Exploring Es6

A definitive guide to creating an intelligent web application with the best of machine learning and JavaScript Key Features Solve complex computational problems in browser with JavaScript Teach your browser how to learn from rules using the power of machine learning Understand discoveries on web interface and API in machine learning Book Description In over 20 years of existence, JavaScript has been pushing beyond the boundaries of web evolution with proven existence on servers, embedded devices, Smart TVs, IoT, Smart Cars, and more. Today, with the added advantage of machine learning research and support for JS libraries, JavaScript makes your browsers smarter than ever with the ability to learn patterns and reproduce them to become a part of innovative products and applications. Hands-on Machine Learning with JavaScript presents various avenues of machine learning in a practical and objective way, and helps implement them using the JavaScript language. Predicting behaviors, analyzing feelings, grouping data, and building neural models are some of the skills you will build from this book. You will learn how to train your machine learning models and work with different kinds of data. During this journey, you will come across use cases such as face detection, spam filtering, recommendation systems, character recognition, and more. Moreover, you will learn how to work with deep neural networks and guide your applications to gain insights from data. By the end of this book, you'll have gained hands-on knowledge on evaluating and implementing the right model, along with choosing from different JS libraries, such as NaturalNode, brain, harthur, classifier, and many more to design smarter applications. What you will learn Get an overview of state-of-the-art machine learning Understand the pre-processing of data handling, cleaning, and preparation Learn Mining and Pattern Extraction with JavaScript Build your own model for classification, clustering, and prediction Identify the most appropriate model for each type of problem Apply machine learning techniques to real-world applications Learn how JavaScript can be a powerful language for machine learning Who this book is for This book is for you if you are a JavaScript developer who wants to implement machine learning to make applications smarter, gain insightful information from the data, and enter the field of machine learning without switching to another language. Working knowledge of JavaScript language is expected to get the most out of the book.

JavaScript is at the heart of almost every modern Web application, whether it's Google Apps, Twitter, or the newest browser-based game. Though it's simple for beginners to pick up and play with, JavaScript is not a toy—it's a flexible and complex language that can be used to build full-scale applications. Eloquent JavaScript dives into this flourishing language and teaches you to write code that's beautiful and effective. By immersing you in example code and encouraging experimentation right from the start, the author quickly gives you the tools you need to build your own programs. As you follow along with examples like an artificial life simulation and a version of the classic game Sokoban, you'll learn to: –Understand the essential elements of programming: syntax, control, and data –Use object-oriented and functional programming techniques to organize and clarify your programs –Script the browser and make basic Web applications –Work with tools like regular expressions and XMLHttpRequest objects And since programming

is an art that's best learned by doing, all example code is available online in an interactive sandbox for you to experiment with. With Eloquent JavaScript as your guide, you can tweak, expand, and modify the author's code, or throw it away and build your own creations from scratch. Before you know it, you'll be fluent in the language of the Web.

Gain a deeper understanding of JavaScript and apply it to build small applications in backend, frontend, and mobile frameworks. Key FeaturesExplore the new ES6 syntax, the event loop, and asynchronous programmingLearn the test-driven development approach when building appsMaster advanced JavaScript concepts to enhance your web developments skillBook Description If you are looking for a programming language to develop flexible and efficient applications, JavaScript is an obvious choice. Advanced JavaScript is a hands-on guide that takes you through JavaScript and its many features, one step at a time. You'll begin by learning how to use the new JavaScript syntax in ES6, and then work through the many other features that modern JavaScript has to offer. As you progress through the chapters, you'll use asynchronous programming with callbacks and promises, handle browser events, and perform Document Object Model (DOM) manipulation. You'll also explore various methods of testing JavaScript projects. In the concluding chapters, you'll discover functional programming and learn to use it to build your apps. With this book as your guide, you'll also be able to develop APIs using Node.js and Express, create front-ends using React/Redux, and build mobile apps using React/Expo. By the end of Advanced JavaScript, you will have explored the features and benefits of JavaScript to build small applications. What you will learnExamine major features in ES6 and implement those features to build applicationsCreate promise and callback handlers to work with asynchronous processesDevelop asynchronous flows using Promise chaining and async/await syntaxManipulate the DOM with JavaScriptHandle JavaScript browser eventsExplore Test Driven Development and build code tests with JavaScript code testing frameworks.List the benefits and drawbacks of functional programming compared to other stylesConstruct applications with the Node.js backend framework and the React frontend frameworkWho this book is for This book is designed to target anyone who wants to write JavaScript in a professional environment. We expect the audience to have used JavaScript in some capacity and be familiar with the basic syntax. This book would be good for a tech enthusiast wondering when to use generators or how to use Promises and Callbacks effectively, or a novice developer who wants to deepen their knowledge on JavaScript and understand TDD.

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.

Advanced JavaScript
Speaking JavaScript
Robust Web Architecture with Node, HTML5, and Modern JS Libraries
Swanson River Satellites, Natural Gas Exploration and Development Project

Building Modern Web Applications, a Course in Five Modules : Master the Art of Building Modern Web Applications Using React
Hands-on Machine Learning with JavaScript

Switching to Angular, Third Edition is the go-to book to align and get started with the Angular JavaScript framework. Angular contributor and international speaker Minko Gechev will help you square up and start building Angular apps and provide you an insight to the Google's vision for the framework. About This Book Get up to date with Google's vision for Angular Align with Angular version 5 and beyond from any direction with confidence Start using TypeScript to supercharge your Angular applications Understand the new framework from AngularJS perspective using your prior experience Use Angular to quickly build fast and scalable enterprise applications Who This Book Is For This book is for software developers who want to align with a modern version of Angular that's aligned with Google's vision of Angular version 5 and beyond, using stable APIs that they can depend on today and in the future. Also for anyone assessing changes to Angular and squaring up for a strategic migration to Angular v5, and for AngularJS developers who want to transfer their mindset to modern Angular version 5 and beyond. What You Will Learn Align with Google's vision for Angular version 5 and beyond Confidently move forward with a long-term understanding of Angular Use stable APIs in Angular to build future-proof, blazingly fast enterprise applications Work with TypeScript to supercharge your Angular applications Understand the core concepts of Angular, aligned with the vision from Google Be ready with Angular from any direction—whether you're building new apps with the Angular and ASP.NET stack, or upgrading from AngularJS with ngUpgrade In Detail Align your work to stable APIs of Angular, version 5 and beyond, with Angular expert Minko Gechev. Angular is the modern Google framework for you to build high-performance, SEO-friendly, and robust web applications. Switching to Angular, Third Edition, shows you how you can align your current and future development with Google's long-term vision for Angular. Gechev shares his expert knowledge and community involvement to give you the clarity you need to confidently switch to Angular and stable APIs. Minko Gechev helps you get to grips with Angular with an overview of the framework, and understand the long-term building blocks of Google's web framework. Gechev then gives you the lowdown on TypeScript with a crash course, so you can take advantage of Angular in its native, statically typed environment. You'll next move on to see how to use Angular dependency injection, plus how Angular router and forms, and Angular pipes, are designed to work for your projects today and in the future. You'll be aligned with the vision and techniques of the one Angular, and be ready to start building quick and efficient Angular applications. You'll know how to

take advantage of the latest Angular features and the core, stable APIs you can depend on. You'll be ready to confidently plan your future with the Angular framework. Style and approach In this book, Minko Gechev continues his direct style of sharing knowledge about Angular that he's developed across more than 40 international presentations to Angular developers. First, Minko explains Google's vision of Angular to you, and then you dive into a clear tutorial to work with Angular that's aligned with Google's vision of Angular.

This is a different book format for game development -- unlike anything you have seen. As I create a generic game in html5 using phaser.js framework, **you develop your own game** by simply following and translating my easy concepts into your own game design. **When you complete this workbook, unlike other game development books, you will have your own game, not a game of the author's.** For example, if you have never created an online game in html5 and JavaScript, you might like to start with chapters 1 through 3 while a seasoned game developer might like chapters 4, 8, 11 and the appendix. The workbook's **appendix is a resource dictionary with all the open-source free assets on the Internet.** Each chapter guides you in [my decision/design process](http://www.stephen-gose.com) you see why I am choosing various business and software results -- all of this in well-commented source code so you can get it right away. In summary, you complete your own exciting game in your selected genre using the free open source Phaser JavaScript Gaming Framework and other JavaScript tools following this step-by-step workbook. The power of the Phaser JavaScript Framework is yours.

Easy Learning Design Patterns JavaScript coding patterns and best practices. If you're an experienced developer looking to solve problems related to objects, functions, inheritance, and other language-specific categories, the abstractions and code templates in this guide are idea that includes practical advice for implementing each pattern discussed, along with several hands-on examples.ECMAScript 6 (ES6). This book provides a highly practical look at ES6, This book takes a user-friendly approach to covering ES6 Javascript design patterns. Its concise presentation means that in a short space of time, you will get a good introduction to various design patterns and actual application case examples.1. Strategy Pattern Principle 2. Strategy Pattern Case3. Composition Pattern Principle4. Composition Pattern Case5. Singleton Pattern Principle6. Singleton Pattern Case7. Template Pattern Principle8. Template Pattern Case9. Factory Pattern Principle10. Factory Pattern Case11. Builder Pattern Principle12. Builder Pattern Case13. Adapter Pattern Principle14. Adapter Pattern Case15. Facade Pattern Principle16. Facade Pattern Case17. Decorator Pattern Principle18. Decorator Pattern Case19. Shallow Clone Pattern Principle20. Clone Pattern Case21. Bridge Pattern Principle22. Bridge Pattern Case23. FlyWeight Pattern Principle24. FlyWeight Pattern Case25. Chain Pattern Principle26. Chain Pattern Case27. Command Pattern Principle28. Command Pattern Case29. Iterator Pattern Principle30. Iterator Pattern Case31. Mediator Pattern Principle32. Mediator Pattern Case33. Memento Pattern Principle34. Memento Pattern Case35. Observer Pattern Principle36. Observer Pattern Case37. Visitor Pattern Principle38. Visitor Pattern Case39. State Pattern Principle40. State

Pattern Case41. Proxy Pattern Principle42. Proxy Pattern Case
No matter how much experience you have with JavaScript, odds are you don't fully understand the language. This concise yet in-depth guide takes you inside scope and closures, two core concepts you need to know to become a more efficient and effective JavaScript programmer. You'll learn how and why they work, and how an understanding of closures can be a powerful part of your development skillset. Like other books in the "You Don't Know JS" series, Scope and Closures dives into trickier parts of the language that many JavaScript programmers simply avoid. Armed with this knowledge, you can achieve true JavaScript mastery. Learn about scope, a set of rules to help JavaScript engines locate variables in your code Go deeper into nested scope, a series of containers for variables and functions Explore function- and block-based scope, "hoisting", and the patterns and benefits of scope-based hiding Discover how to use closures for synchronous and asynchronous tasks, including the creation of JavaScript libraries
Phaser.js Game Design Workbook
Speed up web development with the powerful features and benefits of JavaScript
Environmental Impact Statement
Decoding JavaScript
Object-Oriented JavaScript
Server-side web development made easy with Node 14 using practical examples
Mastering JavaScript and ES6 to Its Fullest, 2nd Edition
Explore the Underscore.js library by example using a test-driven development approach About This Book Understand and learn to apply functional programming principles using the built-in functions of Underscore.js Leverage and reuse Underscore.js-based code to create code that targets client, server, or database contexts Take Underscore.js further by reusing code between client and server and by learning about other closely related libraries Who This Book Is For If you are a developer with fundamental JavaScript knowledge and want to use modern JavaScript libraries to extend your functional programming skills, then Underscore.js is an important library you should be familiar with. What You Will Learn Reference and call Underscore.js functions using a modern JavaScript development workflow Apply Underscore.js to JavaScript arrays, objects, and functions Take advantage of object-oriented or functional programming techniques with Underscore.js Leverage Underscore.js to create code that targets client, server, or database contexts Extend Underscore.js functionality with other closely related libraries Reuse Underscore.js-based code between client and server applications Prepare for the upcoming JavaScript standard ECMAScript 6 and support older browsers In Detail Underscore.js is one of the most popular modern JavaScript libraries used for functional programming. It can be used as a base for building complex JavaScript applications in a sustainable manner and for building other JavaScript libraries. It embraces functional programming principles but is not opinionated and can be used with imperative, object-oriented, functional, or other programming styles. This book explores how to use Underscore.js to power your code and understand

modern JavaScript development concepts while applying a lightweight and efficient workflow to build applications. The book starts with an incremental Underscore.js introduction by exploring key JavaScript concepts. You will then explore the basic features of Underscore.js in action and establish a lightweight development workflow that allows the provided examples to be guided by tests. The book then covers the functionality of Underscore.js with in-depth examples and explanations for understanding and applying the Underscore.js API. You'll also learn how to use Underscore.js as a base for your own modules and libraries within an object-oriented or functional programming style, and will be able to explore Underscore.js use cases in different environments. Eventually, you'll learn about libraries that are closely related with Underscore.js, how to share code between client and server, and how to prepare for the upcoming JavaScript standard ECMAScript 6. Style and approach This book takes an example-driven approach to describing some of the essential JavaScript concepts and practices that are useful for building sustainable applications.

Take advantage of JavaScript's power to build robust web-scale or enterprise applications that are easy to extend and maintain. By applying the design patterns outlined in this practical book, experienced JavaScript developers will learn how to write flexible and resilient code that's easier—yes, easier—to work with as your code base grows. JavaScript may be the most essential web programming language, but in the real world, JavaScript applications often break when you make changes. With this book, author Eric Elliott shows you how to add client- and server-side features to a large JavaScript application without negatively affecting the rest of your code. Examine the anatomy of a large-scale JavaScript application Build modern web apps with the capabilities of desktop applications Learn best practices for code organization, modularity, and reuse Separate your application into different layers of responsibility Build efficient, self-describing hypermedia APIs with Node.js Test, integrate, and deploy software updates in rapid cycles Control resource access with user authentication and authorization Expand your application's reach through internationalization

No matter how much experience you have with JavaScript, odds are you don't fully understand the language. As part of the "You Don't Know JS" series, this compact guide focuses on new features available in ECMAScript 6 (ES6), the latest version of the standard upon which JavaScript is built. Like other books in this series, You Don't Know JS: ES6 & Beyond dives into trickier parts of the language that many JavaScript programmers either avoid or know nothing about. Armed with this knowledge, you can achieve true JavaScript mastery. With this book, you will: Learn new ES6 syntax that eases the pain points of common programming idioms Organize code with iterators, generators, modules, and classes Express async flow control with Promises combined with generators Use collections to work more efficiently with data in structured ways Leverage new API helpers, including Array, Object, Math, Number, and String Extend your program's capabilities through meta programming Preview features likely coming to JS beyond ES6

There's no doubt that the JavaScript ecosystem changes fast. Not only are new tools and frameworks introduced and developed at a rapid rate, the language itself has undergone big changes with the introduction of ES2015 (aka ES6). Understandably, many articles have been written complaining about how difficult it is to learn modern JavaScript development these days. We're aiming to minimize that confusion

with this set of books on modern JavaScript. This book provides an introduction to many of the powerful new JavaScript language features that were introduced in ECMAScript 2015, as well as features introduced in ECMAScript 2016 and 2017. It also takes a look at the features planned for ECMAScript 2018 in this rapidly evolving language. It contains: New Keywords: let and const by Aurelio de Rosa Using Map, Set, WeakMap, WeakSet by Kyle Pennell New Array.* and Array.prototype.* Methods by Aurelio de Rosa New String Methods by Aurelio de Rosa New Number Methods by Aurelio de Rosa ES6 Arrow Functions: Fat and Concise Syntax in JavaScript by Kyle Pennell Symbols and Their Uses by Nilson Jacques How to Use Proxies by Craig Buckler Destructuring Assignment by Craig Buckler ES6 Generators and Iterators: a Developer' Guide by Byron Houwens Object-oriented JavaScript: A Deep Dive into ES6 Classes by Jeff Mott Understanding ES6 Modules by Craig Buckler An Overview of JavaScript Promises by Sandeep Panda JavaScript Decorators: What They Are and When to Use Them by Graham Cox Enhanced Object Literals by Craig Buckler Introduction to the Fetch API by Ludovico Fischer ES6 (ES2015) and Beyond: Understanding JavaScript Versioning by James Wright What's New in ES2017: Async Functions, Improved Objects, and More by Craig Buckler What's New in ES2018 by Craig Buckler This book is for all front-end developers who wish to improve their JavaScript skills. You'll need to be familiar with HTML and CSS and have a reasonable level of understanding of JavaScript in order to follow the discussion.

Simply ES6

Solve complex computational web problems using machine learning

Easy Learning Design Patterns ES6+ Javascript

Gatsby: The Definitive Guide

A strong cup of functions, objects, combinators, and decorators

Switching to Angular

Game development guide using Phaser JavaScript Game Framework

ECMAScript 6 (ES6), also known as ECMAScript 2015, brings new functionality and features to the table that developers have been wanting for a long time. The wait is over, and with help from ECMAScript 6 Succinctly by Matthew Duffield, you can now develop all of these features. You can also target browsers that don't even support ES6 yet using a transpiler. A compiler translates one language to another, such as C# to MSIL, while a transpiler converts one version of a language to another, such as ES6 to ES5. Learn everything you need to know about object-oriented JavaScript with this comprehensive guide. Enter the world of cutting-edge development! About This Book This book has been updated to cover all the new object-oriented features introduced in ECMAScript 6 It makes object-oriented programming accessible and understandable to web developers Write better and more maintainable JavaScript code while exploring interactive examples that can be used in your own scripts Who This Book Is For This book is ideal for

new to intermediate JavaScript developers who want to prepare themselves for web development problems solved by object-oriented JavaScript! What You Will Learn Apply the basics of object-oriented programming in the JavaScript environment Use a JavaScript Console with complete mastery Make your programs cleaner, faster, and compatible with other programs and libraries Get familiar with Iterators and Generators, the new features added in ES6 Find out about ECMAScript 6's Arrow functions, and make them your own Understand objects in Google Chrome developer tools and how to use them Use a mix of prototypal inheritance and copying properties in your workflow Apply reactive programming techniques while coding in JavaScript In Detail JavaScript is an object-oriented programming language that is used for website development. Web pages developed today currently follow a paradigm that has three clearly distinguishable parts: content (HTML), presentation (CSS), and behavior (JavaScript). JavaScript is one important pillar in this paradigm, and is responsible for the running of the web pages. This book will take your JavaScript skills to a new level of sophistication and get you prepared for your journey through professional web development. Updated for ES6, this book covers everything you will need to unleash the power of object-oriented programming in JavaScript while building professional web applications. The book begins with the basics of object-oriented programming in JavaScript and then gradually progresses to cover functions, objects, and prototypes, and how these concepts can be used to make your programs cleaner, more maintainable, faster, and compatible with other programs/libraries. By the end of the book, you will have learned how to incorporate object-oriented programming in your web development workflow to build professional JavaScript applications. Style and approach Filled with practical instructions, the book shows you how to implement object-oriented features of JavaScript in the real world. The to-the-point nature of the book will benefit developers who are looking for a fast-paced guide to learn object-oriented JavaScript.

Dispels the myth that JavaScript is a "baby" language and demonstrates why it is the scripting language of choice used in the design of millions of Web pages and server-side applications Quickly covers JavaScript basics and then moves on to more advanced topics such as object-oriented programming, XML, Web services, and remote scripting Addresses the many issues that Web application developers face, including internationalization, security, privacy, optimization, intellectual property issues, and obfuscation Builds on the reader's basic understanding of HTML, CSS, and the Web in general This book is also available as part of the 4-book JavaScript and Ajax Wrox Box (ISBN: 0470227818). This 4-book set includes: Professional JavaScript for Web Developers (ISBN: 0764579088) Professional Ajax 2nd edition (ISBN: 0470109491) Professional Web 2.0 Programming (ISBN: 0470087889) Professional Rich Internet Applications: Ajax and Beyond (ISBN: 0470082801)

Fast-track your web development skills to build high performance SPA with Angular 2 and beyond About This Book Up to date with the latest API changes introduced by Angular 2 and 4 Get familiar with the

improvements to directives, change detection, dependency injection, router, and more Understand Angular's new component-based architecture Start using TypeScript to supercharge your Angular applications Who This Book Is For Do you want to jump in at the deep end of Angular? Or perhaps you're interested assessing the changes to AngularJS before moving over? If so, then "Getting Started with Angular" is the book for you. To get the most out of the book, you'll need to be familiar with AngularJS 1.x, and have a good understanding of JavaScript. What You Will Learn Understand the changes made from AngularJS with side-by-side code samples to help demystify the Angular learning curve Start working with Angular's new method of implementing directives Use TypeScript to write modern, powerful Angular applications Dig in to the change detection method, and other architectural changes to make sure you know what's going on under the hood of Angular Get to work with the new router in Angular Use the new features of Angular, including pipes, and the updated features such as forms, services, and dependency injection Learn about the server-side rendering in Angular to keep your new applications SEO-friendly Enhance your applications using Ahead-of-Time compilation and Web Workers In Detail I'm delighted to see this new update and hope it helps you build amazing things with Angular. - Misko Hevery, Creator of AngularJS and Angular Angular is the modern framework you need to build performant and robust web applications. This book is the quickest way to upgrade your AngularJS knowledge to the brave new world of Angular, and get grips with the framework. It starts with an overview putting the changes of the framework in context with version 1. After that, you will be taken on a TypeScript crash-course so you can take advantage of Angular in its native, statically-typed environment. You'll explore the new change detection mechanism in detail, how directives and components have changed, how you create applications with Angular, and much more. Next, you'll understand how to efficienly develop forms, use the router, implement communication with HTTP services, and transform data with custom pipes. Finally, we will take a look at the Angular's Ahead-of-Time compiler, angular-cli and other such tools that help us build professional applications. By the end of the book, you'll be ready to start building quick and efficient Angular applications compatible with v2 and v4, that take advantage of all the new features on offer. This book is up to date for the 2.4 release and is compatible with the 4.0 release as well. Style and approach Starting with a comparison between Angular versions, this book is filled with side-by-side code examples to help highlight the changes. Each chapter then looks at major changes to the framework and is filled with small examples and sample code to get you started.
JavaScript Allongé
React, Building Modern Web Applications
An In-Depth Guide for Programmers
ES6 for Humans
JavaScript for Impatient Programmers

Programming Language Explorations

You Don't Know JS: Scope & Closures

End to end solutions for IoT enthusiasts and web developers About This Book Leverage the capability of IoT with the combination of Raspberry Pi 3 and JavaScript (ES5/ES6) Develop a health monitoring device along with some cool projects like Smart Agriculture & Raspberry Pi 3 based surveillance. A practical book which will help you build Mobile/Web/Desktop apps that will show how to manage and monitor data from sensors and actuators in real time. Who This Book Is For This book targets IoT enthusiasts and web developers who would like to build IoT-based applications with Raspberry Pi, Arduino and JavaScript. Some knowledge about electronics and familiarity with programming concepts (JavaScript - ES5/ES6) is expected. What You Will Learn Integrate sensors and actuators with the cloud and control them for your Smart Weather Station. Develop your very own Amazon Alexa integrating with your IoT solution Define custom rules and execute jobs on certain data events using IFTTT Build a simple surveillance solutions using Amazon Recognition & Raspberry Pi 3 Design a fall detection system and build a notification system for it. Use Amazon Rekognition for face detection and face recognition in your Surveillance project In Detail In this world of technology upgrades, IoT is currently leading with its promise to make the world a more smarter and efficient place. This book will show you how to build simple IoT solutions that will help you to understand how this technology works. We would not only explore the IoT solution stack, but we will also see how to do it with the world's most misunderstood programming language - JavaScript. Using Raspberry Pi 3 and JavaScript (ES5/ES6) as the base to build all the projects, you will begin with learning about the fundamentals of IoT and then build a standard framework for developing all the applications covered in this book. You will then move on to build a weather station with temperature, humidity and moisture sensors and further integrate Alexa with it. Further, you will build a smart wearable for understanding the concept of fall detection. You will then extend it with the 'If This Then That' (IFTTT) rules engine to send an email on fall detection. Finally, you will be working with the Raspberry Pi 3 camera module and surveillance with a bit of facial detection using Amazon Rekognition platform. At the end of the book, you will not only be able to build standalone exciting IoT applications but also learn how you can extend your projects to another level. Style and Approach This book will follow a project based approach where each chapter will teach the readers to build a standalone project. It will not only guide you to build exciting projects but will also teach you to extend your project to another level.

Mastering advanced JavaScript to build modern next-generation web applications. KEY FEATURES ? A simplified explanation of complex concepts to create powerful and flexible web applications. ? Learn testing JavaScript code, regular expressions, fetching data, and many more with ES6. ? A full-fledged section dedicated to developing an application using JavaScript. DESCRIPTION Decoding JavaScript will take the users on an eventful journey of simplifying and understanding advanced concepts of JavaScript. Since JavaScript is the core programming language for almost every interaction on the web, this book will make it easier for readers to develop modern cutting-edge web applications. The book begins with a quick recap of the fundamental JavaScript (JS) concepts like the syntax of JS, data types, operators, conditionals, looping, functions, arrays, objects, and so on. The readers will

also explore the handy Chrome Developers' Tools. This book will also help readers learn and implement important concepts like how to connect to the servers, fetching data like images, user information, videos, etc. from the server, and displaying it on the web page. Besides that, users will learn about impactful concepts like testing JavaScript code, regular expressions, and exploring the popular ES6 and the versions beyond. Most importantly, this book will help you with the best JavaScript practices followed by companies like Google, Facebook, Twitter, etc. to develop a live application right from scratch. WHAT YOU WILL LEARN ? Build dynamic web applications interacting with servers using Vanilla. ? Improve code efficiency by learning advanced concepts of JavaScript. ? Get acquainted with best practices adopted by industry leaders, including Google and Facebook. ? Get access to work with popular libraries like ReactJS, jQuery, Angular, Ember, and Vue. WHO THIS BOOK IS FOR This book is for aspiring web developers and fairly experienced JavaScript developers who want to create modern web and server applications. Prior knowledge of HTML and CSS is essential to begin with this book. TABLE OF CONTENTS 1. Introduction to JavaScript 2. The Developer's Tools 3. Functions 4. Arrays 5. Objects 6. ES6 7. Classes 8. Callbacks and Promises 9. AJAX and Interacting with Servers 10. Developing a Live Application! 11. Storing Data in Browsers 12. Debugging and Error Handling 13. Testing and Test Frameworks 14. Regular Expressions 15. Life after ES6 16. Tips and Tricks

Learn all the new ES6 features and be amongst the most prominent JavaScript developers who can write efficient JS programs as per the latest standards!About This Book- Learn a powerful approach to writing object-oriented JavaScript code using ES6- Create and use ES6 modules to learn to write smart, modularized JavaScript code- The book will take you step-by-step through a wide array of examples, giving you tips on how to make the best use of the latest ES6 featuresWho This Book Is ForIf you are a JavaScript developer with basic development, and now want to learn about the latest features in order to develop better client-side programs with JavaScript, then this book is for you.What You Will Learn- Explore the usage of new syntaxes introduced by ES6- Use the new prototype-based features introduced by ES6- Execute ES6 in an old non-supported ES6 environment- Write asynchronous code using promise to facilitate the writing of better asynchronous code that is easier to read and maintain- Create and understand the usage of iterators, iterables, and generators- Get to know object-oriented programming and create objects using classes- Build proxies using the ES6 proxy API and understand its uses- Create JavaScript libraries using ES6 modulesIn DetailECMAScript 6 is the new edition to the ECMAScript language, whose specifications are inherited by JavaScript. ES6 gives a vast makeover to JavaScript by adding new syntaxes and APIs to write complex applications and libraries that are easier to debug and maintain. ES6 aims to keep JavaScript accessible for casual developers, even after adding so many new features.This book will provide step-by-step instructions on how to apply ES6 features instead of old JavaScript hacks and methods.The book will start by introducing all the built-in objects of ES6 and how to create ES6 custom Iterators. Next, it will teach you how to write asynchronous code in a synchronous style using ES6.Moving on, the book will teach how to use Reflect API to inspect and manipulate object properties. Next, it teaches how to create proxies, and use it to intercept and customize operations performed on objects.Finally, it explains old modular programming techniques such as IIFE, CommonJS, AMD, and UMD and also compares

it with ES6 modules and how ES6 modules can increase the performance of websites when used.Style and approachThis book is a pragmatic guide that takes you through the ES6 APIs and other features in a conversational and easy-to-follow style. Each topic is explained with examples and use cases.

Speaking JavaScriptAn In-Depth Guide for Programmers"O'Reilly Media, Inc."

The Latest Standard of JavaScript: ES2015 and Beyond

ES6 Javascript Object Oriented Design Pattern

Master ES6, ES7, and ES8

Practical ES6

Refactoring JavaScript

Expert Data Visualization

A Simple Guide for the Not-so-Simple JavaScript Concepts, Libraries, Tools, and Frameworks (English Edition)

Solve practical real-world problems using JavaScript and Node.js About This Book Learn the concepts of Node.js to gain a high-level understanding of the Node.js execution model Build an interactive web application with MongoDB and Redis and create your own JavaScript modules that work both on the client side and server side Familiarize yourself with the new features of Node.js and JavaScript with this exclusive step-by-step guide Who This Book Is For This book is for developers who want to learn JavaScript and Node.js. Previous experience with programming is desired, but no JavaScript or Node.js knowledge is required. The book focuses mostly on web development, such as networking, serving dynamic pages, and real-time client-server communication. What You Will Learn Understand which problems Node.js best solves Write idiomatic JavaScript and Node.js code Build web applications and command-line tools Minimise complexity and efficiently solve difficult problems Test and deploy Node.js applications Work with persistent data Implement real-time client-server applications Integrate .NET and Node.js code In Detail Node.js is an open source, cross-platform runtime environment that allows you to use JavaScript to develop server-side web applications. This short guide will help you develop applications using JavaScript and Node.js, leverage your existing programming skills from .NET or Java, and make the most of these other platforms through understanding the Node.js programming model. You will learn how to build web applications and APIs in Node, discover packages in the Node.js ecosystem, test and deploy your Node.js code, and more. Finally, you will discover how to integrate Node.js and .NET code. Style and approach This is a step-by-step and practical guide to Node.js for .Net developers. It covers the fundamentals relating to typical applications. The focus is on providing the practical skills required to develop applications, with a summary of the key concepts covered.

Как решить проблемы front-end-разработчиков и сделать их жизнь более счастливой? Нужно всего лишь

познакомиться с возможностями React! Только так вы сможете быстро выйти на новый уровень и получить не только моральное, но и материальное удовлетворение от веб-разработки. Успешные пользовательские интерфейсы должны быть визуально интересными, быстрыми и гибкими. React ускоряет тяжелые веб-приложения, улучшая поток данных между компонентами UI. Сайты начинают эффективно и плавно обновлять визуальные элементы, сводя к минимуму время на перезагрузку страниц. Перед вами труд, над которым на протяжении полутора лет работало более дюжины человек. Тщательно отобранные примеры и подробные комментарии позволяют разработчикам перейти на React быстро, чтобы затем эффективно создавать веб-приложения, используя всю мощь JavaScript. ВНУТРИ: • Основы React • Создание полнофункциональных веб-приложений с маршрутизацией • Тестирование • Оптимизация приложений React «Эта книга — лучший способ разобраться в React.js». Джон Сонмез, автора книги "Путь программиста" «Азат — один из самых авторитетных источников в области программирования. Эта книга выходит за рамки начального уровня и глубоко погружает в основы и архитектуру React». Эрик Хэнчетт, автор книги «Ember.js Cookbook» «React быстро — универсальный источник информации для читателя, который желает освоить React с его экосистемой инструментов, концепций и библиотек». Питер Купер, редактор «JavaScript Weekly» «Эта книга — отличный ресурс для изучения React. Четко и по делу. Я буду пользоваться ей в работе над своим следующим приложением». Натан Бэйли, полностековый разработчик, SpringboardAuto.com

JavaScript Allongé solves two important problems for the ambitious JavaScript programmer. First, JavaScript Allongé gives you the tools to deal with JavaScript bugs, hitches, edge cases, and other potential pitfalls. There are plenty of good directions for how to write JavaScript programs. If you follow them without alteration or deviation, you will be satisfied. Unfortunately, software is a complex thing, full of interactions and side-effects. Two perfectly reasonable pieces of advice when taken separately may conflict with each other when taken together. An approach may seem sound at the outset of a project, but need to be revised when new requirements are discovered. When you "leave the path" of the directions, you discover their limitations. In order to solve the problems that occur at the edges, in order to adapt and deal with changes, in order to refactor and rewrite as needed, you need to understand the underlying principles of the JavaScript programming language in detail. You need to understand why the directions work so that you can understand how to modify them to work properly at or beyond their original limitations. That's where JavaScript Allongé comes in. JavaScript Allongé is a book about programming with functions, because JavaScript is a programming language built on flexible and powerful functions. JavaScript Allongé begins at the beginning, with values and expressions, and builds from there to discuss types, identity, functions, closures, scopes, and many more subjects up to working with classes and

instances. In each case, JavaScript Allongé takes care to explain exactly how things work so that when you encounter a problem, you'll know exactly what is happening and how to fix it. Second, JavaScript Allongé provides recipes for using functions to write software that is simpler, cleaner, and less complicated than alternative approaches that are object-centric or code-centric. JavaScript idioms like function combinators and decorators leverage JavaScript's power to make code easier to read, modify, debug and refactor, thus avoiding problems before they happen. JavaScript Allongé teaches you how to handle complex code, and it also teaches you how to simplify code without dumbing it down. As a result, JavaScript Allongé is a rich read releasing many of JavaScript's subtleties, much like the Café Allongé beloved by coffee enthusiasts everywhere. License: CC BY-SA 3.0 Source is available from Github * https://github.com/justinkelly/javascript-allonge
Learn ES6 best practices for code optimization and organization and walk through practical, common examples of how to implement complete components of your applications. While this book covers the basic concepts of modern JavaScript, it primarily focuses on the new syntax, data-types, functionalities, and everything else that's new in ES6, the latest standard of JavaScript. You'll examine how to use ES6 in functional programming and explore the new more modular and object-oriented approach to JavaScript. This book will help you sharpen and upgrade your JavaScript language skills so you to easily explore modern ES6 based frameworks or libraries such as ReactJS, ReactNative, Angular4 and Vue.js. ES6 for Humans is a complete guide to writing ES6 and will enable you to start taking advantage of this exciting new version of JavaScript. What You'll Learn Use all the new features added to JavaScript Compare ES5 and ES6 in varied situations Refresh your core JavaScript fundamentals Understand the modular and object-oriented approach to JavaScript Who this Book Is For Any Javascript developer who wants to fully understand and dive into the new features of ES6/ES2015. Developers with some background in programming, preferably in JavaScript. A basic understanding of coding concepts and exposure to object-oriented programming is expected.
Programming JavaScript Applications
The Definitive Guide for JavaScript Developers
Practical Modern JavaScript
Professional JavaScript for Web Developers
Learning Underscore.js
Eloquent JavaScript
Writing Modern JavaScript with ES5, ES6, and Beyond

Programming Language Explorations is a tour of several modern programming languages in use today. The book teaches fundamental language concepts using a language-by-language approach. As each language is presented, the authors introduce new concepts as they appear, and revisit familiar ones,

comparing their implementation with those from languages seen in prior chapters. The goal is to present and explain common theoretical concepts of language design and usage, illustrated in the context of practical language overviews. Twelve languages have been carefully chosen to illustrate a wide range of programming styles and paradigms. The book introduces each language with a common trio of example programs, and continues with a brief tour of its basic elements, type system, functional forms, scoping rules, concurrency patterns, and sometimes, metaprogramming facilities. Each language chapter ends with a summary, pointers to open source projects, references to materials for further study, and a collection of exercises, designed as further explorations. Following the twelve featured language chapters, the authors provide a brief tour of over two dozen additional languages, and a summary chapter bringing together many of the questions explored throughout the text. Targeted to both professionals and advanced college undergraduates looking to expand the range of languages and programming patterns they can apply in their work and studies, the book pays attention to modern programming practice, covers cutting-edge languages and patterns, and provides many runnable examples, all of which can be found in an online GitHub repository. The exploration style places this book between a tutorial and a reference, with a focus on the concepts and practices underlying programming language design and usage. Instructors looking for material to supplement a programming languages or software engineering course may find the approach unconventional, but hopefully, a lot more fun.

No matter how much experience you have with JavaScript, odds are you don't fully understand the language. As part of the "You Don't Know JS" series, this compact guide explores JavaScript types in greater depth than previous treatments by looking at type coercion problems, demonstrating why types work, and showing you how to take advantage of these features. Like other books in this series, You Don't Know JS: Types & Grammar dives into trickier parts of the language that many JavaScript programmers simply avoid or assume don't exist (like types). Armed with this knowledge, you can achieve true JavaScript mastery. With this book you will: Get acquainted with JavaScript's seven types: null, undefined, boolean, number, string, object, and symbol Understand why JavaSript's unique array, string, and number characteristics may delight or confound you Learn how natives provide object wrappers around primitive values Dive into the coercion controversy—and learn why this feature is useful in many cases Explore various nuances in JavaScript syntax, involving statements, expressions, and other features

Breathe life into your data by learning how to use D3.js V4 to visualize information About This Book Create complex visualizations powered by D3.js and open data. Provides an extensive set of visualizations that explore all the functionality provided by D3.js V4. Shows how to set up an easy–to-use environment to create stunning visualizations. Who This Book Is For The typical target audience of this book is JavaScript developers, designers, and visual artists who have some basic JavaScript programming knowledge and who now want to master pro-level techniques to create interactive data visualizations using web standards which work on desktop as well as mobile devices. What You Will Learn Learn how D3.js works to declaratively define visualizations. Create charts from scratch by using SVG and the D3.js APIs See how to prepare data for easy visualization using D3.js. Visualize hierarchical data using chart types provided by D3.js Explore the different options provided by D3.js to visualize linked data such as graphs. Spice up your visualizations by adding interactivity and animations. Learn how to use D3.js to visualize and interact with Geo- and Gis-related information sources. Create visualization by streaming data over WebSockets In Detail Do you want to make sense of your data? Do you want to create interactive charts, data trees, info-graphics, geospatial charts, and maps efficiently? This book is your ideal choice to master interactive data visualization with D3.js V4. The book includes a number of extensive examples that to help you hone your skills with data visualization. Throughout nine chapters these examples will help you acquire a clear practical understanding of the various techniques, tools and functionality provided by D3.js. You will first setup your D3.JS development environment and learn the basic patterns needed to visualize your data. After that you will learn techniques to optimize different processes such as working with selections; animating data transitions; creating graps and charts, integrating external resources (static as well as streaming); visualizing information

on maps; working with colors and scales; utilizing the different D3.js APIs; and much more. The book will also guide you through creating custom graphs and visualizations, and show you how to go from the raw data to beautiful visualizations. The extensive examples will include working with complex and realtime data streams, such as seismic data, geospatial data, scientific data, and more. Towards the end of the book, you will learn to add more functionality on top of D3.js by using it with other external libraries and integrating it with Ecmascript 6 and Typescript Style and approach This book will have a real–world, case-study approach, where you will be given data sets from different domains. These data sets will have different visualization goals; some might need 2D or 3D charts, some might need automated workflows, others might require interactive maps. While you fulfill these goals, you will learn different techniques and best practices, which will enable you to perform data visualization tasks on your own

Get the definitive guide on Gatsby, the JavaScript framework for building blazing fast websites and applications. Used by Nike, Costa Coffee, and other companies worldwide, Gatsby is emerging as one of the key technologies in the Jamstack (JavaScript, APIs, and markup) ecosystem. With this comprehensive guide, you'll learn how to architect, build, and deploy Gatsby sites independently or with CMSs, commerce systems, and other data sources. Author Preston So begins by showing you how to set up a Gatsby site from scratch. From there, youâ??ll learn ways to use Gatsbyâ??s declarative rendering and GraphQL API, build complex offline-enabled sites, and continuously deploy Gatsby sites on a variety of platforms, including Gatsby Cloud. Discover how Gatsby integrates with many data sources and plug-ins Set up, configure, and architect Gatsby sites using Gatsby's CLI, React, JSX, and GraphQL with high performance out of the box Build an independent Gatsby site based on Markdown and data- and content-driven Gatsby sites that integrate with CMSs and commerce platforms Deploy Gatsby sites with full CI/CD and test coverage on a variety of platforms, including Netlify, Vercel, and Gatsby Cloud

Getting Started with Angular

Dive into ES6 and the Future of JavaScript

Align with Angular version 5 and Google's long-term vision for Angular

Ecmascript 6 Succinctly

Turning Bad Code Into Good Code

Understanding ECMAScript 6

Build standalone exciting IoT projects with Raspberry Pi 3 and JavaScript (ES5/ES6)

This book makes JavaScript less challenging to learn for newcomers, by offering a modern view that is as consistent as possible. Highlights: Get started quickly, by initially focusing on modern features. Test-driven exercises and quizzes available for most chapters (sold separately). Covers all essential features of JavaScript, up to and including ES2019. Optional advanced sections let you dig deeper. No prior knowledge of JavaScript is required, but you should know how to program.

To get the most out of modern JavaScript, you need learn the latest features of its parent specification, ECMAScript 6 (ES6). This book provides a highly practical look at ES6, without getting lost in the specification or its implementation details. Armed with practical examples, author Nicolas Bevacqua shows you new ways to deal with asynchronous flow control, declare objects or functions, and create proxies or unique sets, among many other features. The first title in Bevacqua's Modular JavaScript series, Practical Modern JavaScript prepares JavaScript and Node.js developers for applied lessons in modular design, testing, and deployment in subsequent books. This book explains: How JavaScript and its standards development process have evolved Essential ES6 changes, including arrow functions, destructuring, let and const Class syntax for declaring object prototypes, and the new Symbol primitive How to handle flow

control with Promises, iterators, generators, and async functions ES6 collection built-in types for creating object maps and unique sets How and when to use the new Proxy and Reflect built-ins Changes to Array, Math, numbers, strings, Unicode, and regular expressions, and other improvements since ES5

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.

Simply ES6 is a great book for people who love JavaScript and everything to do with it. This book contains lessons on ES6 for both novice and advanced JavaScript practitioners, Web-developers, React-Native users, and everyone else who uses JavaScript. No matter where you stand, if you read this book you will learn something that will help you improve your JavaScript skills. This is a great book for you if you are a few months into your web-development training. This book will save you years and years of frustrated lessons. The lessons are well structured, each section begins with a brief introduction, followed by tons of examples to follow and play with; and each chapter ends with a practice project explained in extensive detail, followed by a summary of that chapter to really condense the skills learned. If you love JavaScript then this book is for you! If you want to master JavaScript then this book is for you! The 2nd Edition includes significant updates, 2 new chapters were added for Building CLI programs with ES6, and Introduction to Machine Learning, AI, Data Science, Robotics, TensorFlow, Hardware Programming with JavaScript.

Practical Internet of Things with JavaScript

You Don't Know JS: ES6 & Beyond

Dive Into Es6 and the Future of JavaScript

Learning Ecmascript 6

Write clean, robust, and maintainable web and server code using functional JavaScript, 2nd Edition

Exploring Immune Variability in Susceptibility to Tuberculosis Infection in Humans

Learning Node.js for .NET Developers

To get the most out of modern JavaScript, you need learn the latest features of its parent specification, ECMAScript 6 (ES6). This book provides a highly practical look at ES6, without getting lost in the specification or its implementation details. Armed with practical examples, author Nicolas Bevacqua shows you new ways to deal with asynchronous flow control, declare objects or functions, and create proxies or unique sets, among many other features. The first title in Bevacqua's Modular JavaScript series, Practical Modern JavaScript prepares JavaScript and Node.js developers for applied lessons in modular design, testing, and deployment in subsequent books. This book explains:

How JavaScript and its standards development process have evolved Essential ES6 changes, including arrow functions, destructuring, let and const Class syntax for declaring object prototypes, and the new Symbol primitive How to handle flow control with Promises, iterators, generators, and async functions ES6 collection built-in types for creating object maps and unique sets How and when to use the new Proxy and Reflect built-ins Changes to Array, Math, numbers, strings, Unicode, and regular expressions, and other improvements since ES5 Explore the functional programming paradigm and the different techniques for developing better algorithms, writing more concise code, and performing seamless testing Key FeaturesExplore this second edition updated to cover features like async functions and transducers, as well as functional reactive programmingEnhance your functional programming (FP) skills to build web and server apps using JavaScriptUse FP to enhance the modularity, reusability, and performance of appsBook Description Functional programming is a paradigm for developing software with better performance. It helps you write concise and testable code. To help you take your programming skills to the next level, this comprehensive book will assist you in harnessing the capabilities of functional programming with JavaScript and writing highly maintainable and testable web and server apps using functional JavaScript. This second edition is updated and improved to cover features such as transducers, lenses, prisms and various other concepts to help you write efficient programs. By focusing on functional programming, you'll not only start to write but also to test pure functions, and reduce side effects. The book also specifically allows you to discover techniques for simplifying code and applying recursion for loopless coding. Gradually, you'll understand how to achieve immutability, implement design patterns, and work with data types for your application, before going on to learn functional reactive programming to handle complex events in your app. Finally, the book will take you through the design patterns that are relevant to functional programming. By the end of this book, you'll have developed your JavaScript skills and have gained knowledge of the essential functional programming techniques to program effectively. What you will learnSimplify JavaScript coding using function composition, pipelining, chaining, and transducingUse declarative coding as opposed to imperative coding to write clean JavaScript codeCreate more reliable code with closures and immutable dataApply practical solutions to complex programming problems using recursionImprove your functional code using data types, type checking, and immutabilityUnderstand advanced functional programming concepts such as lenses and prisms for data accessWho this book is for This book is for JavaScript developers who want to enhance their programming skills and build efficient web applications. Frontend and backend developers who use various JavaScript frameworks and libraries like React, Angular, or Node.js will also find the book helpful. Working knowledge of ES2019 is required to grasp the concepts covered in the book easily.

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.

How often do you hear people say things like this? "Our JavaScript is a mess, but we're thinking about using [framework of the month]." Like it or not, JavaScript is not going away. No matter what framework or "compiles-to-js" language or library you use, bugs and performance concerns will always be an issue if the underlying quality of your JavaScript is poor. Rewrites, including porting to the framework of the month, are terribly expensive and unpredictable. The bugs won't magically go away, and can happily reproduce themselves in a new context. To complicate things further, features will get dropped, at least temporarily. The other popular method of fixing your JS is playing "JavaScript Jenga," where each developer slowly and carefully takes their best guess at how the out-of-control system can be altered to allow for new features, hoping that this doesn't bring the whole stack of blocks down. This book provides clear guidance on how best to avoid these pathological approaches to writing JavaScript: Recognize you have a problem with your JavaScript quality. Forgive the code you have now, and the developers who made it. Learn repeatable, memorable, and time-saving refactoring techniques. Apply these techniques as you work, fixing things along the way. Internalize these techniques, and avoid writing as much problematic code to begin with. Bad code doesn't have to stay that way. And making it better doesn't have to be intimidating or unreasonably expensive.

Node.js Web Development
Mastering JavaScript Functional Programming
Simplifying JavaScript
You Don't Know JS: Types & Grammar
React   .   -   React, JSX, Redux   GraphQL
Rediscovering JavaScript
A Modern Introduction to Programming

Build scalable web applications using Node.js, Express.js, and the latest ECMAScript techniques, along with deploying applications with AWS and Docker with this updated fifth edition Key Features • Learn backend web programming with the JavaScript stack • Explore best practices, right from configuring and building web servers to deploying them on a production cloud hosting system: AWS using Docker and Terraform • Work through the different stages of developing robust and scalable apps using Node.js 14 Book Description Node.js is the leading choice of server-side web development platform, enabling developers to use the same tools and paradigms for both server-side and client-side software. This updated fifth edition of Node.js Web Development focuses on the new features of Node.js 14, Express 4.x, and ECMAScript, taking you through modern concepts, techniques, and best practices for using Node.js. The book starts by helping you get to grips with the concepts of building server-side web apps with Node.js. You'll learn how to develop a complete Node.js web app, with a backend database tier to help you explore several databases. You'll deploy the app to real web servers, including a cloud

hosting platform built on AWS EC2 using Terraform and Docker Swarm, while integrating other tools such as Redis and NGINX. As you advance, you'll learn about unit and functional testing, along with deploying test infrastructure using Docker. Finally, you'll discover how to harden Node.js app security, use Let's Encrypt to provision the HTTPS service, and implement several forms of app security with the help of expert practices. With each chapter, the book will help you put your knowledge into practice throughout the entire life cycle of developing a web app. By the end of this Node.js book, you'll have gained practical Node.js web development knowledge and be able to build and deploy your own apps on a public web hosting solution. What you will learn • Install and use Node.js 14 and Express 4.17 for both web development and deployment • Implement RESTful web services using the Restify framework • Develop, test, and deploy microservices using Docker, Docker Swarm, and Node.js, on AWS EC2 using Terraform • Get up to speed with using data storage engines such as MySQL, SQLite3, and MongoDB • Test your web applications using unit testing with Mocha, and headless browser testing with Puppeteer • Implement HTTPS using Let's Encrypt and enhance application security with Helmet Who this book is for If you're looking for an alternative to the 'P' languages (Perl, PHP, and Python), or if you want to get started with server-side web development with JavaScript programming, or if you want a deep dive into deploying services to cloud hosting, this Node.js book is for you. A rudimentary understanding of JavaScript and web application development is a must before you get started with this book. Table of Contents • About Node.js • Setting Up Node.js • Exploring Node.js Modules • HTTP Servers and Clients • Your First Express Application • Implementing the Mobile-First Paradigm • Data Storage and Retrieval • Authenticating Users with a Microservice • Dynamic Client/Server Interaction with Socket.IO • Deploying Node.js Applications to Linux Servers • Deploying Node.js microservices with Docker • Deploying a Docker Swarm to AWS EC2 with Terraform • Unit Testing and Functional Testing • Security in Node.js Applications
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 exprssive. 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 reusableclasses, 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).