

Automating With Node Js

Create real-time server-side applications with this practical, step-by-step guide About This Book Learn about server-side JavaScript with Node.js and Node modules through the most up-to-date book on Node.js web development Understand website development both with and without the Connect/Express web application framework Develop both HTTP server and client applications Who This Book Is For This book is for anybody looking for an alternative to the "P" languages (Perl, PHP, and Python), or anyone looking for a new paradigm of server-side application development. You should have at least a rudimentary understanding of JavaScript and web application development. What You Will Learn Install and use Node.js for both development and deployment Use the Express application framework Configure Bootstrap for mobile-first theming Use data storage engines such as MySQL, SQLITE3, and MongoDB Understand user authentication methods, including OAuth, with third-party services Deploy Node.js to live servers, including microservice development with Docker Perform unit testing with Mocha Perform functional testing of the web application with CasperJS In Detail Node.js is a server-side JavaScript platform using an event driven, non-blocking I/O model allowing users to build fast and scalable data-intensive applications running in real time. Node.js Web Development shows JavaScript is not just for browser-side applications. It can be used for server-side web application development, real-time applications, microservices, and much more. This book gives you an excellent starting point, bringing you straight to the heart of developing web applications with Node.js. You will progress from a rudimentary knowledge of JavaScript and server-side development to being able to create and maintain your own Node.js application. With this book you'll learn how to use the HTTP Server and Client objects, data storage with both SQL and MongoDB databases, real-time applications with Socket.IO, mobile-first theming with Bootstrap, microservice deployment with Docker, authenticating against third-party services using OAuth, and much more. Style and Approach This book is a practical guide for anyone looking to develop striking and robust web applications using Node.js.

Many companies, from startups to Fortune 500 companies alike, use Node.js to build performant backend services. And engineers love Node.js for its approachable API and familiar syntax. Backed by the world's largest package repository, Node's enterprise foothold is only expected to grow. In this hands-on guide, author Thomas Hunter II proves that Node.js is just as capable as traditional enterprise platforms for building services that are observable, scalable, and resilient. Intermediate to advanced Node.js developers will find themselves integrating application code with a breadth of tooling from each layer of a modern service stack. Learn why running redundant copies of the same Node.js service is necessary Know which protocol to choose, depending on the situation Fine-tune your application containers for use in production Track down errors in a distributed setting to determine which service is at fault Simplify app code and increase performance by offloading work to a reverse proxy Build dashboards to monitor service health and throughput Find out why so many different tools are required when operating in an enterprise environment

Write fail-safe automation tests, device emulation, and browser automation using Puppeteer ' s Google-powered API Key FeaturesGet up and running with Puppeteer and discover best practices for automation testingAutomate your modern web applications using Jest and Mocha with PuppeteerGenerate screenshots using Puppeteer and find out how they can be used for UI regression testsBook Description Puppeteer is an open source web automation library created by Google to perform tasks such as end-to-end testing, performance monitoring, and task automation with ease. Using real-world use cases, this book will take you on a pragmatic journey, helping you to learn Puppeteer and implement best practices to take your automation code to the next level! Starting with an introduction to headless browsers, this book will take you through the foundations of browser automation, showing you how far you can get using Puppeteer to automate Google Chrome and Mozilla Firefox. You ' ll then learn the basics of end-to-end testing and understand how to create reliable tests. You ' ll also get to grips with finding elements using CSS selectors and XPath expressions. As you progress through the chapters, the focus shifts to more advanced browser automation topics such as executing JavaScript code inside the browser. You ' ll learn various use cases of Puppeteer, such as mobile devices or network speed testing, gauging your site ' s performance, and using Puppeteer as a web scraping tool. By the end of this UI testing book, you ' ll have learned how to make the most of Puppeteer ' s API and be able to apply it in your real-world projects. What you will learnUnderstand browser automation fundamentalsExplore end-to-end testing with Puppeteer and its best practicesApply CSS Selectors and XPath expressions to web automationDiscover how you can leverage the power of web automation as a developerEmulate different use cases of Puppeteer such as network speed tests and geolocationGet to grips with techniques and best practices for web scraping and web content generationWho this book is for The book is for QA engineers, testing professionals, and frontend web developers alike who want to perform end-to-end testing using Google's developer tools. Web developers who want to learn how to use Puppeteer for generating content, scraping websites, and evaluating website performance will also find this book useful. Although knowledge of Node.js isn ' t necessary, basic JavaScript knowledge will assist with understanding the concepts covered.

Learn how to build dynamic web applications with Express, a key component of the Node/JavaScript development stack. In this hands-on guide, author Ethan Brown teaches you the fundamentals through the development of a fictional application that exposes a public website and a RESTful API. You ' ll also learn web architecture best practices to help you build single-page, multi-page, and hybrid web apps with Express. Express strikes a balance between a robust framework and no framework at all, allowing you a free hand in your architecture choices. With this book, frontend and backend engineers familiar with JavaScript will discover new ways of looking at web development. Create webpage templating system for rendering dynamic data Dive into request and response objects, middleware, and URL routing Simulate a production environment for testing and development Focus on persistence with document databases, particularly MongoDB Make your resources available to other programs with RESTful APIs Build secure apps with authentication, authorization, and HTTPS Integrate with social media, geolocation, and other third-party services Implement a plan for launching and maintaining your app Learn critical debugging skills This book covers Express 4.0.

WhatsApp automation using node js

Node.js Web Development

Ensuring Reliable Code

Practical Node.js

Distributed Systems with Node.js

Sams Teach Yourself Node.js in 24 Hours

This book is for automation engineers who want to learn Selenium in Node.js to automate the web applications. It is assumed that reader has basic programming skills in JavaScript language. Whether you are a beginner or an experienced developer, this book will help you master the skills on Selenium in Node.js. The book starts with introduction of Selenium and then dives into key concepts as mentioned below. Launching browsers with Desired Capabilities, Element Identification, Assertions in Selenium in

Node.js, Interacting with elements in Selenium in Node.js, Basic Browser window automation, Sending keys in Selenium in Node.js, Synchronization in Selenium, Check if Element exists, Working with Tables using Selenium, Performing advanced actions using Selenium in Node.js, Executing JavaScript in Selenium in Node.js, Switching contexts, Common exceptions in Selenium, Frameworks in Selenium, Mocha - Unit testing framework Selenium gri

Create real-time applications using Node.js 10, Docker, MySQL, MongoDB, and Socket.IO with this practical guide and go beyond the developer's laptop to cover live deployment, including HTTPS and hardened security. Key Features Learn server-side JavaScript coding through the most up-to-date book on Node.js Explore the latest JavaScript features, and EcmaScript modules Walk through different stages of developing robust applications using Node.js 10 Book Description Node.js is a server-side JavaScript platform using an event-driven, non-blocking I/O model allowing users to build fast and scalable data-intensive applications running in real time. This book gives you an excellent starting point, bringing you straight to the heart of developing web applications with Node.js. You will progress from a rudimentary knowledge of JavaScript and server-side development to being able to create, maintain, deploy and test your own Node.js application. You will understand the importance of transitioning to functions that return Promise objects, and the difference between fs, fs/promises and fs-extra. With this book you'll learn how to use the HTTP Server and Client objects, data storage with both SQL and MongoDB databases, real-time applications with Socket.IO, mobile-first theming with Bootstrap, microservice deployment with Docker, authenticating against third-party services using OAuth, and use some well known tools to beef up security of Express 4.16 applications. What you will learn Install and use Node.js 10 for both development and deployment Use the Express 4.16 application framework Work with REST service development using the Restify framework Use data storage engines such as MySQL, SQLITE3, and MongoDB Use User authentication methods with OAuth2 Perform Real-time communication with the front-end using Socket.IO Implement Docker microservices in development, testing and deployment Perform unit testing with Mocha 5.x, and functional testing with Puppeteer 1.1.x Work with HTTPS using Let's Encrypt, and application security with Helmet Who this book is for This book is for anybody looking for an alternative to the "P" languages (Perl, PHP, and Python), or anyone looking for a new paradigm of server-side application development. You should have at least a rudimentary understanding of JavaScript and web application development. Summary Node.js in Action, Second Edition is a thoroughly revised book based on the best-selling first edition. It starts at square one and guides you through all the features, techniques, and concepts you'll need to build production-quality Node applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology You already know JavaScript. The trick to mastering Node.js is learning how to build applications that fully exploit its powerful asynchronous event handling and non-blocking I/O features. The Node server radically simplifies event-driven real-time apps like chat, games, and live data analytics, and with its incredibly rich ecosystem of modules, tools, and libraries, it's hard to beat! About the Book Based on the bestselling first edition, Node.js in Action, Second Edition is a completely new book. Packed with practical examples, it teaches you how to create high-performance web servers using JavaScript and Node. You'll master key design concepts such as asynchronous programming, state management, and event-driven programming. And you'll learn to put together MVC servers using Express and Connect, design web APIs, and set up the perfect production environment to build, lint, and test. What's Inside Mastering non-blocking I/O The Node event loop Testing and deploying Web application templating About the Reader Written for web developers with intermediate JavaScript skills. About the Authors The Second Edition author team includes Node masters Alex Young, Bradley Meck, Mike Cantelon, and Tim Oxley, along with original authors Marc Harter, T.J. Holowaychuk, and Nathan Rajlich. Table of contents PART 1 - WELCOME TO NODE Welcome to Node.js Node programming fundamentals What is a Node web application? PART 2 - WEB DEVELOPMENT WITH NODE Front-end build systems Server-side frameworks Connect and Express in depth Web application templating Storing application data Testing Node applications Deploying Node applications and maintaining uptime PART 3 - BEYOND WEB DEVELOPMENT Writing command-line applications Conquering the desktop with Electron

In this book, we take you on a fun, hands-on and pragmatic journey to learning Node.js, Express and MongoDB development. You'll start building your first Node.js app within minutes. Every chapter is written in a bite-sized manner and straight to the point as I don't want to waste your time (and most certainly mine) on the content you don't need. In the end, you will have the skills to create a blog app and deploy it to the Internet. In the course of this book, we will cover: Chapter 1: Introduction Chapter 2: Introduction to npm & Express Chapter 3: Beginning our Blog Project Chapter 4: Templating Engines Chapter 5: Introduction to MongoDB Chapter 6: Applying MongoDB to our Project Chapter 7: Uploading an Image with Express Chapter 8: Introduction to Express Middleware Chapter 9: Refactoring to MVC Chapter 10: User Registration Chapter 11: User Authentication with Express Sessions Chapter 12: Showing Validation Errors Chapter 13: Relating Post Collection with User Collection Chapter 14: Adding a WYSIWYG Editor Chapter 15: Using MongoDB Atlas Chapter 16: Deploying Web Apps on Heroku The goal of this book is to teach you Node.js, Express and MongoDB development in a manageable way without overwhelming you. We focus only on the essentials and cover the material in a hands-on practice manner for you to code along. About the Reader No previous knowledge on Node.js development required, but you should have basic programming knowledge. About the Author Greg Lim is a technologist and author of several programming books. Greg has many years in teaching programming in tertiary institutions and he places special emphasis on learning by doing.

**Raspberry Pi 3 Home Automation Projects
Mastering CloudForms Automation
Case Studies of Software Test Automation
Building Bots with Node. Js
Building Javascript Based Scalable Software
The Build Tool for JavaScript**

Getting started with the processes and the tools to continuously deliver high-quality software About This Book Incorporate popular development practices to prevent messy code Automate your build, integration, release, and deployment processes with Jenkins, Git, and Gulp?and learn how continuous integration (CI) can save you time and money Gain an end-to-end overview of Continuous Integration using different languages (JavaScript and C#) and tools (Gulp and Jenkins) Who This Book Is For This book is for developers who want to understand and implement Continuous Integration and Delivery in their daily work. A basic knowledge of at least JavaScript and HTML/CSS is required. Knowing C# and SQL will come in handy. Most programmers who have programmed in a (compiled) C-like language will be able to follow along. What You Will Learn Get to know all the aspects of Continuous Integration, Deployment, and Delivery Find out how Git can be used in a CI environment Set up browser tests using Karma and

Selenium and unit tests using Jasmine Use Node.js, npm, and Gulp to automate tasks such as linting, testing, and minification Explore different Jenkins jobs to integrate with Node.js and C# projects Perform Continuous Delivery and Deployment using Jenkins Test and deliver a web API In Detail The challenge faced by many teams while implementing Continuous Deployment is that it requires the use of many tools and processes that all work together. Learning and implementing all these tools (correctly) takes a lot of time and effort, leading people to wonder whether it's really worth it. This book sets up a project to show you the different steps, processes, and tools in Continuous Deployment and the actual problems they solve. We start by introducing Continuous Integration (CI), deployment, and delivery as well as providing an overview of the tools used in CI. You'll then create a web app and see how Git can be used in a CI environment. Moving on, you'll explore unit testing using Jasmine and browser testing using Karma and Selenium for your app. You'll also find out how to automate tasks using Gulp and Jenkins. Next, you'll get acquainted with database integration for different platforms, such as MongoDB and PostgreSQL. Finally, you'll set up different Jenkins jobs to integrate with Node.js and C# projects, and Jenkins pipelines to make branching easier. By the end of the book, you'll have implemented Continuous Delivery and deployment from scratch. Style and approach This practical book takes a step-by-step approach to explaining all the concepts of Continuous Integration and delivery, and how it can help you deliver a high-quality product.

Learn to build fast and scalable software in JavaScript with Node.js Node.js is a powerful and popular new framework for writing scalable network programs using JavaScript. This no nonsense book begins with an overview of Node.js and then quickly dives into the code, core concepts, and APIs. In-depth coverage pares down the essentials to cover debugging, unit testing, and flow control so that you can start building and testing your own modules right away. Covers node and asynchronous programming main concepts Addresses the basics: modules, buffers, events, and timers Explores streams, file systems, networking, and automated unit testing Goes beyond the basics, and shares techniques and tools for debugging, unit testing, and flow control If you already know JavaScript and are curious about the power of Node.js, then this is the ideal book for you.

Automating with Node.js Shaun Michael Stone

Step-by-step guide to understand key concepts for Selenium Automation using examples to shine in your interview for test automation roles DESCRIPTION Software Engineering has taken massive strides with a multitude of technology innovations. With several changes being introduced - development of products and their integration into the market - understanding of mobile devices and user interface channels across a plethora of platforms is getting complex day by day. In addition, since the process or procedures of software testing for products and applications can become an act of boiling the ocean, the role of test automation is crucial while dealing with such challenges. This book aims to equip you with just enough knowledge of Selenium in conjunction with concepts you need to master to succeed in the role of Selenium Automation Engineer. It is the most widely used test automation tool and a much sought-after automated testing suite, by automation engineers who are equipped with technical expertise and analytical skills, for web applications across different browsers and platforms. The book starts with a brief introduction to the world of automation and why it is important, succinctly covering the history of Selenium and the capabilities it offers. In this book, you will learn how to do simple Selenium-based automation with examples and understand the progressive complexity of some key features. Before diving deep into advanced concepts such as Page Object Models, Test Automation Framework and Cross Browser testing, you will grasp comprehensive knowledge of several concepts related to Java, Python, JavaScript and Ruby programming languages. In addition, concepts on Selenium Web Driver, Grid and use of Selenium Locators, IDEs and tools to build complex test automation framework are also explained with practical examples. Each chapter has a set of key concepts and questions that one may face during interviews. KEY FEATURES Acquire Selenium skills to do independent test automation projects Learn the basics of Selenium Web Driver for test automation using Selenium Understand Page Object Model, including how and when they're used in test automation Understand the approach for building a test automation framework Build Selenium test automation scripts using various languages - Java, Python, JavaScript/Node JS and Ruby Learn how to report and integrate with CI tools for test automation Get some professional tips for handing interviews and test automation approach Implement cross-browser testing scenarios using Selenium Grid and commercial tools and services WHAT WILL YOU LEARN By the end of the book, you will find several examples to help ignite your understanding and usage of Selenium across a myriad of languages and frameworks. With this, you'll be able to put your knowledge to practice and solve real-life test automation challenges such as testing a web site, mobile application and leveraging tools available for fast-tracking your test automation approach. You can also choose to practice additional examples provided in the code bundle of the book to master the concepts and techniques explained in this book. WHO THIS BOOK IS FOR The book is intended for anyone looking to make a career in test automation using Selenium, all aspiring manual testers who want to learn the most powerful test automation framework - Selenium and associated programming languages - or working professionals who want to switch their career to testing. While no prior knowledge of Selenium, test automation or related technologies is assumed, it will be helpful to have some programming experience

to understand the concepts explained in this book. Table of Contents 1. Introduction to Test Automation 2. Introduction to Selenium 3. Understanding Selenium Architecture 4. Understanding Selenium Tools 5. Understanding Web UI 6. Web UI Automation with Selenium Using Java & Python 7. Selenium Coding with Other Languages - Ruby & JavaScript 6. Building a Test Automation Framework with Selenium 8. Advanced Features of Selenium Using Java & Python 9. Cross-Browser Test Automation 10. Tips and Tricks for Test Automation 11. Interview Tips

JUNOS Automation Cookbook

Server-side development with Node 10 made easy, 4th Edition

Beginning Node.js, Express & MongoDB Development

Writing Secure Code

Android js

Building Real-World Scalable Web Apps

A straightforward, practical guide containing step-by-step tutorials that will push your Node.js programming skills to the next level. If you are a web developer with experience in writing client-side JavaScript and want to discover the fascinating world of Node.js to develop fast and efficient web and desktop applications, then this book is for you.

Get the best out of Node.js by mastering its most powerful components and patterns to create modular and scalable applications with ease About This Book Create reusable patterns and modules by leveraging the new features of Node.js . Understand the asynchronous single thread design of node and grasp all its features and patterns to take advantage of various functions. This unique guide will help you get the most out of Node.js and its ecosystem. Who This Book Is For The book is meant for developers and software architects with a basic working knowledge of JavaScript who are interested in acquiring a deeper understanding of how to design and develop enterprise-level Node.js applications. Basic knowledge of Node.js is also helpful to get the most out of this book. What You Will Learn Design and implement a series of server-side JavaScript patterns so you understand why and when to apply them in different use case scenarios Become comfortable with writing asynchronous code by leveraging constructs such as callbacks, promises, generators and the async-await syntax Identify the most important concerns and apply unique tricks to achieve higher scalability and modularity in your Node.js application Untangle your modules by organizing and connecting them coherently Reuse well-known techniques to solve common design and coding issues Explore the latest trends in Universal JavaScript, learn how to write code that runs on both Node.js and the browser and leverage React and its ecosystem to implement universal applications In Detail Node.js is a massively popular software platform that lets you use JavaScript to easily create scalable server-side applications. It allows you to create efficient code, enabling a more sustainable way of writing software made of only one language across the full stack, along with extreme levels of reusability, pragmatism, simplicity, and collaboration. Node.js is revolutionizing the web and the way people and companies create their software. In this book, we will take you on a journey across various ideas and components, and the challenges you would commonly encounter while designing and developing software using the Node.js platform. You will also discover the "Node.js way" of dealing with design and coding decisions. The book kicks off by exploring the basics of Node.js describing it's asynchronous single-threaded architecture and the main design patterns. It then shows you how to master the asynchronous control flow patterns, and the stream component and it culminates into a detailed list of Node.js implementations of the most common design patterns as well as some specific design patterns that are exclusive to the Node.js world. Lastly, it dives into more advanced concepts such as Universal Javascript, and scalability' and it's meant to conclude the journey by giving the reader all the necessary concepts to be able to build an enterprise grade application using Node.js. Style and approach This book takes its intended readers through a comprehensive explanation to create a scalable and efficient real-time server-side apps.

Automate your workflow with the power of Node.js! If your job is loaded with manual work, then why not write scripts that can deal with it for you? With this book, you will learn how to deal with many tasks such as zipping files, emailing colleagues, and deploying your work at the press of a button. The book is structured into two parts: The first part is a collection of recipes, or building blocks that behave as individual global commands. These can be used as you go about your day, and can be called at any time to speed up your workflow or for pure convenience. The second part is a walkthrough of creating a cross-platform build tool from the ground up that you and your team can use to speed up your workflow. I complete my project over whatsapp automation using node ja. You can use this automation for multidevice. By WhatsApp automation you can message one time to many people. Only you have to do that you have to give admin number in codes and then you have to run this code and scan qr code for open WhatsApp and only admin can control this. For controlling we made some command like !grab ,!chats,!groups etc. So basically it's free of cost no money you have to pay.

Beginner's Guide

Automating with Node. Js

Node Cookbook

Node.js Blueprints

Automate with Grunt

Deploying Node.js

Take your application to the next level of high performance using the extensive capabilities of Node.js About This Book Analyze, benchmark, and profile your Node.js application to find slow spots, and push it to the limit by eliminating performance bottlenecks Learn the basis of performance analysis using Node.js Explore the high performance capabilities of Node.js, along with best practices In Detail Node.js is a tool written in C, which allows you to use JavaScript on the server-side. High performance on a platform like Node.js is knowing how to take advantage of every aspect of your hardware, helping memory management act at its best, and correctly deciding how to architect a complex application. Do not panic if your applications start consuming a lot of

memory; instead spot the leak and solve it fast with Node.js by monitoring and stopping it before it becomes an issue. This book will provide you with the skills you need to analyze the performance of your application and monitor the aspects that can and should be. Starting with performance analysis concepts and their importance in helping Node.js developers eliminate performance bottlenecks, this book will take you through development patterns to avoid performance penalties. You will learn the importance of garbage collection and its behaviour, and discover how to profile your processor, allowing better performance and scalability. You will then learn about the different types of data storage methods. Moving on, you will get to grips with testing and benchmarking applications to avoid unknown application test zones. Lastly, you will explore the limits that external components can impose in your application in the form of bottlenecks. By following the examples in each chapter, you will discover tips to getting better performing applications by avoiding anti-patterns and stretching the limits of your environment as much as possible. What You Will Learn Develop applications using well-defined and well-tested development patterns Explore memory management and garbage collection to improve performance Monitor memory changes and analyze heap snapshots Profile the CPU and improve your code to avoid patterns that force intensive processor usage Understand the importance of data and when you should cache information. Learn to always test your code and benchmark when needed Extend your application's scope and know what other elements can influence performance Who This Book Is For This book is for Node.js developers who want a more in-depth knowledge of the platform to improve the performance of their applications. Whether you have a base Node.js background or you are an expert who knows the garbage collector and wants to leverage it to make applications more robust, the examples in this book will benefit you. Style and approach This is a practical guide to learning high performance, which even the least experienced developer will comprehend. Small and simple examples help you test concepts yourself and easily adapt them to any application, boosting its performance and preparing it for the real-world.

Learn how to build a wide range of scalable real-world web applications using a professional development toolkit. If you already know the basics of Node.js, now is the time to discover how to bring it to production level by leveraging its vast ecosystem of packages. With this book, you'll work with a varied collection of standards and frameworks and see how all those pieces fit together. Practical Node.js takes you from installing all the necessary modules to writing full-stack web applications. You'll harness the power of the Express.js and Hapi frameworks, the MongoDB database with Mongoskin and Mongoose. You'll also work with Pug and Handlebars template engines, Stylus and LESS CSS languages, OAuth and Everyauth libraries, and the Socket.IO and Derby libraries, and everything in between. This exciting second edition is fully updated for ES6/ES2015 and also covers how to deploy to Heroku and AWS, daemonize apps, and write REST APIs. You'll build full-stack real-world Node.js apps from scratch, and also discover how to write your own Node.js modules and publish them on NPM. You already know what Node.js is; now learn what you can do with it and how far you can take it! What You'll Learn Manipulate data from the mongo console Use the Mongoskin and Mongoose MongoDB libraries Build REST API servers with Express and Hapi Deploy apps to Heroku and AWS Test services with Mocha, Expect and TravisCI Utilize sessions for authentication Implement a third-party OAuth strategy with Everyauth Apply Redis, domains, WebSockets, and clusters Write your own Node.js module, and publish it on NPM Who This Book Is For Web developers who have some familiarity with the basics of Node.js and want to learn how to use it to build apps in a professional environment.

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.

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

Mastering Node.js

How To Code in Node.js

Node.js Design Patterns

Leveraging the JavaScript Stack

Node Web Development

Server-side web development made easy with Node 14 using practical examples

Presented in a simple, step-by-step format, this book is an introduction to web development with Node. This book is for anybody looking for an alternative to the "P" languages (Perl, PHP, Python), or anyone looking for a new paradigm of server-side application development. The reader should have at least a rudimentary understanding of JavaScript and web application development.

Monitor and automate complex JavaScript tasks and processes by obtaining a practical understanding of Grunt About This Book Gain a solid knowledge of Grunt to achieve better process management by improving consistency, productivity, reliability, and quality of code Install, configure, and use plugins into your project with this hands-on guide This step-by-step tutorial will walk you through practical examples of workflow automation Who This Book Is For If you are a JavaScript developer and want to learn project monitoring and automation using Grunt, then this book is for you. Basic knowledge of Node.js and Angular.js is assumed. However, no previous experience using Grunt.js is required. What You Will Learn Install and configure Grunt and its dependencies such as Node.js and Node Package Manager (NPM) Create a sample application using Angular.JS Configure plugins to perform various tasks that will benefit your project Explore the task-specific methods available through the Grunt API such as configuration, externals, events, and logging Set up tasks to automate the build process of the simple contact application Build, test, and refine a sample project Get general tips, tricks, and troubleshooting strategies to identify and solve common issues in Grunt Advance your knowledge of Grunt with concepts such as configuration variables and test automation In Detail With the increasing focus on task automation, the Grunt task runner is a vast platform that allows you to incorporate automation into your workflows. At the outset, you will learn how to use Node.js and NPM through an example. You will then find out how to build a sample app and the development environment for it. You will further delve into the implementation of Grunt plugins and the configuration of Grunt tasks. Furthermore, you will explore the various methods and packages for workflow automation. The final chapter will cover some advanced concepts, such as configuration variables and how to create a Grunt plugin. By the end of the book, you will have gained the fundamentals of Grunt and progressed through advanced concepts, including building a Grunt plugin. Style and approach This book is an easy-to-follow, step-by-step tutorial that provides explanations and examples of deploying Grunt from scratch.

Discover practical recipes to get to grips with Node.js concepts and programming models for delivering a scalable server-side for your applications Key Features Implement practical solutions for scaling, securing, and testing your Node.js web apps effectively Build and deploy scalable microservices architecture with the power of Node.js 14 Discover techniques for debugging and testing Node.js applications Book Description A key technology for building web applications and tooling, Node.js brings JavaScript to the server enabling full-stack development in a common language. This fourth edition of the Node Cookbook is updated with the latest Node.js features and the evolution of the Node.js framework ecosystems. This practical guide will help you to get started with creating, debugging, and deploying your Node.js applications and cover solutions to common problems, along with tips to avoid pitfalls. You'll become familiar with the Node.js development model by learning how to handle files and build simple web applications and then explore established and emerging Node.js web frameworks such as Express.js and Fastify. As you advance, you'll discover techniques for detecting problems in your applications, handling security concerns, and deploying your applications to the cloud. This recipe-based guide will help you to easily navigate through various core topics of server-side web application development with Node.js. By the end of this Node book, you'll be well-versed with core Node.js concepts and have gained the knowledge to start building performant and scalable Node.js applications. What you will learn Understand the Node.js asynchronous programming model Create simple Node.js applications using modules and web frameworks Develop simple web applications using web frameworks such as Fastify and Express Discover tips for testing, optimizing, and securing your web applications Create and deploy Node.js microservices Debug and diagnose issues in your Node.js applications Who this book is for The book is for web developers who have knowledge of JavaScript and want to gain a broad understanding of Node.js concepts for server-side development.

Summary Sails.js in Action is a comprehensive guide to building enterprise-capable web applications using Node and Sails. Written by the creators of the Sails.js framework, this book carefully introduces each concept, technique, and tool with real-world examples and crystal clear explanations. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Sails makes professional web development a breeze. This instantly familiar MVC framework automatically handles the tedious application boilerplate, so you can concentrate on developing features and creating business value. You get powerful tools for rapid API development, task automation, an ORM, and easy integration with any web, mobile, or IoT frontend. And because you're using Node.js, it's JavaScript all the way down. About the Book Sails.js in Action is a comprehensive guide on how to build enterprise-capable web applications. Written by the creators of Sails.js, this book introduces each concept and technique with real-world examples and thorough explanations. As you read, you'll learn to build the backend of a typical web application while you explore real-time programming with WebSockets, security fundamentals, and best practices for building Sails/Node.js apps. What's Inside Creating the backend for a web, mobile, or IoT app Real-time programming with WebSockets User management, authentication, and password recovery Using Sails to autogenerate REST APIs Custom backend development and third-party API integrations About the Reader Readers should be comfortable with JavaScript and frontend web development. About the Author Mike McNeil is the creator of Sails.js. Irl Nathan is the producer of sailsCasts, a series focused on using Sails. Table of Contents Getting started First steps Using static assets Using the blueprint API Custom backend code Using models Custom actions Server-rendered views Authentication and sessions Policies and access control Refactoring Embedded data and associations Ratings, followers, and search Realtime with WebSockets Deployment, testing, and security Get Programming with Node.js Node.js High Performance Professional Node.js Bringing your home to life using Raspberry Pi 3, Arduino, and ESP8266 Sails.js in Action

Testable JavaScript

Administer, configure, and monitor Junos in your organization About This Book Get well acquainted with security and routing policies to identify the use of firewall filters. Learn to provide end-user authentication and protect each layer in an enterprise network. A recipe-based guide that will help you configure and monitor Junos OS and basic device operations. Who This Book Is For This book targets network engineers, developers, support personals, and administrators who are working on devices running Junos OS and are looking at automating their organisation's operations. Some understanding about Junos would be necessary What You Will Learn Start using NETCONF RPC standard and understand its usefulness in programming JUNOS Write SLAX scripts to respond to events in the JUNOS environment Automate JUNOS with PyEZ Deal with events in the JUNOS environment, and writing response handlers to deal with them Make the most of automation technologies to help with maintenance and monitoring of JUNOS Use the Ansible framework to extend the automation functionality of Junos In Detail The JUNOS Automation Cookbook is a companion guide for the complex field of automating tasks on JUNOS devices. With a foundation in industry-standrd XML, JUNOS provides an ideal environment for programmatic interation, allowing you to build upon the capabilities provided by Juniper, with your own original code. You will begin by learning about, and setting up, the industry-standard NETCONF remote procedure call mechanisms on your device. After initial setup, you'll walk through SLAX - Juniper's foundation scripting language - for manipulating XML representations of JUNOS concepts and elements. You'll learn how to write your own SLAX scripts to customise the operating environment, and also how to write proactive event handlers that deal with situations as they happen. You'll then delve into PyEZ - Juniper's bridging framework to make automation accessible to Python code - allowing you to build automation applications in the popular scripting language. You'll witness some examples of how to write applications that can monitor configuration changes, implement BGP security policies and implement ad-hoc routing protocols, for those really tricky situations. You'll also leaarn how asynchronous I/O frameworks like Node.js can be used to implement automation applications that present an acceptable web interface. Along with way, you'll explore how to make use of the latest RESTful APIs that JUNOS provides, how to visualize aspects of your JUNOS network, and how to integrate your automation capabilities with enterprise-wide orchestration systems like Ansible. By the end of the book, you'll be able to tackle JUNOS automation challenges with confidence and understanding, and without hassle. Style and Approach A guide that will cover all the automation tools along with steps on leveraging these tools "With futuristic homes on the rise, learn to control and automate the living space with intriguing IoT projects." About This Book Build exciting (six) end-to-end home automation projects with Raspberry Pi 3, Seamlessly communicate and control your existing devices and build your own home automation system, Automate tasks in your home through projects that are reliable and fun Who This Book Is For This book is for all those who are excited about building home automation systems with Raspberry Pi 3. It's also for electronic hobbyists and developers with some knowledge of electronics and programming. What You Will Learn Integrate different embedded microcontrollers and development boards like Arduino, ESP8266, Particle Photon and Raspberry Pi 3, creating real life solutions for day to day tasks and home automation Create your own magic mirror that lights up with useful information as you walk up to it Create a system that intelligently decides when to water your garden and then goes ahead and waters it for you Use the Wi-fi enabled Adafruit ESP8266 Huzzah to create your own networked festive display lights Create a simple machine learning application and build a parking automation system using Raspberry Pi Learn how to work with AWS cloud services and connect your home automation to the cloud Learn how to work with Windows IoT in Raspberry Pi 3 and build your own Windows IoT Face Recognition door locking system In Detail Raspberry Pi 3 Home Automation Projects addresses the challenge of applying real-world projects to automate your house using Raspberry Pi 3 and Arduino. You will learn how to customize and program the Raspberry Pi 3 and Arduino-based boards in several home automation projects around your house, in order to develop home devices that will really rejuvenate your home. This book aims to help you integrate different microcontrollers like Arduino, ESP8266 Wi-Fi module, Particle Photon and Raspberry Pi 3 into the real world, taking the best of these boards to develop some exciting home automation projects. You will be able to use these projects in everyday tasks, thus making life easier and comfortable. We will start with an interesting project creating a Raspberry Pi-Powered smart mirror and move on to Automated Gardening System, which will help you build a simple smart gardening system with plant-sensor devices and Arduino to keep your garden healthy with minimal effort. You will also learn to build projects such as CheerLights into a holiday display, a project to erase parking headaches with OpenCV and Raspberry Pi 3, create Netflix's "The Switch" for the living room and lock down your house like Fort Knox with a Windows IoT face recognition-based door lock system. By the end of the book, you will be able to build and automate the living space with intriguing IoT projects and bring a new degree of interconnectivity to your world. Style and approach End to end home automation projects with Raspberry Pi 3.

In just 24 sessions of one hour or less, Sams Teach Yourself Node.js in 24 Hours will help you master the Node.js platform and use it to build server-side applications with extraordinary speed and scalability. Using this text's straightforward, step-by-step approach, you'll move from basic installation, configuration, and programming all the way through real-time messaging between browser and server, testing and deployment. Every lesson and case-study application builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Node.js development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. By the Way notes present valuable additional information related to the discussion. Did You Know? tips offer advice or show you easier ways to perform tasks. Watch Out! cautions alert you to possible problems and give you advice on how to avoid them. Learn how to... · Create end-to-end applications entirely in JavaScript · Master essential Node.js concepts like callbacks and quickly create your first program · Create basic sites with the HTTP module and Express web framework · Manage data persistence with Node.js and MongoDB · Debug and test Node.js applications · Deploy Node.js applications to thirdparty services, such as Heroku and Nodester · Build powerful real-time solutions, from chat servers to Twitter clients · Create JSON APIs using JavaScript on the server · Use core components of the Node.js API, including processes, child processes, events, buffers, and streams · Create and publish a Node.js module

Automate workflow and internal communication processes and provide customer service without apps using messaging and interactive bots About This Book* Create interactive bots on platforms such as Facebook Messenger, Kik, Telegram, and Skype to automate workflows* Create a bot that works with SQL Server and Skype to deal with HR requests within a company* Work with some of the most cutting-edge and widely-used APIs and messaging platforms to create interactive

customer-facing experiences and automate work
Who This Book Is For This is a book for Node.js developers who want to build powerful bots for customer-facing and internal workflow automation.
What you will learn
* Create a bot template that responds to e-mails based on certain ruling criteria
* Interact with SMS and perform some basic Natural Language Processing using the Twilio API for Node.js
* Work with the Skype Web SDK and Node.js to create a bot that works with SQL Server and Skype
* Build an automated Flight Information Agent bot using the Twitter and Google Flights APIs
* Use the Slack API to create a team collaboration task management (to-do list) bot
* Create a scheduling bot for teams using the Facebook Messenger API
* Interact with BotKit along with MySQL and Amazon S3 to create a document management bot in Node.js
* Leverage ICR and Azure Table Storage from Node.js to create a bug tracking bot
* Integrate Force.com API and Kik to create a Salesforce CRM bot
In Detail The bots are taking over! Messenger-based bots are expected to become the dominant software UI for the next generation of applications. Slack, Telegram, and Facebook are driving a new approach where "threads are the new apps." This book shows you how to create work automation bots that interact with users through Slack, e-mail, Skype, Twitter, and more using Node.js. You'll learn to create conversational UIs for your Node.js apps, and then use those UIs to provide workflow automation tools. You will handle customer service requests that come in through messenger systems. Then, you'll interpret the natural language to reveal the user's intent and respond accordingly. You will also learn how to automate processes that involve several people, such as processing holiday requests, arranging meetings, or sending updated reports on time. Last, you'll create bots that can handle and manipulate documents, URLs, and other items of content. By the end of the book, you will understand the importance of bots and why they are beneficial to any organization.
Reliable and faster software releases with automating builds, tests, and deployment
Design and implement production-grade Node.js applications using proven patterns and techniques, 3rd Edition
Automating with Node.js

Master Web UI Automation and Create Your Own Test Automation Framework

Learn to Automate Effectively Using WebDriverIO APIs

This book contains an extensive set of practical examples and an easy-to-follow approach to creating 3D objects. This is for anyone who already knows JavaScript and who wants to start creating 3D graphics that run in any browser. You don't need to know anything about advanced math or WebGL; all that is needed is a general knowledge of JavaScript and HTML. The source materials and examples can be freely downloaded and all tools used in this book are open source.

A unique book that consists entirely of test automation case studies from a variety of domains - from the top names in the industry.

*Proven advice to empower development organizations to save time by mirroring others' experiences and save money by avoiding others' mistakes.

*Insightful case studies from a wide variety of domains, including aerospace, pharmaceuticals, insurance, technology, and telecommunications.

*Focuses on the basic issues, rather than technology trends, to give the book a timeless quality.

The practice of test automation is becoming more and more popular, but many organizations are not yet experiencing its full benefits.

This book unveils the secrets of how automation has been made to work in reality. The knowledge gained by reading this book can save months or years of effort in automating software testing by helping organizations avoid expensive mistakes and learn from the experiences of others.

The book is a collection of proven ideas. By its nature, this book shows the current state of software test automation practice. The authors' contributions focused on those things that are more universal (e.g. people issues, return on investment, etc.) and to avoid overly technical content where this does not impede the process of learning valuable lessons, in order to give the book as much practical value as possible.

Software practitioners always enjoy reading about what happened to others. For example, at conferences, presentations are usually very well attended. The authors/editors have gathered together a collection of experiences from a wide section of industries and countries, both success stories and failures, in both agile and traditional development. In a series of case studies, the authors/editors comment on issues raised in these stories, and also include a chapter summarizing the lessons learned and common pitfalls.

Learn how to work with the Automate feature of CloudForms, the powerful Red Hat cloud management platform that lets you

administer your virtual infrastructure, including hybrid public and private clouds. This practical hands-on introduction shows you

how to increase your operational efficiency by automating day-to-day tasks that now require manual input. Through this book, author Peter McGowan provides a combination of theoretical information and practical coding examples to help you learn how to

Automate object model. With this CloudForms feature, you can create auto-scalable cloud applications, eliminate manual tasks, and

optimize your operations when provisioning virtual machines and cloud instances, and manage your complete virtual machine lifecycle.

Through this book, you will learn:

the objects and concepts for developing automation scripts with CloudForms Automate

the steps and workflows involved in provisioning virtual machines

Create and use service catalogs, items, dialogs, objects, and hierarchies

Use CloudForm's updated workflow to retire and delete virtual machines and services

Orchestrate automation with external services as part of a workflow

Explore distributed automation processing as well as argument passing

Node.js is a popular choice for teams that need to design, build, test, deploy, maintain, and monitor large-scale distributed applications.

Starting with a detailed overview of the Node.js architecture, this book covers topics that will help in application development, testing, deployment, and maintenance. You will learn about concurrency, event loops, callbacks and streams. Further, step-by-step instructions on deploying applications to providers such as DigitalOcean and Heroku will be provided, including information on setting up load balancers and proxies. Message queues and other techniques for managing state and session data are also

covered. A series of examples on deploying your Node.js applications in production environments are provided, including a detailed discussion on setting up continuous deployment and integration for your team. Popular tools for testing, deploying, and monitoring Node.js applications are covered, helping you get up and running quickly.

An Essential Guide for Cloud Administrators

Test-Driven JavaScript Development

Practical WebDriverIO

Selenium Webdriver With Node.js

Web Development with Node and Express

Science of Selenium

Learn proven patterns, techniques, and tricks to take full advantage of the Node.js platform. Master well-known design principles to create applications that are readable, extensible, and that can grow big. Key Features Learn how to create solid server-side applications by leveraging the full power of Node.js 14 Understand how Node.js works and learn how to take full advantage of its core components as well as the solutions offered by its ecosystem Avoid common mistakes and use proven patterns to create production grade Node.js applications Book Description In this book, we will show you how to implement a series of best practices and design patterns to help you create efficient and robust Node.js applications with ease. We kick off by exploring the basics of Node.js, analyzing its asynchronous event driven architecture and its fundamental design patterns. We then show you how to build asynchronous control flow patterns with callbacks, promises and async/await. Next, we dive into Node.js streams, unveiling their power and showing you how to use them at their full capacity. Following streams is an analysis of different creational, structural, and behavioral design patterns that take full advantage of JavaScript and Node.js. Lastly, the book dives into more advanced concepts such as Universal JavaScript, scalability and messaging patterns to help you build enterprise-grade distributed applications. Throughout the book, you'll see Node.js in action with the help of several real-life examples leveraging technologies such as LevelDB, Redis, RabbitMQ, ZeroMQ, and many others. They will be used to demonstrate a pattern or technique, but they will also give you a great introduction to the Node.js ecosystem and its set of solutions. What you will learn Become comfortable with writing asynchronous code by leveraging callbacks, promises, and the async/await syntax Leverage Node.js streams to create data-driven asynchronous processing pipelines Implement well-known software design patterns to create production grade applications Share code between Node.js and the browser and take advantage of full-stack JavaScript Build and scale microservices and distributed systems powered by Node.js Use Node.js in conjunction with other powerful technologies such as Redis, RabbitMQ, ZeroMQ, and LevelDB Who this book is for This book is for developers and software architects who have some prior basic knowledge of JavaScript and Node.js and now want to get the most out of these technologies in terms of productivity, design quality, and scalability. Software professionals with intermediate experience in Node.js and JavaScript will also find valuable the more advanced patterns and techniques presented in this book. This book assumes that you have an intermediate understanding of web application development, databases, and software design principles.

Automate your workflow with the power of Node.js! If your job is loaded with manual work, then why not write scripts that can deal with it for you? With this book, you will learn how to deal with many tasks such as zipping files, emailing colleagues, and deploying your work at the press of a button. The book is structured into two parts: The first part is a collection of recipes, or building blocks that behave as individual global commands. These can be used as you go about your day, and can be called at any time to speed up your workflow or for pure convenience. The second part is a walkthrough of creating a cross-platform build tool from the ground up that you and your team can use to speed up your workflow.

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

One skill that's essential for any professional JavaScript developer is the ability to write testable code. This book shows you what writing and maintaining testable JavaScript for the client- or server-side actually entails, whether you're creating a new application or rewriting legacy code. From methods to reduce code complexity to unit testing, code coverage, debugging, and automation, you'll learn a holistic approach for writing JavaScript code that you and your colleagues can easily fix and maintain going forward. Testing JavaScript code is complicated. This book helps experienced JavaScript developers simplify the process considerably. Get an overview of Agile, test-driven development, and behavior-driven development Use patterns from static languages and standards-based JavaScript to reduce code complexity Learn the advantages of event-based architectures, including modularity, loose coupling, and reusability Explore tools for writing and running unit tests at the functional and application level Generate code coverage to measure the scope and effectiveness of your tests Conduct integration, performance, and load testing, using Selenium or CasperJS Use tools for in-browser, Node.js, mobile, and production debugging Understand what, when, and how to automate your development processes

Testing Node.js Web Uis

Automate network devices on Juniper's operating system

Learning Grunt

Node.js in Action

Experiences of Test Automation

Continuous Integration, Delivery, and Deployment

Learn how to quickly set up the test automation tool WebDriverIO, one of the major Node.js-based test frameworks. Software testing is here to stay, and an integral part of this is test automation. Dive into the amazing possibilities that WebDriverIO offers to automate browser interactions for a user of any web application. You will learn to automate a vast range of actions that a user takes to interact with the browser. From a simple click to more complex user actions such as frame switches, selecting from drop-downs, and file downloads using WebDriverIO APIs. You will also learn about assertions, timeouts, waits, parallel testing frameworks, and the general pros and cons of WebDriverIO. With over 150 working code samples demonstrating various test scenarios that you require in your day-to-day automation testing, this book is your practical handbook to WebDriverIO. What You'll Learn Set up and install WebDriverIO efficiently Run parallel execution using WebDriverIO Review the pros, cons and challenges you may face with WebDriverIO Ensure optimum usage and avoid common mistakes Who This Book Is For This book is ideal for test engineers who have a basic understanding of test automation with Selenium, developers who want to implement this testing tool for internal testing, Test Managers/IT Project Managers who want to get some general understanding of this tool and its advantage, and students who want to pursue career in test automation.

Summary Get Programming with Node.js teaches you to build web servers using JavaScript and Node. In this engaging tutorial, you'll work through eight complete projects, from writing the code for your first web server to adding live chat to a web app. Your hands will stay on the keyboard as you explore the most important aspects of the Node development process, including security, database management, authenticating user accounts, and deploying to production. You'll especially appreciate the easy-to-follow discussions, illuminating diagrams, and carefully explained code! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Node.js delivers the speed and reliability you need for ecommerce, social media, and gaming applications. It comes with thousands of prebuilt packages to help you get started immediately. If you want to use JavaScript on the server, Node.js is your choice. What's inside New features from ES2015 and later Writing asynchronous code Creating data models Debugging JavaScript modules About the Reader Written for front-end web developers with intermediate JavaScript skills. Table of Contents GETTING SET UP Lesson 0 - Setting up Node.js and the JavaScript engine Lesson 1 - Configuring your environment Lesson 2 - Running a Node.js application UNIT 1 - GETTING STARTED WITH NODE.JS Lesson 3 - Creating a Node.js module Lesson 4 - Building a simple web server in Node.js Lesson 5 - Handling incoming data Lesson 6 - Writing better routes and serving external files Lesson 7 - Capstone: Creating your first web application UNIT 2 - EASIER WEB DEVELOPMENT WITH EXPRESS.JS Lesson 8 - Setting up an app with Express.js Lesson 9 - Routing in Express.js Lesson 10 - Connecting views with templates Lesson 11 - Configurations and error handling Lesson 12 - Capstone: Enhancing the Confetti Cuisine site with Express.js UNIT 3 - CONNECTING TO A DATABASE Lesson 13 - Setting up a MongoDB database Lesson 14 - Building models with Mongoose Lesson 15 - Connecting controllers and models Using promises with Mongoose Lesson 16 - Capstone: Saving user subscriptions UNIT 4 - BUILDING A USER MODEL Lesson 17 - Improving your data models Lesson 18 - Building the user model Lesson 19 - Creating and reading your models Lesson 20 - Updating and deleting your models Lesson 21 - Capstone: Adding CRUD models to Confetti Cuisine Creating controllers UNIT 5 - AUTHENTICATING USER ACCOUNTS Lesson 22 - Adding sessions and flash messages Lesson 23 - Building a user login and hashing passwords Lesson 24 - Adding user authentication Lesson 25 - Capstone: Adding user authentication to Confetti Cuisine UNIT 6 - BUILDING AN API Lesson 26 - Adding an API to your application Lesson 27 - Accessing your API from your application Lesson 28 - Adding API security Lesson 29 - Capstone: Implementing an API UNIT 7 - ADDING CHAT FUNCTIONALITY Lesson 30 - Working with Socket.io Lesson 31 - Saving chat messages Lesson 32 - Adding a chat notification indicator UNIT 8 - DEPLOYING AND MANAGING CODE IN PRODUCTION Lesson 33 - Capstone: Adding a chat feature to Confetti Cuisine Lesson 34 - Deploying your application Lesson 35 - Managing in production Lesson 36 - Testing your application Lesson 37 - Capstone: Deploying Confetti Cuisine

Covers topics such as the importance of secure systems, threat modeling, canonical representation issues, solving database input, denial-of-service attacks, and security code reviews and checklists.

Implement end-to-end testing and browser automation using JavaScript and Node.js

Discover solutions, techniques, and best practices for server-side web development with Node.js 14, 4th Edition

UI Testing with Puppeteer