Test Driving Javascript Applications Rapid Confident Maintainable Code

Everyone is creating Web pages for fun and profit -- now, no matter how little programming experience you have, you can get into the action as well with JavaScript For Dummies, 2nd Edition. This easy-to-use reference takes the mystery out of creating vibrant, attention-getting Web pages by using the latest version of JavaScript. Use the design tips and real-life sample JavaScript code you find in this book to wake up your Web pages and keep those Web surfers coming back for more! Inside, find helpful advice on how to Add JavaScript scripts to existing HTML code to create easy-to-use forms for users to fill out Take advantage of the latest JavaScript features available in Netscape Navigator 4.0 and Microsoft Internet Explorer 4.0 Integrate other programming languages, such as C++ and Java, with JavaScript to create powerful multimedia applications Test and debug your scripts with ease Explore options for creating full-blown client-server applications with JavaScript Test-drive the latest cool JavaScript tools Build Vue apps the right way using Vue CLI 3. Understand how the building blocks of Vue CLI 3 work including npm, webpack, babel, eslint, plugins, GUI, testing, and SCSS. Import third-party libraries and maintain your project. Key FeaturesLearn to work with Vue CLI 3 both on the command line and with a GUIManage VueJS apps, settings, Vue plugins, and third-party libraries Learn how to build Vue apps from scratch using webpack, babel, ES6, vue-router, Jest, Cypress, SCSS, and GitBook Description The sprawling landscape of various tools in JavaScript web development is becoming overwhelming. This book will show you how Vue CLI 3 can help you take back control of the tool chain. To that end, we'll begin by configuring webpack, utilizing HMR, and using single-file .vue components. We'll also use SCSS, ECMAScript, and TypeScript. We'll unit test with Jest and perform E2E testing with Cypress. This book will show you how to configure Vue CLI as your default way of building Vue projects. You'll discover the reasons behind using webpack, babel, eslint, and other modern JavaScript toolchain technologies. You'll learn about the inner workings of each through the lens of Vue CLI 3. We'll

explore the extendibility of Vue CLI with the built-in settings, and various core and third-party plugins. Vue CLI helps you work with Vue components, routers, directives, and services in the Vue ecosystem. While learning these concepts, you'll examine the evolution of JavaScript. You'll learn about use of npm, IIFEs, modules in JavaScript, Common.js modules, task runners, npm scripts, module bundlers, and webpack. You'll get familiar with the reasons why Vue CLI 3 is set up the way it is. You'll also learn to perform linting with ESLint and Prettier. Towards the end, we'll introduce you to working with styles and SCSS. Finally, we'll show you how to deploy your very own Vue project on Github Pages. What you will learnWork with nvm, install Node.js and npm, use Vue CLI 3 with no configuration, via the command line and the graphical user interfaceBuild a Vue project from scratch using npm and webpack, and learn about hot module replacementWork with Babel settings, configurations, and presetsWork with Vue plugins, including testing plugins such as Jest and CypressWrite, run, and watch unit and E2E tests using TDD assertions in the red-green-refactor cycleWork with Vue router and use, nested, lazy-loading, and dynamic routesAdd SCSS to your projects and work with third-party Vue pluginsDeploy your Vue apps to Github PagesWho this book is for This book is for existing web developers and developers who are new to web development. You must be familiar with HTML, CSS, and JavaScript programming. Basic knowledge of the command line will be helpful but is not necessary.

Presents information on using HTML5 to create dynamic, data-rich Web pages, covering such topics as geolocation, 2D drawing, Web storages, and Web workers.

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.

Simple, Rapid, Effective, and Scalable

A Brain-Friendly Guide

ARC User

Node.js for Embedded Systems

Building a Web Application Using HTML, CSS, and JavaScript

A JavaScript and jQuery Developer's Guide

InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects.

Summary Ext JS in Action, Second Edition teaches Ext JS from the ground up. You'll start with a quick overview of the framework and then explore the core components by diving into complete examples, engaging illustrations, and crisp, straightforward explanations. You'll feel like you have an expert guide right at your elbow teaching you important Ext techniques and offering insight into its inner workings. Along the way, you'll learn the best practices for building and scaling full-featured web applications, including how to customize and build Ext widgets. Fully revised for Ext JS 4.0. About this Book Ext JS is a mature JavaScript web application framework that provides modern UI widgets and an advanced MVC architecture. It helps you manage tedious boilerplate and minimize hand-coded HTML and browser incompatibilities. Ext JS in Action, Second Edition starts with a quick overview of the framework and then explores the core components by diving into complete examples, engaging illustrations, and clear explanations. You'll feel like you have an expert guide at your elbow as you learn the best practices for building and scaling full-featured web applications. A working knowledge of JavaScript is assumed. No prior experience with Ext JS is required. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside Building professional web apps with Ext JS Stamping out DOM fragments with templates Customizing and building Ext widgets Masterful UI design Fully revised for Ext JS version 4.0 About the Authors Jay Garcia is a well-known member of the Ext JS community and a contributor to the

framework. He wrote Sencha Touch in Action. Grgur Grisogono founded SourceDevCon in London, UK and Split, Croatia. Jacob Andresen is a consultant specializing in large scale internet applications. Table of Contents PART 1 INTRODUCTION TO EXT JS 4.0 A framework apart DOM manipulation Components and containers PART 2 EXT JS COMPONENTS Core UI components Exploring layouts Forms in Ext JS The data store The grid panel Taking root with trees Drawing and charting Remote method invocation with Ext Direct Drag-and-drop PART 3 BUILDING AN APPLICATION Class system foundations Building an application

Why reinvent the wheel every time you run into a problem with JavaScript? This cookbook is chock-full of code recipes that address common programming tasks, as well as techniques for building web apps that work in any browser. Just copy and paste the code samples into your project—you'll get the job done faster and learn more about JavaScript in the process. You'll also learn how to take advantage of the latest features in ECMAScript 5 and HTML5, including the new cross-domain widget communication technique, HTML5's video and audio elements, and the drawing canvas. You'll find recipes for using these features with JavaScript to build high-quality application interfaces. Create interactive web and desktop applications Work with JavaScript objects, such as String, Array, Number, and Math Use JavaScript with Scalable Vector Graphics (SVG) and the canvas element Store data in various ways, from the simple to the complex Program the new HTML5 audio and video elements Implement concurrent programming with Web Workers Use and create jQuery plug-ins Use ARIA and JavaScript to create fully accessible rich internet applications

A quick problem-solving guide to automated testing web applications with Selenium WebDriver in JavaScript. It contains hundreds of solutions to real-world testing problems, with clear explanations and ready-to-run Selenium test scripts that you can use in your own projects.

A Step-by-Step Guide to XPages Application Development and the XSP Language

Rapid, Confident, Maintainable Code

Unleash the power of TDD by implementing real world examples under .NET environment and JavaScript

JavaScript for Modern Web Development

High Performance JavaScript

InfoWorld

Automated testing will help you write high-quality software in less time, with more confidence, fewer bugs, and without constant manual oversight. Testing JavaScript Applications is a guide to building a comprehensive and reliable JS application testing suite, covering both how to write tests and how JS testing

tools work under the hood. Automated testing will help you write high-quality software in less time, with more confidence, fewer bugs, and without constant manual oversight. Testing JavaScript Applications is a guide to building a comprehensive and reliable JS application testing suite, covering both how to write tests and how JS testing tools work under the hood. Testing JavaScript Applications teaches you how to create JavaScript tests that are targeted to your application's specific needs. Through dozens of detailed code samples that you can apply to your own projects, you'll learn how to write tests for both backend and frontend applications, covering the full spectrum of testing types. Taking on the role of a developer for a bakery's web store, you'll learn to validate different aspects including databases, third-party services, and how to spin-up a real browser instance to interact with the entire application. All examples are delivered using the popular testing tool Jest and modern packages of the JavaScript ecosystem. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

JavaScript has evolved quite a bit since its earliest days, from a relatively basic scripting language to a full-blown programming language in its own right. You can use JavaScript to create even more breathtakingly cool Web sites than ever before. You've probably seen Web sites with the following features: Images that change when your mouse moves over them Slide-show animations Input forms with pop-up messages that help you fill in the fields correctly Customized messages that welcome repeat visitors All of these features (and much more) can be created with JavaScript. The thing is, JavaScript isn't easy to use. The JavaScript language itself has become more complex than its earlier incarnations – but that's where his new, improved, better-tasting edition of JavaScript For Dummies comes in! Even if you're not a crackerjack programmer, you can use the techniques and sample scripts in this book to create interactive, "intelligent" Web pages bursting with animated effects. JavaScript For Dummies, 3rd Edition, gives you all you need to know to get started with JavaScript, plus some really cool JavaScript tricks, all explained from the point of view of the first-time JavaScript programmer. Here are just a few of the topics you'll find covered: Understanding JavaScript programming concepts Writing your first script Sampling browser cookies Making your pages interactive with button events and mouse rollovers Fiddling with forms and frames Automating your Web site Top Ten lists on online resources, common mistakes (and how to avoid them), and debugging your scripts Appendixes on JavaScript reserved words, color values, special characters, and the document object model reference JavaScript For Dummies, 3rd Edition, also includes a CD-ROM with trial versions of popular Web creations tools, such as HomeSite, Dreamweaver, NetObjects ScriptBuilder, and SurfMap JavaScript. So if you've worked with HTML before but want to add more flexibility and punch to your pages, or even if you've never written a stick of code in your life but are eager to hop on the JavaScript bandwagon, JavaScript For Dummies, 3rd Edition, is the book for you.

For JavaScript developers working on increasingly large and complex projects, effective automated testing is crucial to success. Test-Driven JavaScript Development is a complete, best-practice guide to agile JavaScript testing and quality assurance with the test-driven development (TDD) methodology. Leading agile JavaScript developer Christian Johansen covers all aspects of applying state-of-the-art automated testing in JavaScript environments, walking readers through the entire development lifecycle, from project launch to application deployment, and beyond. Using real-life examples driven by unit tests, Johansen shows how to use TDD to gain greater confidence in your code base, so you can fearlessly refactor and build more robust, maintainable, and reliable JavaScript code at lower cost. Throughout, he addresses crucial issues ranging from code design to performance optimization, offering realistic solutions for developers, QA specialists, and testers. Coverage includes • Understanding automated testing and TDD • Building effective automated testing workflows • Testing code for both browsers and servers (using Node.js) • Using TDD to build cleaner APIs, better modularized code, and more robust software • Writing testable code • Using test stubs and mocks to test units in isolation • Continuously improving code through refactoring • Walking through the construction and automated testing of fully functional software The accompanying Web site, tddjs.com, contains all of the book's code listings and additional resources.

Offering an in-depth exploration of AJAX technologies, this book is ideal for programmers with or without a Web programming background. It provides readers with a detailed code-rich walkthrough on writing AJAX programs, and introduces key AJAX techniques and program models.

JavaScript For Dummies?

Selenium Webdriver Recipes in Node.js

JavaScript Cookbook

The Technology Driving Disruption in the Financial Services Industry

Practical Test-Driven Development Using C# 7

RSpec Essentials

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.

When traditional web development techniques don't cut it, try React. Use React to create highly interactive web pages faster and with fewer errors. With a little JavaScript experience under your belt, you'll be up and running in no time creating dynamic web applications. Craft isolated components that make your apps easier to develop and maintain, with plenty of guidance on best practices. Set up automated tests, and make pages render fast for your users. See how to use your React skills to integrate with other front-end technologies when needed. Dive right into React by defining components, the basic building blocks of a React application. Integrate modern JavaScript language features such as classes and arrow functions in your app. Analyze the relationships in your data to isolate state, and sync the data model with what your users see. Once you're familiar with how a React application works, organize your code base with modules. Configure a production build and deliver your app as efficiently as possible with Webpack. Master testing with React-specific advice and tools to catch the most bugs with the least amount of code. Learn the basics of the Redux library. Define actions and manage an immutable central state with reducers, then connect Redux to your React components to build even larger and more complex interfaces. Package your React code as a standalone widget so anyone can use it in their own applications. Reuse existing JavaScript code in your React components, and build a new React view on top of an existing data model shared with a legacy application. When you finish this book, you'll be well on your way to solving your front-end problems with React. What You Need: Node.js 6.x or later, and a modern web browser.

Capitalist Nigger is an explosive and jarring indictment of the black race. The book asserts that the Negroid race, as naturally endowed as any other, is culpably a non-productive race, a consumer race that depends on other communities for its culture, its language, its feeding and its clothing. Despite enormous natural resources, blacks are economic slaves because they lack the

'devil-may-care' attitude and the 'killer instinct' of the Caucasian, as well as the spider web mentality of the Asian. A Capitalist Nigger must embody ruthlessness in pursuit of excellence in his drive towards achieving the goal of becoming an economic warrior. In putting forward the idea of the Capitalist Nigger, Chika Onyeani charts a road to success whereby black economic warriors employ the 'Spider Web Doctrine' - discipline, self-reliance, ruthlessness - to escape from their victim mentality. Born in Nigeria, Chika Onyeani is a journalist, editor and former diplomat.

For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

Capitalist Nigger

JavaScript For Dummies

Volume 4

Practical Test-Driven Development using C# 7

Front-end Code, Untangled

Computerworld

With Learning JavaScript Design Patterns, you'll learn how to write beautiful, structured, and maintainable JavaScript by applying classical and modern design patterns to the language. If you want to keep your code efficient, more manageable, and up-to-date with the latest best practices, this book is for you. Explore many popular design patterns, including Modules, Observers, Facades, and Mediators. Learn how modern architectural patterns—such as MVC, MVP, and MVVM—are useful from the perspective of a modern web application developer. This book also walks experienced JavaScript developers through modern module formats, how to namespace code effectively, and other essential topics. Learn the structure of design patterns and how they are written Understand different pattern categories, including creational, structural, and behavioral Walk through more than 20 classical and modern design patterns in JavaScript Use several options for writing modular code—including the Module pattern, Asyncronous Module Definition (AMD), and CommonJS Discover design patterns implemented in the jQuery library Learn popular design patterns for writing maintainable jQuery plug-ins "This book should be in every JavaScript developer's hands. It's the go-to book on JavaScript patterns that will be read and referenced many times in the future."—Andrée Hansson, Lead Front-End Developer, presis!

Do less work when testing your Python code, but be just as expressive, just as elegant, and just as readable. The pytest testing framework helps you write tests quickly and keep them readable and maintainable - with no boilerplate code. Using a robust yet simple fixture model, it's just as easy to write small tests with pytest as it is to scale up to complex functional testing for applications, packages, and libraries. This book shows you how. For Python-based projects, pytest is the undeniable choice to test your code if you're looking for a full-featured, API-independent, flexible, and extensible testing framework. With a full-bodied fixture model that is unmatched in any other tool, the pytest framework gives you powerful

features such as assert rewriting and plug-in capability - with no boilerplate code. With simple step-by-step instructions and sample code, this book gets you up to speed quickly on this easy-to-learn and robust tool. Write short, maintainable tests that elegantly express what you're testing. Add powerful testing features and still speed up test times by distributing tests across multiple processors and running tests in parallel. Use the built-in assert statements to reduce false test failures by separating setup and test failures. Test error conditions and corner cases with expected exception testing, and use one test to run many test cases with parameterized testing. Extend pytest with plugins, connect it to continuous integration systems, and use it in tandem with tox, mock, coverage, unittest, and doctest. Write simple, maintainable tests that elegantly express what you're testing and why. What You Need: The examples in this book are written using Python 3.6 and pytest 3.0. However, pytest 3.0 supports Python 2.6, 2.7, and Python 3.3-3.6.

Develop testable, modular, and maintainable Ruby software for the real world using RSpec About This Book Explore the concept of testability and how to implement tests that deliver the most value Maximize the quality of your Ruby code through a wide variety of tests Master the real-world tradeoffs of testing through detailed examples supported by in-depth discussion Who This Book Is For This book is aimed at the software engineer who wants to make their code more reliable and their development process easier. It is also aimed at test engineers who need to automate the testing of complex systems. Knowledge of Ruby is helpful, but even someone new to the language should find it easy to follow the code and tests. What You Will Learn Identify a unit of software for the purposes of testing Manage test states with hooks, fixtures, and mocks Handle external web services in tests using various techniques Configure RSpec flexibly and cleanly using support code and environment variables Interact with rich web apps in tests using Capybara Build the right feature with behavior-driven development Customize matchers and failure messages Verify correct development and production environments In Detail This book will teach you how to use RSpec to write high-value tests for real-world code. We start with the key concepts of the unit and testability, followed by hands-on exploration of key features. From the beginning, we learn how to integrate tests into the overall development process to help create high-quality code, avoiding the dangers of testing for its own sake. We build up sample applications and their corresponding tests step by step, from simple beginnings to more sophisticated versions that include databases and external web services. We devote three chapters to web applications with rich JavaScript user interfaces, building one from the ground up using behavior-driven development (BDD) and test-driven development (TDD). The code examples are detailed enough to be realistic while simple enough to be easily understood. Testing concepts, development methodologies, and engineering tradeoffs are discussed in detail as they arise. This approach is designed to foster the reader's ability to make well-informed decisions on their own. Style and approach This comprehensive tutorial is packed with real-world examples of testing with RSpec. The most important features of RSpec are introduced in the early chapters and are used in examples of growing complexity in the following chapters. Concepts and methodologies are discussed in detail.

Develop applications for the real world with a thorough software testing approach Key Features Develop a thorough understanding of TDD and how it can help you develop

simpler applications with no defects using C# and JavaScript Adapt to the mindset of writing tests before code by incorporating business goals, code manageability, and other factors Make all your software units and modules pass tests by analyzing failed tests and refactoring code as and when required Book Description Test-Driven Development (TDD) is a methodology that helps you to write as little as code as possible to satisfy software requirements, and ensures that what you've written does what it's supposed to do. If you're looking for a practical resource on Test-Driven Development this is the book for you. You've found a practical end-to-end guide that will help you implement Test-Driven Techniques for your software development projects. You will learn from industry standard patterns and practices, and shift from a conventional approach to a modern and efficient software testing approach in C# and JavaScript. This book starts with the basics of TDD and the components of a simple unit test. Then we look at setting up the testing framework so that you can easily run your tests in your development environment. You will then see the importance of defining and testing boundaries, abstracting away third-party code (including the .NET Framework), and working with different types of test double such as spies, mocks, and fakes. Moving on, you will learn how to think like a TDD developer when it comes to application development. Next, you'll focus on writing tests for new/changing requirements and covering newly discovered bugs, along with how to test JavaScript applications and perform integration testing. You'll also learn how to identify code that is inherently un-testable, and identify some of the major problems with legacy applications that weren't written with testability in mind. By the end of the book, you'll have all the TDD skills you'll need and you'll be able to re-enter the world as a TDD expert! What you will learn The core concepts of TDD Testing in action with a real-world case study in C# and JavaScript using React Writing proper Unit Tests and testable code for your application Using different types of test double such as stubs, spies, and mocks Growing an application guided by tests Exploring new developments on a green-field application Mitigating the problems associated with writing tests for legacy applications Modifying a legacy application to make it testable Who this book is for This book is for software developers with a basic knowledge of Test Driven Development (TDD) who want a thorough understanding of how TDD can benefit them and the applications they produce. The examples in this book are in C#, and you will need a basic understanding of C# to work through these examples.

Find Problems Early, Fix Them Quickly, Code with Confidence

JavaScript & jQuery: The Missing Manual

Rediscovering JavaScript

Head First HTML5 Programming

Build Faster Web Application Interfaces

Test-Driving JavaScript ApplicationsTest-Driving JavaScript ApplicationsRapid, Confident, Maintainable CodePragmatic Bookshelf

If you know HTML, CSS, and JavaScript, you already have the tools you need to develop Android applications. This hands-on book shows you how to use these open source web standards to design and build apps that can be adapted for any Android device -- without having to use Java. You'll learn how to create an Android-friendly web app on the platform of

your choice, and then convert it to a native Android app with the free PhoneGap framework. Discover why device-agnostic mobile apps are the wave of the future, and start building apps that offer greater flexibility and a broader reach. Learn the basics for making a web page look great on the Android web browser Convert a website into a web application, complete with progress indicators and more Add animation with jQTouch to make your web app look and feel like a native Android app Take advantage of client-side data storage with apps that run even when the Android device is offline Use PhoneGap to hook into advanced Android features -- including the accelerometer, geolocation, and alerts Test and debug your app on the Web under load with real users, and then submit the finished product to the Android Market This book received valuable community input through O'Reilly's Open Feedback Publishing System (OFPS). Learn more at http://labs.oreilly.com/ofps.html.

You work in a loop: write code, get feedback, iterate. The faster you get feedback, the faster you can learn and become a more effective developer. Test-Driven React helps you refine your React workflow to give you the feedback you need as quickly as possible. Write strong tests and run them continuously as you work, split complex code up into manageable pieces, and stay focused on what's important by automating away mundane, trivial tasks. Adopt these techniques and you'll be able to avoid productivity traps and start building React components at a stunning pace!

If you're like most developers, you rely heavily on JavaScript to build interactive and quick-responding web applications. The problem is that all of those lines of JavaScript code can slow down your apps. This book reveals techniques and strategies to help you eliminate performance bottlenecks during development. You'll learn how to improve execution time, downloading, interaction with the DOM, page life cycle, and more. Yahoo! frontend engineer Nicholas C. Zakas and five other JavaScript experts—Ross Harmes, Julien Lecomte, Steven Levithan, Stoyan Stefanov, and Matt Sweeney—demonstrate optimal ways to load code onto a page, and offer programming tips to help your JavaScript run as efficiently and quickly as possible. You'll learn the best practices to build and deploy your files to a production environment, and tools that can help you find problems once your site goes live. Identify problem code and use faster alternatives to accomplish the same task Improve scripts by learning how JavaScript stores and accesses data Implement JavaScript code so that it doesn't slow down interaction with the DOM Use optimization techniques to improve runtime performance Learn ways to ensure the UI is responsive at all times Achieve faster client-server communication Use a build system to minify files, and HTTP compression to deliver them to the browser

Python Testing with pytest

Ext JS in Action

React for Real

JavaScript for Impatient Programmers

Test-Driven Development with Python

Building Android Apps with HTML, CSS, and JavaScript

This compact syntax reference covers syntax and parameters central to JSON object definitions. You'll learn the syntax used in the JSON object definition language, logically

organized by topical chapters, and getting more advanced as chapters progress, covering structures and file formats which are best for use with HTML5. Furthermore, the JSON Quick Syntax Reference includes the key factors regarding the data footprint optimization work process, the in-lining of CSS and JS files, and why a data footprint optimization work process is important. What You'll Learn • Use the object definition syntax supported in JSON• Define a JSON content production workflow• Gain an understanding of the concepts and principles behind JSON object definitions• Use JSON code snippets and apply them in your web applications• Utilize the NetBeans, Android Studio, and Eclipse IDEs for your JSON coding Who This Book Is For Web developers, Android application developers, and user interface designers.

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.
Everything that we know about the world of finance is changing before us. Innovation is happening constantly, despite the protests of the traditional financial industry. With all the new technology that we have today, it is almost mind-blowing to think about the kind of technology that we will have in another ten years or so. The change is going to keep coming, the only thing we can do is get on board with it. This book introduces the basics of FinTech and equips readers with the knowledge to get on the cutting edge of age we live in today.
How can we build bridges from the digital world of the Internet to the analog world that surrounds us? By bringing accessibility to embedded components such as sensors and microcontrollers, JavaScript and Node.js might shape the world of physical computing as they did for web browsers. This practical guide shows hardware and software engineers, makers, and web developers how to talk in JavaScript with a variety of hardware platforms. Authors Patrick Mulder and Kelsey Breseman also delve into the basics of microcontrollers, single-board computers, and other hardware components. Use JavaScript to program microcontrollers with Arduino and Espruino Prototype IoT devices with the Tessel 2 development platform Learn about electronic input and output components, including sensors Connect microcontrollers to the Internet with the Particle Photon toolchain Run Node.js on single-board computers such as Raspberry Pi and Intel Edison Talk to embedded devices with Node.js libraries such as Johnny-Five, and remotely control the devices with Bluetooth Use MQTT as a message broker to connect devices across networks Explore ways to use robots as building blocks for shared experiences
Ajax, Rich Internet Applications, and Web Development for Programmers
Build and maintain Vue.js applications quickly with the

standard CLI
Level Up with Today's Web Technologies
JSON Quick Syntax Reference
Testing JavaScript Applications
Head First JavaScript Programming

By taking you through the development of a real web application from beginning to end, the second edition of this hands-on guide demonstrates the practical advantages of test-driven development (TDD) with Python. You'll learn how to write and run tests before building each part of your app, and then develop the minimum amount of code required to pass those tests. The result? Clean code that works. In the process, you'll learn the basics of Django, Selenium, Git, jQuery, and Mock, along with current web development techniques. If you're ready to take your Python skills to the next level, this book—updated for Python 3.6—clearly demonstrates how TDD encourages simple designs and inspires confidence. Dive into the TDD workflow, including the unit test/code cycle and refactoring Use unit tests for classes and functions, and functional tests for user interactions within the browser Learn when and how to use mock objects, and the pros and cons of isolated vs. integrated tests Test and automate your deployments with a staging server Apply tests to the third-party plugins you integrate into your site Run tests automatically by using a Continuous Integration environment Use TDD to build a REST API with a front-end Ajax interface Debunk the myth that JavaScript is not easily testable. Whether you use Node.js, Express, MongoDB, jQuery, AngularJS, or directly manipulate the DOM, you can test-drive JavaScript. Learn the craft of writing meaningful, deterministic automated tests with Karma, Mocha, and Chai. Test asynchronous JavaScript, decouple and properly mock out dependencies, measure code coverage, and create lightweight modular designs of both server-side and client-side code. Your investment in writing tests will pay high dividends as you create code that's predictable and cost-effective to change. Design and code JavaScript applications with automated tests. Writing meaningful tests is a skill that takes learning, some unlearning, and a lot of practice, and with this book, you'll hone that skill. Fire up the editor and get hands-on through practical exercises for effective automated testing and designing maintainable, modular code. Start by learning when and why to do manual testing vs. automated verification. Focus tests on the important things, like the pre-conditions, the invariants, complex logic, and gnarly edge cases. Then begin to design asynchronous functions using automated tests. Carefully decouple and mock out intricate dependencies such as the DOM, geolocation API, file and database access, and Ajax calls to remote servers. Step by step, test code that uses Node.js, Express, MongoDB, jQuery, and AngularJS. Know when and how to use tools such as Chai, Istanbul, Karma, Mocha, Protractor, and Sinon. Create tests with minimum effort and run them fast without having to spin up web servers or manually edit HTML pages to run in browsers. Then explore end-to-end testing to ensure all parts are wired and working well together.

Don't just imagine creating testable code, write it. What You Need: A computer with a text editor and your favorite browser. The book provides instructions to install the necessary automated testing-related tools. Develop applications for the real world with a thorough software testing approach Key Features Develop a thorough understanding of TDD and how it can help you develop simpler applications with no defects using C# and JavaScript Adapt to the mindset of writing tests before code by incorporating business goals, code manageability, and other factors Make all your software units and modules pass tests by analyzing failed tests and refactoring code as and when required Book Description Test-Driven Development (TDD) is a methodology that helps you to write as little as code as possible to satisfy software requirements, and ensures that what you've written does what it's supposed to do. If you're looking for a practical resource on Test-Driven Development this is the book for you. You've found a practical end-to-end guide that will help you implement Test-Driven Techniques for your software development projects. You will learn from industry standard patterns and practices, and shift from a conventional approach to a modern and efficient software testing approach in C# and JavaScript. This book starts with the basics of TDD and the components of a simple unit test. Then we look at setting up the testing framework so that you can easily run your tests in your development environment. You will then see the importance of defining and testing boundaries, abstracting away third-party code (including the .NET Framework), and working with different types of test double such as spies, mocks, and fakes. Moving on, you will learn how to think like a TDD developer when it comes to application development. Next, you'll focus on writing tests for new/changing requirements and covering newly discovered bugs, along with how to test JavaScript applications and perform integration testing. You'll also learn how to identify code that is inherently un-testable, and identify some of the major problems with legacy applications that weren't written with testability in mind. By the end of the book, you'll have all the TDD skills you'll need and you'll be able to re-enter the world as a TDD expert! What you will learn The core concepts of TDD Testing in action with a real-world case study in C# and JavaScript using React Writing proper Unit Tests and testable code for your application Using different types of test double such as stubs, spies, and mocks Growing an application guided by tests Exploring new developments on a green-field application Mitigating the problems associated with writing tests for legacy applications Modifying a legacy application to make it testable Who this book is for This book is for software developers with a basic knowledge of Test Driven Development (TDD) who want a thorough understanding of how TDD can benefit them and the applications they produce. The examples in this book are in C#, and you will need a basic understanding of C# to work through these examples.

IBM's Best-Selling Guide to XPages Development–Now Updated and Expanded for Lotus Notes/Domino 9.0.1 XPages instantly revolutionized

Notes/Domino application development, and the newest versions deliver unprecedented performance and flexibility. Now, the popular insider's guide to XPages development has been updated and expanded to reflect all these improvements, through IBM Notes/Domino 9.0.1 and beyond. Three key members of the IBM XPages team have brought together comprehensive knowledge for delivering outstanding solutions. They have added several hundred pages of new content, including four new chapters. Drawing on their unsurpassed experience, they present new tips, samples, and best practices reflecting the platform's growing maturity. Writing for both XPages newcomers and experts, they cover the entire project lifecycle, including problem debugging, performance optimization, and application scalability. This second edition of Mastering XPages fully addresses enhancements to the XPages data sources for Domino views and documents; the latest XPages mobile library; the new Domino Designer Server-Side JavaScript debugger; and improvements to integrated technologies such as Dojo and CKEditor. Nearly every chapter contains at least one downloadable sample application, offering extensive hands-on practice. This guide concludes with complete references to XSP tags, relevant Java/JavaScript classes, and XSP style classes. Coverage includes * Understanding XPages' development paradigm, tooling, runtime framework, and application architecture * Configuring Domino Designer and integrating XPages Extension Library * Constructing application logic and using data binding controls * Reading/writing Notes documents: from use cases to design properties * Using Views, including examples of accessing calendars via REST * Making the most of Notes/Domino 9.0's new DataView control * Coding: from the basics to fully customized behavior * Advanced scripting: AJAX, Dojo, @Functions, managed beans, and more * Extending the Rich Text Editor's functionality * Building and consuming new controls with Extensibility APIs * Taking web applications offline in the Notes client * Building mobile apps: controls, design patterns, and best practices * Debugging Server-Side JavaScript with Domino Designer 9.0 * Creating apps that look and work great–for local and global audiences * Systematically optimizing performance and scalability * Protecting data and users: leveraging Domino and Notes security models

The Problem Solving Guide to Selenium Webdriver in Javascript

Learning Test-Driven Development

HTML5 and CSS3

Mastering XPages

Vue CLI 3 Quick Start Guide

Test-Driven React

Your code is a testament to your skills as a developer. No matter what language you use, code should be clean, elegant, and uncluttered. By using test-driven development (TDD), you'll write code that's easy to understand, retains its elegance, and works for months, even years, to come. With this indispensable guide, you'll learn how to use TDD with three different languages: Go, JavaScript, and Python. Author Saleem Siddiqui

shows you how to tackle domain complexity using a unit test-driven approach. TDD partitions requirements into small, implementable features, enabling you to solve problems irrespective of the languages and frameworks you use. With Learning Test-Driven Development at your side, you'll learn how to incorporate TDD into your regular coding practice. This book helps you: Use TDD's divide-and-conquer approach to tame domain complexity Understand how TDD works across languages, testing frameworks, and domain concepts Learn how TDD enables continuous integration Support refactoring and redesign with TDD Learn how to write a simple and effective unit test harness in JavaScript Set up a continuous integration environment with the unit tests produced during TDD Write clean, uncluttered code using TDD in Go, JavaScript, and Python

What will you learn from this book? This brain-friendly guide teaches you everything from JavaScript language fundamentals to advanced topics, including objects, functions, and the browser's document object model. You won't just be reading—you'll be playing games, solving puzzles, pondering mysteries, and interacting with JavaScript in ways you never imagined. And you'll write real code, lots of it, so you can start building your own web applications. Prepare to open your mind as you learn (and nail) key topics including: The inner details of JavaScript How JavaScript works with the browser The secrets of JavaScript types Using arrays The power of functions How to work with objects Making use of prototypes Understanding closures Writing and testing applications What's so special about this book? We think your time is too valuable to waste struggling with new concepts. Using the latest research in cognitive science and learning theory to craft a multi-sensory learning experience, Head First JavaScript Programming uses a visually rich format designed for the way your brain works, not a text-heavy approach that puts you to sleep. This book replaces Head First JavaScript, which is now out of print.

This book is composed of a selection of articles from The 2021 World Conference on Information Systems and Technologies (WorldCIST'21), held online between 30 and 31 of March and 1 and 2 of April 2021 at Hangra de Heroismo, Terceira Island, Azores, Portugal. WorldCIST is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and challenges of modern information systems and technologies research, together with their technological development and applications. The main topics covered are: A) Information and Knowledge Management; B) Organizational Models and Information Systems; C) Software and Systems Modeling; D) Software Systems, Architectures, Applications and Tools; E) Multimedia Systems and Applications; F) Computer Networks, Mobility and Pervasive Systems; G) Intelligent and Decision Support Systems; H) Big Data Analytics and Applications; I) Human–Computer Interaction; J) Ethics, Computers &

Security; K) Health Informatics; L) Information Technologies in Education; M) Information Technologies in Radiocommunications; N) Technologies for Biomedical Applications.

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.

Test-Driving JavaScript Applications

Using Web Technologies to Build Connected Devices

Obey the Testing Goat: Using Django, Selenium, and JavaScript

FinTech

Master ES6, ES7, and ES8

The Road To Success – A Spider Web Doctrine

Testing JavaScript Applications teaches you how to implement an automated testing plan for JavaScript-based web applications. Summary Automated testing will help you write high-quality software in less time, with more confidence, fewer bugs, and without constant manual oversight. Testing JavaScript Applications is a guide to building a comprehensive and reliable JS application testing suite, covering both how to write tests and how JS testing tools work under the hood. You'll learn from Lucas de Costa, a core contributor to popular JS testing libraries, as he shares a quality mindset for making testing decisions that deliver a real contribution to your business. You'll benefit from informative explanations and diagrams, easily-transferable code samples, and useful tips on using the latest and most consolidated libraries and frameworks of the JavaScript ecosystem. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Automated testing is essential to delivering good JavaScript applications every time. A complete testing strategy needs to cover functions in isolation, integration between different parts of your code, and correctness from the end user's perspective. This book will teach you how to deliver reliable software quickly and confidently. About the book Testing JavaScript Applications teaches you how to implement an automated testing plan for JavaScript-based web applications. It describes practical testing strategies, covers useful tools and libraries, and explains how to foster a culture of quality. In this clearly-written, example-rich book, you'll explore approaches for both backend and frontend applications and learn how to validate your software much more quickly and reliably. What's inside Unit, end-to-end, and integration testing Managing test cost and complexity Practicing test-driven development Dealing with external dependencies Tools like like Jest and Cypress About the reader For junior JavaScript developers. About the author Lucas da Costa is a core maintainer of Chai and Sinon.JS, two of the most popular testing tools in the JavaScript ecosystem, and contributed to numerous other open-source projects, including

Jest. Table of Contents PART 1 - TESTING JAVASCRIPT APPLICATIONS 1 An introduction to automated testing 2 What to test and when? Part 2 - WRITING TESTS 3 Testing techniques 4 Testing backend applications 5 Advanced backend testing techniques 6 Testing frontend applications 7 The React testing ecosystem 8 Testing React applications 9 Test-driven development 10 UI-based end-to-end testing 11 Writing UI-based end-to-end tests PART 3 - BUSINESS IMPACT 12 Continuous integration and continuous delivery 13 A culture of quality

Beginner to Expert in Web development with JavaScript: From HTML to React-Redux KEY FEATURES - Acquire web development skills to build independent applications - Understand the basics of HTML, CSS, JavaScript, React and Redux - Create build beautiful applications using HTML, CSS, JavaScript, React and Redux - Learn how to debug and unit test your applications properly to build good end products - Follow best practices to write good quality code and build performant applications DESCRIPTION This book will take you on a complete journey of learning web development, starting right with the basics. The book begins with the history of web development and JavaScript, how it has evolved over these years, and how it still keeps growing with new features. Next, you will learn the basic pillars of web development - HTML, CSS, and JavaScript. You will learn about the functional, object-oriented programming and asynchronous behaviour, and how JavaScript provides for these. Empowered with the basics, you will proceed to learn the new features of JavaScript, ES2015, and the latest ES2019. Next, you will apply your learning to build a real application to see how the Web takes shape.At the end, you will also have an introductory section on ReactJS, one of the modern frameworks for UI development and also develop a simple weather application using React. You will be introduced to Redux as the state container for React applications. This book will conclude with an introductory look at additional topics which can be taken up to become a professional and in building enterprise level applications. WHAT WILL YOU LEARN By the end of the book, you will be building real web applications to put your knowledge to practice. This book introduces all the concepts to get started with web application development. To further excel in this field, you really need to practice by building a lot many applications, implementing your own ideas or imitating existing websites. Also remember to practice additional examples provided in the code bundle of the book to master this field. WHO THIS BOOK IS FOR This book can be used by people who are completely new to software development and want to get into front-end web development by starting from basics. This book can also be used by JavaScript users for a quick reference to the fundamentals of HTML, CSS, JS, and learn ReactJS with Redux, as well as the new features in JavaScript ES2019. Table of Contents 1. History of JS and how it has revolutionized web development 2. HTML: Creating Web Content 3. CSS: Making content beautiful 4. JavaScript Programming: Making application Interactive 5. Functional programming with JavaScript 6. Object-Oriented JavaScript 7. Asynchronous Programming 8. What's new in ES2019 JavaScript 9. Building an application with JavaScript 10. Debugging JavaScript Applications 11. Unit test automation 12. Build and Deploy an Application 13. JavaScript Best

Practices 14. Introduction to React 15. Building an application with React 16. State Management in React applications 17. Debugging, Testing, and Deploying React applications 18. What is next - for becoming a pro?
Test-Driven JavaScript Development
Building Web Apps with JavaScript
Learning JavaScript Design Patterns
Trends and Applications in Information Systems and Technologies