynamic language features, and embrace evented programming. Harness the power of the event loop and non-blocking I/O to create highly parallel microservices and applications. This expanded and updated second edition showcases the latest ECMAScript features, current best practices, and modern development techniques. JavaScript is the backbone of the modern web, powering nearly every web app's user interface. Node.js is JavaScript for the server. This greatly expanded second edition introduces new language features while dramatically increasing coverage of core topics. Each hands-on chapter offers progressively more challenging topics and techniques, broadening your skill set and enabling you to think in Node.js. Write asynchronous, non-blocking code using Node.js's style and patterns. Cluster and load balance services with Node.js core features and third-party tools. Harness the power of databases such as Elasticsearch and Redis. Work with many protocols, create RESTful web services, TCP socket clients and servers, and more. Test your code's functionality with Mocha, and manage its life cycle with npm. Discover how Node.js pairs a server-side event loop with a JavaScript runtime to produce screaming fast, non-blocking concurrency. Through a series of practical programming domains, use the latest available ECMAScript features and harness key Node.js classes and popular modules. Create rich command-line tools and a web-based UI using modern web development techniques. Join the smart and diverse community that's rapidly advancing the state of the art in JavaScript development.

**What You Need:** Node.js 8.x Operating system with bash-like shell OMQ (pronounced "Zero-M-Q") library, version 3.2 or higher Elasticsearch version 5.0 or higher jq version 1.5 or higher Redis version 3.2 or higher

**Functional-Light JavaScript** is a balanced, pragmatic exploration of Functional Programming in JavaScript. Functional Programming (FP) is an incredibly powerful paradigm for structuring code that yields more robust, verifiable, and readable programs. If you've ever tried to learn FP but struggled with terms like "monad", mathematical concepts like category theory, or symbols like  $\lambda$ , you're not alone. Functional-Light programming distills the most vital aspects of FP—function purity, value immutability, composition, and more!—down to approachable JavaScript patterns. Rather than the all-or-nothing dogmatism often encountered in FP, this book teaches you how to improve your programs line by line. JavaScript has finally grown up. Armed with a slew of new features, JavaScript now makes writing the code that powers your applications elegant, concise, and easy to understand. This book is a pragmatic guide to the new features introduced in JavaScript, starting with Edition 6 of ECMAScript, and ending with Edition 9. Using a "compare and contrast" approach, each chapter offers a deep dive into new features, highlighting how best to use them moving forward. As you progress through the book, you'll be offered multiple opportunities to see the new features in action, and in concert with one another. Backed by an example-driven writing style, you'll learn by doing, and get ready to embrace the new world of JavaScript.

**What You'll Learn** Provide a deep exposition of the new features introduced in ES6 through ES9 Review how JavaScript's new features by-pass any limitations of an existing approach Examine the refactoring necessary to go from old to new Demonstrate how JavaScript's new features work in unison with each other

**Who This Book Is For** New and experienced developers who wish to keep abreast of the changes to JavaScript and deepen their understanding of the language.

Over the last five years, CoffeeScript has taken the web development world by storm. With the humble motto "It's just JavaScript," CoffeeScript provides all the power of the JavaScript language in a friendly and elegant package. This extensively revised and updated new edition includes an all-new project to demonstrate CoffeeScript in action, both in the browser and on a Node.js server. There's no faster way to learn to write a modern web application. This new edition has been extensively revised and updated to reflect the current state and features of CoffeeScript. Every chapter has been revised and refactored, and new sections and a new chapter on testing have been added. If you already know JavaScript, this book will make your transition to CoffeeScript easy. If you're new to JavaScript, it's a great place to start.

**New in this edition:** Automating setup with the Grunt task runner Using CoffeeScript classes with the Backbone framework Using CoffeeScript's simple callback syntax to interact with the Express framework A new chapter on client-side and server-side testing with Intern \* A new project that gives you hands-on experience with browser-side and server-side CoffeeScript

CoffeeScript is every bit as portable and effective as JavaScript. It aids development by adding a bevy of features, such as classes, splats, list comprehensions, and destructuring. These features make it easier to write clear, readable code, and by learning how these features work, you'll deepen your understanding of JavaScript as well. This book is your complete guide to writing better JavaScript code, faster.

Need to learn how to wrap your head around Git, but don't need a lot of hand holding? Grab this book if you're new to Git, not to the world of programming. Git tasks displayed on two-page spreads provide all the context you need, without the extra fluff.

" Algorithms and data structures are much more than abstract concepts. Mastering them enables you to write code that runs faster and more efficiently, which is particularly important for today's web and mobile apps. This book takes a practical approach to data structures and algorithms, with techniques and real-world scenarios that you can use in your daily production code. Graphics and examples make these computer science concepts understandable and relevant. You can use these techniques with any language; examples in the book are in JavaScript, Python, and Ruby. Use Big O notation, the primary tool for evaluating algorithms, to measure and articulate the efficiency of your code, and modify your algorithm to make it faster. Find out how your choice of arrays, linked lists, and hash tables can dramatically affect the code you write. Use recursion to solve tricky problems and create algorithms that run exponentially faster than the alternatives. Dig into advanced data structures such as binary trees and graphs to help scale specialized applications

such as social networks and mapping software. You'll even encounter a single keyword that can give your code a turbo boost. Jay Wengrow brings to this book the key teaching practices he developed as a web development bootcamp founder and educator. Use these techniques today to make your code faster and more scalable. "

Like it or not, JavaScript is everywhere these days—from browser to server to mobile—and now you, too, need to learn the language or dive deeper than you have. This concise book guides you into and through JavaScript, written by a veteran programmer who once found himself in the same position. Speaking JavaScript helps you approach the language with four standalone sections. First, a quick-start guide teaches you just enough of the language to help you be productive right away. More experienced JavaScript programmers will find a complete and easy-to-read reference that covers each language feature in depth. Complete contents include: JavaScript quick start: Familiar with object-oriented programming? This part helps you learn JavaScript quickly and properly. JavaScript in depth: Learn details of ECMAScript 5, from syntax, variables, functions, and object-oriented programming to regular expressions and JSON with lots of examples. Pick a topic and jump in. Background: Understand JavaScript's history and its relationship with other programming languages. Tips, tools, and libraries: Survey existing style guides, best practices, advanced techniques, module systems, package managers, build tools, and learning resources.

Provides information on how to write better JavaScript programs, covering such topics as functions, arrays, library and API design, and concurrency.

JavaScript. The First Step is the Easiest A pragmatic introduction to modern JavaScript True to the motto "The First Step is the Easiest" you don't need any previous knowledge for this book and as a working environment you only need a browser. So just start! Step by step you will learn the core of the JavaScript language and its application to everyday programming. In addition to implementing some requirements of a web shop, you mix cocktails with arrays, become a wallpaper designer with recursion, and fight the "dark side of JavaScript". This way, you'll learn how to write JavaScript code that not only works, but you can be proud of. The latest, completely revised edition takes into account the most current JavaScript language version. Here's an excerpt from the contents: From operators, data types and other priorities Variables or reality in drawers Set a signal - with strings! For all cases... if & else Functions give us back so much... One for all and all for one: Arrays The big arrangement with map, reduce, filter,... Again from the beginning with recursion That's where I stay strict! OWL Step-by-Step Guides OWL Step-by-Step Guides convey practical knowledge in a simple and understandable way. They are written based on teaching practice by experts from the renowned Open Web Learning Institute and conceived in such a way that you can put your own projects into practice. Knowledge tests and exercises serve to deepen and consolidate the newly acquired know-how. This OWL Step-by-Step Guide is part of the online course "JavaScript" at OWL Institute but can also be used independently of the course. The online course offers additional benefits such as personal support, quizzes, assignments and and a final exam including an official certification. Check out <https://owl.institute> for additional information.

A revised and updated edition offers comprehensive coverage of ECMAScript 5 (the new JavaScript language standard) and also the new APIs introduced in HTML5, with chapters on functions and classes completely rewritten and updated to match current best practices and a new chapter on language extensions and subsets. Original.

Learn Rails the way the Rails core team recommends it, along with the tens of thousands of developers who have used this broad, far-reaching tutorial and reference. If you're new to Rails, you'll get step-by-step guidance. If you're an experienced developer, get the comprehensive, insider information you need for the latest version of Ruby on Rails. The new edition of this award-winning classic is completely updated for Rails 5.1 and Ruby 2.4, with information on system testing, Webpack, and advanced JavaScript. Ruby on Rails helps you produce high-quality, beautiful-looking web applications quickly---you concentrate on creating the application, and Rails takes care of the details. Rails 5.1 brings many improvements, and this edition is updated to cover the new features and changes in best practices. We start with a step-by-step walkthrough of building a real application, and in-depth chapters look at the built-in Rails features. Follow along with an extended tutorial as you write a web-based store application. Eliminate tedious configuration and housekeeping; seamlessly incorporate Ajax and JavaScript; send emails and manage background jobs with ActiveJob; build real-time features using WebSockets and ActionCable. Test your applications as you write them using the built-in unit, integration, and system testing frameworks; internationalize your applications; and deploy your applications easily and securely. New in this edition is support for Webpack and advanced JavaScript, as well as Rails' new browser-based system testing. Rails 1.0 was released in December 2005. This book was there from the start, and didn't just evolve alongside Rails, it evolved with Rails. It has been developed in consultation with the Rails core team. In fact, Rails itself is tested against the code in this book. What You Need: All you need is a Windows, Mac OS X, or Linux machine to do development on. This book will take you through the steps to install Rails and its dependencies. If you aren't familiar with the Ruby programming language, this book contains a chapter that covers the basics necessary to understand the material in the book.

With the advent of HTML5, front-end MVC, and Node.js, JavaScript is ubiquitous--and still messy. This book will give you a solid foundation for managing async tasks without losing your sanity in a tangle of callbacks. It's a fast-paced guide to the most essential techniques for dealing with async behavior, including PubSub, evented models, and Promises. With these tricks up your sleeve, you'll be better prepared to manage the complexity of large web apps and deliver responsive code. With Async JavaScript, you'll develop a deeper understanding of the JavaScript language. You'll start with a ground-up primer on the JavaScript event model--key to avoiding many of the most common mistakes JavaScripters make. From there you'll see tools and design patterns for turning that conceptual understanding into practical code. The concepts in the book are illustrated with runnable examples drawn from both the browser and the Node.js server framework, incorporating complementary libraries including jQuery, Backbone.js, and Async.js. You'll learn how to create dynamic web pages and highly concurrent servers by mastering the art of distributing events to where they need to be handled, rather than nesting callbacks within callbacks within callbacks. Async JavaScript will get you up and running with real web development quickly. By the time you've finished the Promises chapter, you'll be parallelizing Ajax requests or running animations in sequence. By the end of the book, you'll even know how to leverage Web Workers and AMD for JavaScript applications with cutting-edge performance. Most importantly, you'll have the knowledge you

need to write async code with confidence. What You Need: Basic knowledge of JavaScript is recommended. If you feel that you're not up to speed, see the "Resources for Learning JavaScript" section in the preface.

The days of the traditional request-response web application are long gone, but you don't have to wade through oceans of JavaScript to build the interactive applications today's users crave. The innovative Phoenix LiveView library empowers you to build applications that are fast and highly interactive, without sacrificing reliability. This definitive guide to LiveView isn't a reference manual. Learn to think in LiveView. Write your code layer by layer, the way the experts do. Explore techniques with experienced teachers to get the best possible performance. Instead of settling for traditional manuals and tutorials, get insights that can only be learned from experience. Start with the Elixir language techniques that effortlessly marry your client templates and server-side handlers. Design your systems with the right layers in the right places so that your code is easier to understand, change, and support. Explore features like multi-part uploads and learn how to comprehensively test your live views. Roll into advanced techniques to tie your code to other services through the powerful publish-subscribe interface. LiveView brings the most important programming techniques from the popular Elm and JavaScript React frameworks to Elixir. You'll experience firsthand how to harness that power by working side by side with some of the first LiveView users. You will write your programs to change data on the server, and you'll see how LiveView efficiently detects those changes and reflects them on the web page. Start from scratch, use built-in generators, and craft reusable components. Your single-purpose reducers will transform server data that your renderers can turn into efficient client-side diffs. Don't settle for knowing how things work. To get the most out of LiveView, you need to know why they work that way. Co-authored by one of the most prolific authors and teachers in all of Elixir, this book is your perfect guide to one of the most important new frameworks of our generation. What You Need: Programming Phoenix LiveView uses Phoenix version 1.5, and any Elixir version compatible with it. You will also want PostgreSQL and JavaScript Node.

ECMAScript 6 represents the biggest update to the core of JavaScript in the history of the language. In Understanding ECMAScript 6, expert developer Nicholas C. Zakas provides a complete guide to the object types, syntax, and other exciting changes that ECMAScript 6 brings to JavaScript. Every chapter is packed with example code that works in any JavaScript environment so you'll be able to see new features in action. You'll learn: –How ECMAScript 6 class syntax relates to more familiar JavaScript concepts –What makes iterators and generators useful –How arrow functions differ from regular functions –Ways to store data with sets, maps, and more –The power of inheritance –How to improve asynchronous programming with promises –How modules change the way you organize code Whether you're a web developer or a Node.js developer, you'll find Understanding ECMAScript 6 indispensable on your journey from ECMAScript 5 to ECMAScript 6.

The best modern JavaScript is simple, readable, and predictable. Learn to write modern JavaScript not by memorizing a list of new syntax, but with practical examples of how syntax changes can make code more expressive. Starting from variable declarations that communicate intention clearly, see how modern principles can improve all parts of code. Incorporate ideas with curried functions, array methods, classes, and more to create code that does more with less while yielding fewer bugs. It's time to write JavaScript code that's clean and expressive. Modern JavaScript is simpler and more predictable and readable than ever. Discover how to write better code with clear examples using principles that show how updated syntax can make code better with fewer bugs. Starting from the ground up, learn new syntax (or how to reuse older syntax) to transform code from clunky bug-susceptible scripts to clear and elegant programs that are easy to read and easy to extend. Create a foundation for readable code with simple variable declarations that reduce side effects and subtle bugs. Select collections with clear goals instead of defaulting to objects or arrays. See how to simplify iterations from complex loops to single line array methods. Master techniques for writing flexible and solid code ranging from high-order functions, to reusable classes, to patterns for architecting large applications creating applications that will last while through rounds of refactoring and changing requirements. The best part is there's no need to read this book straight through. Jump around and incorporate new functionality at will. Most importantly, understand not just what the new syntax is, but when and how to use it. Start writing better code from the first page. What You Need: For the best experience, have the latest version of Node installed (at least version 7). You can test most examples in the console of Chrome or other modern web browser. If you'd like to run the tests, you'll also need to install the latest version of Node Package Manager (npm). JavaScript lets you supercharge your HTML with animation, interactivity, and visual effects—but many web designers find the language hard to learn. This easy-to-read guide not only covers JavaScript basics, but also shows you how to save time and effort with the jQuery and jQuery UI libraries of prewritten JavaScript code. You'll build web pages that feel and act like desktop programs—with little or no programming. The important stuff you need to know: Pull back the curtain on JavaScript. Learn how to build a basic program with this language. Get up to speed on jQuery. Quickly assemble JavaScript programs that work well on multiple web browsers. Transform your user interface. Learn jQuery UI, the JavaScript library for interface features like design themes and controls. Make your pages interactive. Create JavaScript events that react to visitor actions. Use animations and effects. Build drop-down navigation menus, pop-ups, automated slideshows, and more. Collect data with web forms. Create easy-to-use forms that ensure more accurate visitor responses. Practice with living examples. Get step-by-step tutorials for web projects you can build yourself.

ReasonML is a new, type-safe, functional language that compiles to efficient, readable JavaScript. ReasonML interoperates with existing JavaScript libraries and works especially well with React, one of the most popular front-end frameworks. Learn how to take advantage of the power of a functional language while keeping the flexibility of the whole JavaScript ecosystem. Move beyond theory and get things done faster and more reliably with ReasonML today. ReasonML is a new syntax for OCaml, a battle-tested programming language used in industry for over 20 years. Designed to be familiar to JavaScript programmers, ReasonML code compiles to highly readable JavaScript. With ReasonML, you get OCaml's powerful functional programming features: a strong static type system with an excellent type inference engine, pattern matching, and features for functional programming with immutable variables. ReasonML also allows flexibility with opt-in side effects, mutation, and object-oriented programming. ReasonML hits the sweet spot between the pure theoretical world and the laissez-faire approach of JavaScript. Start using ReasonML's powerful type system as you learn the essentials of the language: variables and arithmetic operations. Gain expressive power as you write functions with named parameters and currying. Define your own data types, and integrate all these capabilities into a simple web page. Take advantage of ReasonML's functional data structures with map and reduce functions. Discover new ways to write algorithms with ReasonML's recursion support. Interoperate with existing JavaScript libraries with bindings, and write reactive web applications using ReasonML in tandem with React. Reinforce concepts with examples that range from short, tightly focused functions to complete programs, and practice your new skills with exercises in each chapter. With

ReasonML, harness the awesome power of a functional language while retaining the best features of JavaScript to produce concise, fast, type-safe programs. What You Need: You'll need to have node.js (version 10.0 or above) and npm (version 5.6 or above). Once you install the bs-platform package and fire up a text editor, you're ready to go. (There are plugins for many popular editors that will make editing easier.)

The Road to learn React teaches you the fundamentals of React. You will build a real world application along the way in plain React without complicated tooling. Everything from project setup to deployment on a server will be explained. The book comes with additional referenced reading material and exercises with each chapter. After reading the book, you will be able to build your own applications in React. The material is kept up to date by me and the community. In the Road to learn React, I want to offer a foundation before you start to dive into the broader React ecosystem. It has less tooling and less external state management, but a lot of information around React. It explains general concepts, patterns and best practices in a real world React application. You will learn to build your own React application. It covers real world features like pagination, client-side caching and interactions like searching and sorting. Additionally you will transition from JavaScript ES5 to JavaScript ES6 along the way. I hope this book captures my enthusiasm for React and JavaScript and helps you to get started.

HTML5 and CSS3 are more than just buzzwords--they're the foundation for today's web applications. This book gets you up to speed on the HTML5 elements and CSS3 features you can use right now in your current projects, with backwards compatible solutions that ensure that you don't leave users of older browsers behind. This new edition covers even more new features, including CSS animations, IndexedDB, and client-side validations. HTML5 and CSS3 power today's web applications, with semantic markup, better forms, native multimedia, animations, and powerful APIs. You'll get hands-on with all the new features with practical example projects, and find what you need quickly with this book's modular structure. "Falling Back" sections show you how to create solutions for older browsers, and "The Future" sections at the end of each chapter get you excited about the possibilities when features mature. This revised second edition walks you through new features such as IndexedDB, CSS Animations, SVG, and more, along with updated fallback solutions. You'll use HTML5's new markup to create better structure for your content and better interfaces for your forms. You'll work with new form controls and validations, and build interfaces that are accessible to assistive technology and mobile devices. You'll draw with the Canvas and SVG, do simple animations with pure CSS, work with advanced CSS selectors, and make audio and video play natively. You'll bring your web apps to the next level as you use Web Storage and IndexedDB to save data on the client and make applications available offline. And you'll discover how to use web sockets, geolocation, cross-document messaging, and the History API to create even more interactive applications. Today, you have the flexibility that used to be only available through large JavaScript libraries or proprietary plugins. Get ready for today's web. What You Need: You'll need the latest versions of Google Chrome, Firefox, Opera, and Internet Explorer, along with a text editor with good support for HTML5 and CSS3 syntax. Instructions for testing on older versions of Internet Explorer are included in the book.

Expert JavaScript is your definitive guide to understanding how and why JavaScript behaves the way it does. Master the inner workings of JavaScript by learning in detail how modern applications are made. In covering lesser-understood aspects of this powerful language and truly understanding how it works, your JavaScript code and programming skills will improve. You will learn about core fundamentals of JavaScript, including deep dives into functions, scopes, closures, and practical object-oriented code. Mark Daggett explains clearly how closures, events, and asynchronous code really operate, as well as conventions and concepts to write JavaScript in a clear, pragmatic style. Many of the changes in ECMAScript6 and its implications are all explained. You'll be introduced to modern workflow tools to make application development faster, more enjoyable, and ostensibly more profitable. You'll understand how to measure code quality and write more testable JavaScript, and finally you'll learn about real-world applications of JavaScript, including JavaScript-powered robots. JavaScript is one of the most powerful languages on the web today, and it is only getting stronger. This book will take you through the process of planning, coding, testing, profiling and finally releasing your application, at expert level. With more frameworks and more improvements than ever, now is the time to become an expert at JavaScript. Make this journey - use Expert JavaScript today. What you'll learn What is really going on underneath functions, in arguments, types, coercion, and scope How closures, events, and asynchronous code work at a fundamental level How to understand advanced topics including promise objects, coroutines, and generators How to apply this newfound knowledge pragmatically to build the very best modern JavaScript applications Who this book is for This book is for the experienced JavaScript programmer who wants to understand the how and why of their code in order to become a better developer. This book is not intended to teach JavaScript at a syntactical level, but instead delve deep into the code - the philosophy, the reasoning and the detailed expert-level knowledge behind it. This newfound knowledge will enable the reader to build the very best modern JavaScript applications. It is for anyone who wants to become a better programmer by understanding at a very high level how the code works. Table of Contents Objects and Prototypes Functions Getting Closure JavaScript Slang Living Asynchronously JavaScript IRL Pragmatic JavaScript Style Workflow Code Quality Improving Testability

Provides information on using Ajax in building Web applications.

Pragmatic Guide to JavaScript

JavaScript was written to give readers an accurate, concise examination of JavaScript objects and their supporting nuances, such as complex values, primitive values, scope, inheritance, the head object, and more. If you're an intermediate JavaScript developer and want to solidify your understanding of the language, or if you've only used JavaScript beneath the mantle of libraries such as jQuery or Prototype, this is the book for you. This updated and expanded second edition of Book provides a user-friendly introduction to the subject, Taking a clear structural framework, it guides the reader through the subject's core elements. A flowing writing style combines with the use of illustrations and diagrams throughout the text to ensure the reader understands even the most complex of concepts. This succinct and enlightening overview is a required reading for all those interested in the subject . We hope you find this book useful in shaping your future career & Business.

Provides information on JavaScript, covering such topics as DOM, events, timers, mashups, forms, and Ajax--

Do you want to learn how JavaScript and the major markup languages work? If yes, then keep reading... Hypertext Markup Language (HTML) is part of the three major elements of modern web pages. The other two are Cascading Style Sheets (CSS) and JavaScript. HTML defines the structure of web pages. HTML contains a lot of features and instructs the browser on how to display content. CSS is responsible for styling while JavaScript is a prototype-based language with top-notch functions utilized by web page authors to control element actions. The three major markup languages concepts are explained further in the book. Cascading Style Sheets (CSS) is an excellent way of designing web pages. With CSS, you determine the color of an element, angle, visibility, size, and position, and more. CSS can be utilized either within the document or as an independent file which must be referenced by the HTML document. CSS is a standard way of styling an individual or group of elements at once. There are many parts and tasks that come with the JavaScript language, and we are going to take some time to explore these a bit more. This will make it easier for us to see how this language works and what we can do with it. From learning how to write our own objects, expressions, operators, and more, this guidebook has all of the tools that you need in order to get started with writing some of our own codes in JavaScript. Working with a coding language can seem hard to work with. This is not always as easy to choose as the others, but the number of features and capabilities that come with this language compared to some of the other

options, especially when we are talking about using this on web pages, then JavaScript is the right choice for you. When you are ready to learn more about the JavaScript language and what you are able to do with it, make sure to check out this guidebook to help you get started. JavaScript is capable of acting on or influencing web pages. JavaScript enhances web user interface by confirming actions taken by the user on the client-side. JavaScript contains three data types, which are number, Boolean, and string. With JavaScript, you can describe the functions of your own. In this book, you will learn more about: Fundamental JavaScript Concepts HTML Overview JavaScript's Control Flow Statements The Different Types of Loops in JavaScript Syntax Enabling JavaScript in Browsers Placement of JavaScript in Files Popup Message JavaScript Variables JavaScript ECMAScript Standard Working With JavaScript: A Brief HTML Guide for Beginners Changing the content of HTML elements using DOM Changing CSS using DOM Pointers Expressions and Operators What Are Some Of The JavaScript Variables? Variables, data types & constants Closures and Callbacks in JavaScript Apply, call, and bind methods in JavaScript Events Arrays in JavaScript Values, Types, and Operators Definition of Arrays in JavaScript ... AND MORE!!! What are you waiting for? Don't wait anymore, press the buy now button and get started.

The Road to GraphQL is your personal journey to master pragmatic GraphQL in JavaScript. The book is full with applications you are going to build along the way with React.js and Node.js. Afterward, you will be able to implement full-stack JavaScript applications. I wrote the The Road to GraphQL over the last year, while building several GraphQL applications for my clients and for myself. During this time, I came to understand the practical genius of GraphQL, and how it dramatically improves communication in client-server architectures. Not only does it improve the interface between the client and the server, it also enhances client-side state management by eliminating remote data management. Sophisticated GraphQL libraries like Apollo Client provide powerful features like caching, optimistic UI, and data prefetching for free. This book covers the fundamentals of GraphQL itself, as well as its ecosystem. I applied the same principles as my other books: Stay pragmatic Keep it simple Answer the why, not just the how Experience a problem, solve a problem This book is not intended to be an end-all reference for GraphQL APIs, nor an in-depth guide about the internals of the GraphQL specification. Instead, its purpose is to journey through learning GraphQL with JavaScript the pragmatic way, building client and server applications yourself. The book covers lots of facets about GraphQL in JavaScript that are important for building modern applications, without just throwing the libraries like Apollo at problems before experiencing them. It starts with the basic HTTP requests to perform GraphQL queries first, then moves on to using dedicated GraphQL libraries for it. You will even get the chance to implement your own GraphQL client library, so you understand how these libraries work under the hood. There are no hidden abstractions in this book, just plenty of fundamentals for JavaScript, React.js, Node.js, and GraphQL.

Requirements To get the most out of this book, you should be familiar with the basics of web development, which includes some knowledge of HTML, CSS and JavaScript. You will also need to be familiar with the term API, because they are discussed frequently. I encourage you to join the official Slack Group for the book, help or get help from others. React On the client-side, this book uses React to teach about GraphQL in JavaScript. My other book called The Road to learn React teaches you all the fundamentals about React. It also teaches you to make the transition from JavaScript ES5 to JavaScript ES6. The book is available for free and after having read the Road to learn React, you should possess all the knowledge to implement the GraphQL client-side application with this book. Node On the server-side, this book uses Node with Express as library to teach about GraphQL in JavaScript. You don't need to know much about those technologies before using them for your first GraphQL powered applications. The book will guide you through the process of setting up a Node application with Express and shows you how to weave GraphQL into the mix. Afterward, you should be able to consume the GraphQL API provided by your server-side application in your client-side application.

Grasp the fundamentals of web application development by building a simple database-backed app from scratch, using HTML, JavaScript, and other open source tools. Through hands-on tutorials, this practical guide shows inexperienced web app developers how to create a user interface, write a server, build client-server communication, and use a cloud-based service to deploy the application. Each chapter includes practice problems, full examples, and mental models of the development workflow. Ideal for a college-level course, this book helps you get started with web app development by providing you with a solid grounding in the process. Set up a basic workflow with a text editor, version control system, and web browser Structure a user interface with HTML, and include styles with CSS Use JQuery and JavaScript to add interactivity to your application Link the client to the server with AJAX, JavaScript objects, and JSON Learn the basics of server-side programming with Node.js Store data outside your application with Redis and MongoDB Share your application by uploading it to the cloud with CloudFoundry Get basic tips for writing maintainable code on both client and server

8+ Hours of Video Instruction It can be difficult for developers familiar with Java and other languages to make the transition to modern JavaScript. If you simply want to be productive with JavaScript as it exists today, then you don't want to relive history with books or courses that teach older JavaScript versions, or that assume familiarity with those older versions and focus on recently introduced features. This course assumes that you are a competent programmer who understands branches and loops, functions, data structures, and the basics of object-oriented programming. You will get up to speed with modern JavaScript in the shortest possible time. Description Modern JavaScript for the Impatient LiveLessons focuses on how to be productive with JavaScript as it exists today. After reviewing the fundamentals of values, variables, and control flow, the video thoroughly covers functions, objects, and classes. The standard library and the most commonly used tools are also covered, as well as key topics related to asynchronous programming, internationalization, and modules. Related Content This training pairs with Cay Horstmann's book Modern JavaScript for the Impatient (9780136502142) About the Instructor Cay S. Horstmann is a professor of computer science at San Jose State University and a Java Champion. He is also the author of Core Java, Volume II, Fundamentals, Eleventh Edition (2019); Core Java, Volume I, Fundamentals, Eleventh Edition (2018); Core Java SE 9 for the Impatient, Second Edition (2018); Java SE 8 for the Really Impatient (2014); and Scala for the Impatient (2012). He has written more than a dozen other books for professional programmers and computer science students. What You Will Learn After starting with the basics-JavaScript values, variables, and types, and a quick overview of expressions and the various type of flow control statements-Horstmann shows viewers how to implement functions that consume and produce other functions and how to use closures to implement a form of classes before moving on to more advanced topics including: Object-oriented programming with modern JavaScript (classes and inheritance and how these are implemented with prototypes) The standard library (numbers and dates, strings and regular expressions, as well as arrays and collections.) Metaprogramming, iterators, and generators (a powerful mechanism to bridge between linear and event-driven control flow) How to use proxies to inter...

ClojureScript is a pragmatic functional programming language for building web applications. Whether you are an experienced JavaScript developer or a brand-new programmer, this book is your guide to creating impressive web apps in the simple and elegant ClojureScript language. The tutorial-style lessons are easy to follow at your own pace, and the practical capstone projects will reinforce what you have learned. By the end of the book, you will have created: - A weather forecast widget - A personal contact manager - A text-based adventure game - A group chat app - And more!

A tutorial and reference to the object-oriented programming language for beginning to experienced programmers, updated for version 1.8, describes the language's structure, syntax, and operation, and explains how to build applications. Original.

(Intermediate)

Grunt is everywhere. JavaScript projects from jQuery to Twitter Bootstrap use Grunt to convert code, run tests, and produce distributions for production. It's a build tool in the spirit of Make and Rake, but written with modern apps in mind. This book gets you up to speed with Grunt using practical hands-on examples, so you can wrangle your projects with ease. You'll learn how to create and maintain tasks and project builds, and automate your workflow with plugins and custom tasks. JavaScript has moved from being the language you love to hate to the language you need to use. And as JavaScript applications get more complex, you need a process to manage that complexity. While online tutorials just explain how to slap together a configuration file, this book goes further and shows you how to create your own tasks, design your own project templates, combine plugins together to bring a web app to life, and build your own plugins. You'll start by learning the basics of task creation, error handling, and logging as you create a simple configuration that executes basic JavaScript code using Node.js. Then you'll jump right into file manipulation as you read, write, copy, and delete files. You'll learn how Grunt's powerful multitasks work as you build a task to concatenate files together. Once you've got a grasp on these basics, you'll build a simple app with AngularJS and CoffeeScript, using Grunt to do all the heavy lifting and script processing. Finally, you'll create your own plugin so you can understand how plugins work. Each chapter contains hands-on exercises and ideas for further study. Whether you rock Ruby or sling C#, Grunt will be a useful addition to your toolbox. What You Need: This book covers Grunt 0.4.1 and higher, and requires basic knowledge of JavaScript and command-line tools on Windows, OS X, or Linux.

This book covers microsoft acces-based GUI programming using pyqt. Intentionally designed for various levels of interest and ability of learners, this book is suitable for students, engineers, and even researchers in a variety of disciplines. No advanced programming experience is needed, and only a few school-level programming skill are needed. In the first chapter, you will learn to use several widgets in PyQt5: Display a welcome message; Use the Radio Button widget; Grouping radio buttons; Displays options in the form of a check box; and Display two groups of check boxes. In chapter two, you will learn to use the following topics: Using Signal / Slot Editor; Copy and place text from one Line Edit widget to another; Convert data types and make a simple calculator; Use the Spin Box widget; Use scrollbars and sliders; Using the Widget List; Select a number of list items from one Widget List and display them on another Widget List widget; Add items to the Widget List; Perform operations on the Widget List; Use the Combo Box widget; Displays data selected by the user from the Calendar Widget; Creating a hotel reservation application; and Display tabular data using Table Widgets. In third chapter, you will learn: How to create the initial three tables project in the School database: Teacher, Class, and Subject tables; How to create database configuration files; How to create a Python GUI for inserting and editing tables; How to create a Python GUI to join and query the three tables. In fourth chapter, you will learn how to: Create a main form to connect all forms; Create a project will add three more tables to the school database: Student, Parent, and Tuition tables; Create a Python GUI for inserting and editing tables; Create a Python GUI to join and query over the three tables. In the last chapter, you will join the six classes, Teacher, TClass, Subject, Student, Parent, and Tuition and make queries over those tables.

Do you want to develop a skill that will ensure you never go jobless again? Have you always wanted to learn how to program but could never afford those ridiculously expensive courses? Developers and programmers are amongst the highest paid professions in the world, and according to the US Bureau of Labor Statistics, the number of jobs for software and app developers will increase by a shocking 24% in the next few years. In 2019, the tech industry posted 4.6 million job openings in the US job market, and their direct economic output was estimated at 1.9 trillion dollars. There's no doubt that the IT industry is the future, and software, web, and app developers are and will be the most coveted professionals for many years to come. But here's the shock you may not have seen coming: the IT industry has a backdoor--you only need to know how to open it in order to jump straight on that cash wagon. The key to that door is JavaScript, a programming language that has withstood the test of time and has become one of the most used languages. You might have heard about some of the companies that use JavaScript: Netflix, Google, Microsoft, eBay, Facebook, Uber, PayPal... The list goes on and on. Being proficient in JavaScript will basically ensure that you never run out of job options. As with pursuing any new concept, learning how to program can be intimidating, especially for beginners. Even though JavaScript is incredibly beginner-friendly, it's still complex enough for you to need a guide to lead you through the process of mastering it.

JavaScript is no longer to be feared or loathed - the world's most popular and ubiquitous language has evolved into a respectable language. Whether you're writing frontend applications or server side code, the phenomenal features from ES6 and beyond - like the rest operator, generators, destructuring, object literals, arrow functions, modern classes, promises, async, and metaprogramming capabilities - will get you excited and eager to program with JavaScript. You've found the right book to get started quickly and dive deep into the essence of modern JavaScript. Learn practical tips to apply the elegant parts of the language and the gotchas to avoid. JavaScript is a black swan that no one, including the author of the language, thought would become a popular and ubiquitous language. Not long ago, it was the most hated and feared language you could use to program the web. JavaScript ES6 and beyond has gone through a significant makeover. Troublesome features have been replaced with better, elegant, more reliable alternatives. This book includes many practical examples and exercises to help you learn in depth. It will not bore you with idiosyncrasies and arcane details intended for bad interview questions. Instead, it takes you into key features that you can readily use in your day-to-day projects. Whether you program the frontend or the server side, you can now write concise, elegant, and expressive JavaScript with newer features like default parameters, template literals, rest and spread operators, destructuring, arrow functions, and generators. Take it up a notch with features like infinite series, promises, async, and metaprogramming to create flexible, powerful, and extensible libraries. While the evolved features of the language will draw you in, the hundreds of examples in this book will pin the concepts down, for you to use on your projects. Take command of modern JavaScript and unlock your potential to create powerful applications. What You Need: To try out the examples in the book you will need a computer with Node.js, a text editor, and a browser like Chrome installed in it.

Most programming languages contain good and bad parts, but JavaScript has more than its share of the bad, having been developed and released in a hurry before it could be refined. This authoritative book scrapes away these bad features to reveal a subset of JavaScript that's more reliable, readable, and maintainable than the language as a whole—a subset you can use to create truly extensible and efficient code. Considered the JavaScript expert by many people in the development community, author Douglas Crockford identifies the abundance of good ideas that make JavaScript an outstanding object-oriented programming language-ideas such as functions, loose typing, dynamic objects, and an expressive object literal notation. Unfortunately, these

good ideas are mixed in with bad and downright awful ideas, like a programming model based on global variables. When Java applets failed, JavaScript became the language of the Web by default, making its popularity almost completely independent of its qualities as a programming language. In *JavaScript: The Good Parts*, Crockford finally digs through the steaming pile of good intentions and blunders to give you a detailed look at all the genuinely elegant parts of JavaScript, including: Syntax Objects Functions Inheritance Arrays Regular expressions Methods Style Beautiful features The real beauty? As you move ahead with the subset of JavaScript that this book presents, you'll also sidestep the need to unlearn all the bad parts. Of course, if you want to find out more about the bad parts and how to use them badly, simply consult any other JavaScript book. With *JavaScript: The Good Parts*, you'll discover a beautiful, elegant, lightweight and highly expressive language that lets you create effective code, whether you're managing object libraries or just trying to get Ajax to run fast. If you develop sites or applications for the Web, this book is an absolute must.

WebAssembly fulfills the long-awaited promise of web technologies: fast code, type-safe at compile time, execution in the browser, on embedded devices, or anywhere else. Rust delivers the power of C in a language that strictly enforces type safety. Combine both languages and you can write for the web like never before! Learn how to integrate with JavaScript, run code on platforms other than the browser, and take a step into IoT. Discover the easy way to build cross-platform applications without sacrificing power, and change the way you write code for the web. WebAssembly is more than just a revolutionary new technology. It's reshaping how we build applications for the web and beyond. Where technologies like ActiveX and Flash have failed, you can now write code in whatever language you prefer and compile to WebAssembly for fast, type-safe code that runs in the browser, on mobile devices, embedded devices, and more. Combining WebAssembly's portable, high-performance modules with Rust's safety and power is a perfect development combination. Learn how WebAssembly's stack machine architecture works, install low-level wasm tools, and discover the dark art of writing raw wasm code. Build on that foundation and learn how to compile WebAssembly modules from Rust by implementing the logic for a checkers game. Create wasm modules in Rust to interoperate with JavaScript in many compelling ways. Apply your new skills to the world of non-web hosts, and create everything from an app running on a Raspberry Pi that controls a lighting system, to a fully-functioning online multiplayer game engine where developers upload their own arena-bound WebAssembly combat modules. Get started with WebAssembly today, and change the way you think about the web. What You Need: You'll need a Linux, Mac, or Windows workstation with an Internet connection. You'll need an up-to-date web browser that supports WebAssembly. To work with the sample code, you can use your favorite text editor or IDE. The book will guide you through installing the Rust and WebAssembly tools needed for each chapter.

Design websites faster than ever using Sass--the most mature and popular CSS meta-language. On any platform, integrate Sass into your project, create a reusable style guide, and use maps to drastically reduce duplication in your stylesheets. You'll see how to code the right way in Sass with short, clear examples on two-page spreads that show the explanation on one side and code examples on the other. This ultimate guide to using Sass, written by its creator, is updated and expanded with all the new features found in Sass 3.4, making you an expert in no time. Sass lets you write CSS faster and more easily by enabling you to use features that regular CSS doesn't have yet. Bring the power of Sass to your projects, whether you use Node.js, Ruby, or any other programming language. This updated Pragmatic Guide gives you brief, targeted hands-on examples in an easy-to-follow modular format. Use variables to easily change color values, measurements, or fonts across a whole project. Pare down large style sheets into comprehensible code with maps and placeholder selectors. Organize your Sass with media queries to make maintainable, responsive designs. Create your own layout systems and build shared tooling across projects that make designs more consistent. Learn the differences between extends and mixins. Build data structures to make creating site-wide color schemes a breeze, and use placeholder selectors to keep style sheets cleaner. Pass content through mixins, prevent accidental deep nesting of selectors, and use cutting-edge modular add-ons in the new Sass ecosystem, such as Eyeglass, Susy, and Bourbon Neat. This revised guide covers all the new features in Sass 3.4, including selector parsing and manipulation. Make full use of all Sass's features by updating to the most mature and powerful CSS toolchain out there. What You Need: A solid understanding of CSS, and either comfort using the command line or installing GUI software on your computer. Sass 3.4 installed on any Mac, Linux, or Windows machine.

Provides information on Subversion 1.3, an open source version control system.

"Seven Languages in Seven Weeks" presents a meaningful exploration of seven languages within a single book. Rather than serve as a complete reference or installation guide, the book hits what's essential and unique about each language.

What others in the trenches say about *The Pragmatic Programmer*... "The cool thing about this book is that it's great for keeping the programming process fresh. The book helps you to continue to grow and clearly comes from people who have been there." —Kent Beck, author of *Extreme Programming Explained: Embrace Change* "I found this book to be a great mix of solid advice and wonderful analogies!" —Martin Fowler, author of *Refactoring* and *UML Distilled* "I would buy a copy, read it twice, then tell all my colleagues to run out and grab a copy. This is a book I would never loan because I would worry about it being lost." —Kevin Ruland, Management Science, MSG-Logistics "The wisdom and practical experience of the authors is obvious. The topics presented are relevant and useful.... By far its greatest strength for me has been the outstanding analogies—tracer bullets, broken windows, and the fabulous helicopter-based explanation of the need for orthogonality, especially in a crisis situation. I have little doubt that this book will eventually become an excellent source of useful information for journeymen programmers and expert mentors alike." —John Lakos, author of *Large-Scale C++ Software Design* "This is the sort of book I will buy a dozen copies of when it comes out so I can give it to my clients." —Eric Vought, Software Engineer "Most modern books on software development fail to cover the basics of what makes a great software developer, instead spending their time on syntax or technology where in reality the greatest leverage possible for any software team is in having talented developers who really know their craft well. An excellent book." —Pete McBreen, Independent Consultant "Since reading this book, I have implemented many of the practical suggestions and tips it contains. Across the board, they have saved my company time and money while helping me get my job done quicker! This should be a desktop reference for everyone who works with code for a living." —Jared Richardson, Senior Software Developer, iRenaissance, Inc. "I would like to see this issued to every new employee at my company...." —Chris Cleeland, Senior Software Engineer, Object Computing, Inc. "If I'm putting together a project, it's the authors of this book that I want. . . . And failing that I'd settle for people who've read their book." —Ward Cunningham Straight from the programming trenches, *The Pragmatic Programmer* cuts through the increasing specialization and technicalities of modern software development to examine the core process--taking a requirement and producing working, maintainable code that delights its users.

It covers topics ranging from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you'll learn how to Fight software rot; Avoid the trap of duplicating knowledge; Write flexible, dynamic, and adaptable code; Avoid programming by coincidence; Bullet-proof your code with contracts, assertions, and exceptions; Capture real requirements; Test ruthlessly and effectively; Delight your users; Build teams of pragmatic programmers; and Make your developments more precise with automation. Written as a series of self-contained sections and filled with entertaining anecdotes, thoughtful examples, and interesting analogies, The Pragmatic Programmer illustrates the best practices and major pitfalls of many different aspects of software development. Whether you're a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you'll quickly see improvements in personal productivity, accuracy, and job satisfaction. You'll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You'll become a Pragmatic Programmer.

Forget wizards, you need a slave--someone to do your repetitive, tedious and boring tasks, without complaint and without pay, so you'll have more time to design and write exciting code. Indeed, that's what computers are for. You can enlist your own computer to automate all of your project's repetitive tasks, ranging from individual builds and running unit tests through to full product release, customer deployment, and monitoring the system. Many teams try to do these tasks by hand. That's usually a really bad idea: people just aren't as good at repetitive tasks as machines. You run the risk of doing it differently the one time it matters, on one machine but not another, or doing it just plain wrong. But the computer can do these tasks for you the same way, time after time, without bothering you. You can transform these labor-intensive, boring and potentially risky chores into automatic, background processes that just work. In this eagerly anticipated book, you'll find a variety of popular, open-source tools to help automate your project. With this book, you will learn: How to make your build processes accurate, reliable, fast, and easy. How to build complex systems at the touch of a button. How to build, test, and release software automatically, with no human intervention. Technologies and tools available for automation: which to use and when. Tricks and tips from the masters (do you know how to have your cell phone tell you that your build just failed?) You'll find easy-to-implement recipes to automate your Java project, using the same popular style as the rest of our Jolt Productivity Award-winning Starter Kit books. Armed with plenty of examples and concrete, pragmatic advice, you'll find it's easy to get started and reap the benefits of modern software development. You can begin to enjoy pragmatic, automatic, unattended software production that's reliable and accurate every time.

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