Node Js Mongodb And Angular Web Development The Definitive

Revised and updated second edition of the bestselling hands-on guide to building enterprise-ready web apps using an evergreen Angular platform Key Features Updated examples, projects, and a new overview of tools – including NgRX and Ivy, automated testing, and Firebase authentication New chapter summarizing history of web frameworks and Angular version updates All-new RESTful API implementation leveraging the MEAN stack with MongoDB, Express.js, Angular and Node.js Book Description This second edition of Angular for Enterprise-Ready Web Applications is updated with in-depth coverage of the evergreen Angular platform. You'll start by mastering Angular programming fundamentals. Using the Kanban method and GitHub tools, you'll build great-looking apps with Angular Material and also leverage reactive programming patterns with RxJS, discover the flux pattern with NgRx, become familiar with automated testing, utilize continuous integration using CircleCI, and deploy your app to the cloud using Vercel Now and GCloud. You will then learn how to design and develop line-of-business apps using router-first architecture with observable data anchors, demonstrated through oft-used recipes like master/detail views, and data tables with pagination and forms. Next, you'll discover robust authentication and authorization design demonstrated via integration with Firebase, API documentation using Swagger, and API implementation using the MEAN stack. Finally, you will learn about DevOps using Docker, build a highly available cloud infrastructure on AWS, capture user behavior with Google Analytics, and perform load testing. By the end of the book, you'll be familiar with the entire gamut of modern web development and full-stack architecture, learning patterns and practices to be successful as an individual developer on the web or as a team in the enterprise. What you will learn Adopt a minimalist, value-first approach to delivering web apps Master Angular development fundamentals, RxJS, CLI tools, GitHub, and Docker Discover the flux pattern and NgRx Implement a RESTful APIs using Node.js, Express.js, and MongoDB Create secure and efficient web apps for any cloud provider or your own servers Deploy your app on highly available cloud infrastructure using DevOps, CircleCI, and AWS Who this book is for This book is for developers who want to confidently deliver high-quality and production-grade Angular apps from design to deployment. Developers that have prior experience in writing a RESTful APIs will also benefit, as well as developers who will gain greater awareness of how they fit into the larger picture of delivering a web application. Prior experience with RESTful APIs is desired.

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 Lssson 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

In this book, we take you on a fun, hands-on and pragmatic journey to learning MERN stack development. You'll start building your first MERN stack 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 Movies review app and deploy it to the Internet. In the course of this book, we will cover: Chapter 1: Introduction Chapter 2: MongoDB Overview Chapter 3: Setting Up MongoDB Atlas Cloud Database Chapter 4: Adding Sample Data Chapter 5: Setting Up Our Node.js, Express Backend Chapter 6: Creating Our Backend Server Chapter 7: Creating The Movies Data Access Object Chapter 8: Creating The Movies Controller Chapter 9: Testing Our Backend API Chapter 10: Leaving Movie Reviews Chapter 11: Testing The Reviews API Chapter 12: Route To Get A Single Movie And Its Ratings Chapter 13: Introduction To React Chapter 14: Create Navigation Header Bar Chapter 15: Defining Our Routes Chapter 16: MovieDataService: Connecting To The Backend Chapter 17: MoviesList Component Chapter 18: Movie Component Chapter 19: Listing Reviews Chapter 21: Adding And Editing Reviews Chapter 22: Deleting A Review Chapter 23: Get Next Page's Results Chapter 24: Get Next Page's Results - Search By Title And Rating Chapter 25: Deploying Backend On Heroku Chapter 26: Hosting And Deploying Our React Frontend The goal of this book is to teach you MERN stack 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. Working Through This Book This book is purposely broken down into short chapters where the development process of each chapter will center on

different essential topics. The book takes a practical hands on approach to learning through practice. You learn best when you code along with the examples in the book. Requirements No previous knowledge on Node.js or React development is required, but you should have basic programming knowledge. It will be a helpful advantage if you could read through my Node, Express book and React book first which will provide you will better insight and deeper knowledge into the various technologies. But even if you have not done so, you should still be able to follow along.

Any programmer working with a dynamically typed language will tell you how hard it is to scale to more lines of code and more engineers. That's why Facebook, Google, and Microsoft invented gradual static type layers for their dynamically typed JavaScript and Python code. This practical book shows you how one such type layer, TypeScript, is unique among them: it makes programming fun with its powerful static type system. If you're a programmer with intermediate JavaScript experience, author Boris Cherny will teach you how to master the TypeScript language. You'll understand how TypeScript can help you eliminate bugs in your code and enable you to scale your code across more engineers than you could before. In this book, you'll: Start with the basics: Learn about TypeScript's different types and type operators, including what they're for and how they're used Explore advanced topics: Understand TypeScript's sophisticated type system, including how to safely handle errors and build asynchronous programs Dive in hands-on: Use TypeScript with your favorite frontend and backend frameworks, migrate your existing JavaScript project to TypeScript, and run your TypeScript application in production

Explore what React, Node, TypeScript, Webpack, and Docker have to offer individually, and how they all fit together in modern app development. React is one of the most popular web development tools available today, and Node.js is extremely popular for server-side development. The fact that both utilize JavaScript is a big selling point, but as developers use the language more, they begin to recognize the shortcomings, and that's where TypeScript comes in and why it's gaining in popularity quickly. Add Webpack and Docker to the mix, and you've got a potent full development stack on which to build applications. You'll begin by building a solid foundation of knowledge and quickly expand it by constructing two different real-world apps. These aren't just simple, contrived examples but real apps that you can choose to install on your servers and use for real. By the end, you will have a solid grasp of building apps with React, Node.js, and TypeScript and a good grasp on how Webpack can be used to optimize and organize your code for deployment. You'll also understand how Docker can be used to run the apps you build in a clear and well-defined way, all of which will be able to springboard you into creating more advanced apps on your own. What You'll Learn Get a project started and logically structure it Construct a user interface with React and Material-UI Use WebSockets for real-time communication between client and server Build a REST API with Node and Express as another approach to client-server communication Package the app with Webpack for optimized delivery Take a completed app and wrap it up with Docker for easy distribution Review a host of other ancillary topics including NPM, Semantic versioning, Babel, NoSQL, and more Who This Book Is For Web developers with basic knowledge of HTML, JavaScript, CSS, and CLI tools who are interested in and in all aspects of application development, and using TypeScript instead of straight JavaScript.

Summary Getting MEAN, Second Edition teaches you how to develop full-stack web applications using the MEAN stack. This edition was completely revised and updated to cover MongoDB 4, Express 4, Angular 7, Node 11, and the latest mainstream release of JavaScript ES2015. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Juggling languages mid-application can radically slow down a full-stack web project. The MEAN stack—MongoDB, Express, Angular, and Node—uses JavaScript end to end, maximizing developer productivity and minimizing context switching. And you'll love the results! MEAN apps are fast, powerful, and beautiful. About the Book Getting MEAN, Second Edition teaches you how to develop full-stack web applications using the MEAN stack. Practical from the very beginning, the book helps you create a static site in Express and Node. Expanding on that solid foundation, you'll integrate a MongoDB database, build an API, and add an authentication system. Along the way, you'll get countless pro tips for building dynamic and responsive data-driven web applications! What's inside MongoDB 4, Express 4, Angular 7, and Node.js 11 MEAN stack architecture Mobile-ready web apps Best practices for efficiency and reusability About the Reader Readers should be comfortable with standard web application designs and ES2015-style JavaScript. About the Author Simon Holmes and Clive Harber are full-stack developers with decades of experience in JavaScript and other leading-edge web technologies. Table of Contents PART 1 - SETTING THE BASELINE Introducing full-stack development Designing a MEAN stack architecture PART 2 - BUILDING A NODE WEB APPLICATION Creating and setting up a MEAN project Building a static site with Node and Express Building a data model with MongoDB and Mongoose Writing a REST API: Exposing the MongoDB database to the application Consuming a REST API: Using an API from inside Express PART 3 - ADDING A DYNAMIC FRONT END WITH ANGULAR Creating an Angular application with TypeScript Building a single-page application with Angular: Foundations Building a single-page application with Angular: The next level PART 4 - MANAGING AUTHENTICATION AND USER SESSIONS Authenticating users, managing sessions, and securing APIs Using an authentication API in Angular applications

A practical approach to conquering the complexities of Microservices using the Python tooling ecosystem About This Book A very useful guide for Python developers who are shifting to the new microservices-based development A concise, up-to-date guide to building efficient and lightweight microservices in Python using Flask, Tox, and other tools Learn to use Docker containers, CoreOS, and Amazon Web Services to deploy your services Who This Book Is For This book is for developers who have basic knowledge of Python, the command line, and HTTP-based application principles, and those who want to learn how to build, test, scale, and manage Python 3 microservices. No prior experience of writing microservices in Python is assumed. What You Will Learn Explore what microservices are and how to design them Use Python 3, Flask, Tox, and other tools to build your services using best practices Learn how to use a TDD approach Discover how to document your microservices Configure and package your code in the best way Interact with other services Secure, monitor, and scale your services Deploy your services in Docker containers, CoreOS, and Amazon Web Services In Detail We often deploy our web applications into the cloud, and our code needs to interact with many third-party services. An efficient way to build applications to do this is through microservices architecture. But, in practice, it's hard to get this right due to the complexity of all the pieces interacting with each other. This book will teach you how to overcome these issues and craft applications that are built as small standard units, using all the proven best practices and avoiding the usual traps. It's a practical book: you'll build everything using Python 3 and its amazing tooling ecosystem. You will understand the principles of TDD and apply them. You will use Flask, Tox, and other

tools to build your services using best practices. You will learn how to secure connections between services, and how to script Nginx using Lua to build web application firewall features such as rate limiting. You will also familiarize yourself with Docker's role in microservices, and use Docker containers, CoreOS, and Amazon Web Services to deploy your services. This book will take you on a journey, ending with the creation of a complete Python application based on microservices. By the end of the book, you will be well versed with the fundamentals of building, designing, testing, and deploying your Python microservices. Style and approach This book is an linear, easy-to-follow guide on how to best design, write, test, and deploy your microservices. It includes real-world examples that will help Python developers create their own Python microservice using the most efficient methods.

Traditionally, web applications have been architected so that the back-end houses all the front-end code. This has resulted in heavy projects that are difficult to manage and scale. This book will explain a new way to write web applications by treating the front-end as if it were a third-party (such as a mobile client). This book, written by a practicing MEAN developer, will take a holistic approach to using the MEAN JavaScript platform for creating modern web applications and lay out how to use the MEAN (Mongo, Express, AngularJS, and Node.js) set of tools to create a web application, from installation and setup of the tools to debugging and deploying your app. After an introduction to how web development is changing and the advantages of using the MEAN stack, the author jumps into an introduction to each tool and then dives into using the complete JavaScript-based application stack to build, test, and deploy apps.

This book is aimed at web developers who are familiar with frontend technologies like JavaScript, HTML, and CSS, and modern tools like Bower, Yeoman, and Grunt.

With modern tools. it is possible to create a production grade, full-stack application using HTML, CSS, and JavaScript alone. The combination of MongoDB, Express, AngularJS, and Node.js has become so popular that it has earned the title MEAN stack -- the subject of this book. This book explores the MEAN stack in detail. We will begin by covering Node.js, as it will lay the groundwork for all of our server-side work. You will learn how to get Node running on your local machine as well as download modules using npm. The key aspects of the Node.js programming model will also be covered. From there, we will move on to MongoDB, where you'll learn how to interact with Mongo from a Node application. You will also learn how to create, retrieve, update, and delete data from a Mongo store. After you have a solid grasp on Node and Mongo, the book will move on to the Express web server. We'll cover the basics of Express applications via topics like routes and middleware. Building on previous chapters, we will cover the integration of Node, Mongo, and Express. Our coverage of the MEAN stack will wrap up with several chapters on AngularJS. These chapters will cover Angular fundamentals like data binding, directives, controllers, routing, and services. In an effort to explore competing technologies, a slight introduction to Ember.js will also be provided. Full stack JavaScript is not fully encompassed by the MEAN stack. There is an entire ecosystem of JavaScript tools to learn about, and this book will introduce a few of them. We will cover task runners Gulp.js and Grunt.js which are extremely useful for automating mundane, repetitive tasks. We'll also cover JSHint, a linting tool used to improve code quality. Linting tools analyze source code and report potentials issues - a feature that is especially useful in non-compiled languages like JavaScript.

Build an interactive and full-featured web application from scratch using Node.js and MongoDBAbout This Book• Configure your development environment to use Node.js and MongoDB• Use Node.js to connect to a MongoDB database and perform data manipulations• A practical guide with clear instructions to design and develop a complete web application from start to finishWho This Book Is ForThis book is designed for JavaScript developers of any skill level that want to get up and running using Node.js and MongoDB to build full-featured web applications. A basic understanding of JavaScript and HTML is the only requirement for this book.What You Will Learn• Configure your development environment to use Node.js and MongoDB• Write and configure a web server using Node.js powered by the Express.js framework• Build dynamic HTML pages using the Handlebars template engine• Persist application data using MongoDB and Mongoose ODM• Test your code using automated testing tools such as the Mocha framework• Deploy the development environment to the cloud using services such as Heroku, Amazon Web Services, and Microsoft Azure• Explore Single-Page application frameworks to take your web applications to the next levelIn DetailNode.js and MongoDB are quickly becoming one of the most popular tech stacks for the web. Powered by Google's V8 engine, Node.js caters to easily building fast, scalable network applications while MongoDB is the perfect fit as a scalable, high-performance, open source NoSQL database solution. Using these two technologies together, web applications can be built quickly and easily and deployed to the cloud with very little difficulty.The book will begin by introducing you to the groundwork needed to set up the development environment. Here, you will quickly run through the steps necessary to get the main application server up and running. Then you will see how to use Node.js to connect to a MongoDB database and perform data manipulations.From here on, the book will take you through integration with third-party tools for interaction with web apps. It then moves on to show you how to use controllers and view models to generate reusable code that will reduce development time. Toward the end of the book, we will cover tests to properly execute the code and some popular frameworks for developing web applications.By the end of the book, you will have a running web application developed with MongoDB and Node.js along with it's popular frameworks.Style and approachAn easy guide to Node.js and MongoDB, which will quickly introduce you to the relevant concepts by taking you through the different steps involved in building a full-fledged web application.

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.

Develop an end-to-end, real-time e-commerce application using the MEAN stackAbout This Book• Build all the main components of an e-commerce website and extend its high-quality features as per your needs• Get to grips with the full-stack JavaScript to build attractive e-commerce sites and start making money• A step-by-step guide to developing the MEAN stack components from scratch to achieve maximum flexibility when building an e-commerce applicationWho This Book Is ForThis book is for a web or full stack JavaScript developer who wants to get a head start on developing an e-commerce application with MEAN. A basic knowledge of the MEAN stack is highly recommended.What You Will Learn• Employ AngularJS to build responsive UI components• Implement multiple authentication strategies such as OAuth, JsonWebToken, and Sessions• Enhance website usability with social logins such as Facebook, Twitter, and Google• Create integrations with payment platforms such as PayPal• Apply full-text search functionality in MongoDB• Build a flexible categorization system to organize your products• Secure your app by creating SSL certificates and run payment platforms in a live environmentIn DetailMEAN stands for MongoDB, Express, AngularJS, and Node.js. It is a combination of a NoSQL database, MongoDB, with a couple of JavaScript web application frameworks, namely Express.js and Angular.js. These run on Node.js.There is always an ever-growing list of requirements while designing an e-commerce application, which needs to be flexible enough for easy adaptation. The MEAN stack allows you to meet those requirements on time and build responsive applications using JavaScript.This book will show you how to create your own e-commerce application using the MEAN stack. It will take you step by step through the parallel process of learning and building. It will also teach you to develop a production-ready, high-quality e-commerce site from scratch and will provide the knowledge you need to extend your own features to the e-commerce site.This book starts with a short introduction to the MEAN stack, followed by a step-by-step guide on how to build a store with AngularJS, set up a database with MongoDB, create a REST API, and wire AngularJS. It also shows you how to manage user authentication and authorization, check multiple payment platforms, add products' search and navigation, deploy a production-ready e-commerce site, and finally add your own high-quality feature to the site.By the end of the book, you will be able to build and use your own e-commerce app in the real world and will also be able to add your own new features to it.Style and approachThis book is a step-by-step guide on how to build a real-time e-commerce app with MEAN. Each transition is well explained, and each chapter begins with the required background knowledge.

Become a Node.js craftsman. About This Book This book will help readers to dive deeper into software development with Node.js and JavaScript Takes a craftsman approach to Node.js and object-orientation and test-driven development Crafts many of the small details of Node.js and through to fully-fledged web applications with REST Who This Book Is For This book is written to help you if you're working with Node.js already, but you want to move your craft to the next level with Node.js, so some working knowledge of Node.js is of course already assumed, so that we can look at the work of crafting applications with Node. What You Will Learn How to connect to databases like MongoDB and MySQL from your Node.js application How to unit tests and end-to-end tests for your code When and how to leverage migrations for setting up a continuous deployment workflow Detailed insight into how the Node Package Manager, NPM works How object-orientation actually works in JavaScript Ways to keep your code fast and efficient using asynchronous and non-blocking operations How to use and create event emitters How to use REST frameworks to write full-fledged web applications How to integrate Node.js with Angular In Detail The Node Craftsman Book helps JavaScript programmers with basic Node.js knowledge to now thoroughly master Node.js and JavaScript. This book dives you deeper into the craft of software development with Node.js and JavaScript, incuding object-orientation, test-driven development, database handling, web frameworks, and much more. The Node Craftsman Book shows you how to work with Node.js and how to think deeply about how you build your Node projects. You'll master how to build a complete Node.js application across six crafting milestones, and you'll learn many specific skills to achieve that mastery. These skills include how to work with the Node Package Manager in depth, how to connect your Node applications to databases, and how to write unit tests and end-to-end tests for your code. You'll experience the full Node.js development picture, and learn how to craft and control your Node.js applications - right through to fully-fledged web applications using REST, and integration with Angular applications. Style and approach This book builds on your early knowledge and experience of Node.js and takes a craftsman approach to understanding the whole picture more deeply and shaping your Node applications to perform the way a craftsman would want. So, we take a thoughtful and broad thinking and coding approach to work with Node.js in this book.

Node.js, MongoDB and Angular Web DevelopmentThe definitive guide to using the MEAN stack to build web applicationsAddison-Wesley Professional

Summary AngularJS in Action covers everything you need to know to get started with the AngularJS framework. As you read, you'll explore all the individual components of the framework and learn how to customize and extend them. You'll discover the emerging patterns for web application architecture and tackle required tasks like communicating with a web server back-end. Along the way, you'll see AngularJS in action by building real world applications with thoroughly commented code. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology AngularJS is a JavaScript-based framework that extends HTML, so you can create dynamic, interactive web applications in the same way you create standard static pages. Out of the box, Angular provides most of the functionality you'll need for basic apps, but you won't want to stop there. Intuitive, easy to customize, and test-friendly, Angular practically begs you to build more interesting apps. About the Book AngularJS in

Action teaches you everything you need to get started with AngularJS. As you read, you'll learn to build interactive single-page web interfaces, apply emerging patterns like MVVM, and tackle key tasks like communicating with back-end servers. All examples are supported by clear explanations and illustrations along with fully annotated code listings. This book assumes you know at least some JavaScript. No prior exposure to AngularJS is required. What's Inside Get started with AngularJS Write your own components Best practices for application architecture Progressively build a full-featured application Covers Angular JS 1.3 Sample application updated to the latest version of Angular About the Author Lukas Ruebbelke is a full-time web developer and an active contributor to the AngularJS community. Table of Contents PART 1 GET ACQUAINTED WITH ANGULARJS Hello AngularJS Structuring your AngularJS applicationPART 2 MAKE SOMETHING WITH ANGULARJS Views and controllers Models and services Directives Animations Structuring your site with routes Forms and validations APPENDIXES Setting up Karma Setting up a Node.js server Setting up a Firebase server Running the app

Node.js, MongoDB and Angular Web Development The definitive guide to using the MEAN stack to build web applications Node.js is a leading server-side programming environment, MongoDB is the most popular NoSQL database, and Angular is the leading framework for MVC-based front-end development. Together, they provide an easy-to-implement, fully integrated web development stack that allows web programmers to create high-performance sites and applications built completely in JavaScript, from server to client. Updated for Angular 2, Angular 4, and subsequent versions, this new edition of Node.js, MongoDB and Angular Web Development shows you how to integrate these three technologies into complete working solutions. It begins with concise, crystal-clear tutorials on each technology and then quickly moves on to building common web applications. You'll learn how to use Node.js and MongoDB to build more scalable, high-performance sites, how to leverage Angular's innovative MVC approach to structure more effective pages and applications, and how to use all three together to deliver outstanding next-generation Web solutions. Implement a highly scalable and dynamic web server using Node.js and Express Implement a MongoDB data store for your web applications Access and interact with MongoDB from Node.js JavaScript code Learn the basics of TypeScript Define custom Angular directives that extend the HTML language Build server-side web services in JavaScript Implement client-side services that can interact with the Node.js web server Build dynamic browser views that provide rich user interaction Add authenticated user accounts and nested comment components to your web applications and pages Contents at a Glance Part I: Getting Started 1 Introducing the Node.js-to-Angular Stack 2 JavaScript Primer Part II: Learning Node.js 3 Getting Started with Node.js 4 Using Events, Listeners, Timers, and Callbacks in Node.js 5 Handling Data I/O in Node.js 6 Accessing the File System from Node.js 7 Implementing HTTP Services in Node.js 8 Implementing Socket Services in Node.js 9 Scaling Applications Using Multiple Processors in Node.js 10 Using Additional Node.js Modules Part III: Learning MongoDB 11 Understanding NoSQL and MongoDB 12 Getting Started with MongoDB 13 Getting Started with MongoDB and Node.js 14 Manipulating MongoDB Documents from Node.js 15 Accessing MongoDB from Node.js 16 Using Mongoose for Structured Schema and Validation 17 Advanced MongoDB Concepts Part IV: Using Express to Make Life Easier 18 Implementing Express in Node.js 19 Implementing Express Middleware Part V: Learning Angular 20 Jumping into TypeScript 21 Getting Started with Angular 22 Angular Components 23 Expressions 24 Data Binding 25 Built-in Directives Part VI: Advanced Angular 26 Custom Directives 27 Events and Change Detection 28 Implementing Angular Services in Web Applications 29 Creating Your Own Custom Angular Services 30 Having Fun with Angular

Traditional web dev stacks use a different programming language in every layer, resulting in a complex mashup of code and frameworks. Developers and businesses love it because it's scalable and cost-effective. End users love it because the apps created with it are fast and responsive. It's a win-win-win! Getting MEAN, Second Edition is completely revised and updated to cover Angular 2, Node 6 and the latest mainstream release of JavaScript ES2015 (ES6). Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

If you are a web or a full-stack JavaScript developer who is interested in learning how to build modern web applications using the MEAN stack, this book is for you.

This is a hands-on book which introduces you to agile JavaScript web and mobile software development using the latest cutting-edge front-end and back-end technologies including: Node.js, MongoDB, Backbone.js, Parse.com, Heroku and Windows Azure. Practical examples include building multiple versions of the Chat app:•jQuery + Parse.com JS REST API•Backbone and Parse.com JS SDK•Backbone and Node.js•Backbone and Node.js + MongoDB The Chat application has all the foundation of a typical web/mobile application: fetching data, displaying it, submitting new data. Other examples in the book are as follows:•jQuery + Twitter RESP API "Tweet Analyzer"•Parse.com "Save John"•MongoDB "Print Collections"•Backbone.js "Apple Database"•Monk + Express.js "REST API Server" This book will save you many hours by providing a hand-picked and tested collection of quick start guides. RPJS has practical examples that allow to spend less time learning and more time building your own applications. Prototype fast and ship code that matters! What You will Learn: You should expect a basic understanding from a collection of quick start guides, tutorials and suggestions for the devel0pment apps discussed in this book. In addition to coding examples, the book covers virtually all setup and deployment step-by-step. You'll learn from the examples of Chat web/mobile applications starting with front-end components and by the end we'll put front-end and back-end together and deploy to the production environment. Who This Book is For: The typical programmer who wants to learn more about effective JavaScript coding.

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Learning Node.js brings together the knowledge and JavaScript code needed to build master the Node.js platform and build server-side applications with extraordinary speed and scalability. You'll start by installing and running Node.js, understanding the extensions it uses, and quickly writing your first app. Next, building on the basics, you'll write more capable application servers and extend them with today's most powerful Node.js tools and modules. Finally, you'll discover today's best practices for testing, running Node.js code on production servers, and writing command-line utilities. Throughout the book, author Marc Wandschneider teaches by walking the reader line-by-line through carefully crafted examples, demonstrating proven techniques for creating highly efficient applications and servers. The second edition updates coverage of Node.js to reflect changes in the technology and how it is used in the three years since the first edition was published: Explanation of Node's new versioning scheme Updated coverage of Streams New coverage of installation using pre-build installers rather than from source code New coverage of Mongoose in the section on MongoDB New information about deploying Node on Heroku and Azure Expansion of coverage on testing If you're a developer who wants to build server-side web

applications with Node.js, Learning Node.js is your fatest route to success. Build Node.js solutions that leverage current JavaScript skills Master Node.js nonblocking IO and async programming Handle more requests and increase an application’s flexibility Use and write modules Perform common JSON/web server tasks Use browsers to generate pages on the fly via Ajax calls and template libraries Simplify development with the Express framework Create database back-ends using popular NoSQL and relational databases Deploy and run Node.js apps on Unix/macOS or Windows servers Deploy apps to Heroku and Microsoft Azure Support virtual hosts and SSL/HTTPS security Test Node.js programs that mix synchronous, async, and RESTful server API functionality

Build an interactive and full-featured web application from scratch using Node.js and MongoDB About This Book Configure your development environment to use Node.js and MongoDB Use Node.js to connect to a MongoDB database and perform data manipulations A practical guide with clear instructions to design and develop a complete web application from start to finish Who This Book Is For This book is designed for JavaScript developers of any skill level that want to get up and running using Node.js and MongoDB to build full-featured web applications. A basic understanding of JavaScript and HTML is the only requirement for this book. What You Will Learn Configure your development environment to use Node.js and MongoDB Write and configure a web server using Node.js powered by the Express.js framework Build dynamic HTML pages using the Handlebars template engine Persist application data using MongoDB and Mongoose ODM Test your code using automated testing tools such as the Mocha framework Deploy the development environment to the cloud using services such as Heroku, Amazon Web Services, and Microsoft Azure Explore Single-Page application frameworks to take your web applications to the next level In Detail Node.js and MongoDB are quickly becoming one of the most popular tech stacks for the web. Powered by Google's V8 engine, Node.js caters to easily building fast, scalable network applications while MongoDB is the perfect fit as a scalable, high-performance, open source NoSQL database solution. Using these two technologies together, web applications can be built quickly and easily and deployed to the cloud with very little difficulty. The book will begin by introducing you to the groundwork needed to set up the development environment. Here, you will quickly run through the steps necessary to get the main application server up and running. Then you will see how to use Node.js to connect to a MongoDB database and perform data manipulations. From here on, the book will take you through integration with third-party tools for interaction with web apps. It then moves on to show you how to use controllers and view models to generate reusable code that will reduce development time. Toward the end of the book, we will cover tests to properly execute the code and some popular frameworks for developing web applications. By the end of the book, you will have a running web application developed with MongoDB and Node.js along with it's popular frameworks. Style and approach An easy guide to Node.js and MongoDB, which will quickly introduce you to the relevant concepts by taking you through the different steps involved in building a full-fledged web application.

If you are a web application developer interested in using AngularJS for a real-life project, then this book is for you. As a prerequisite, knowledge of JavaScript and HTML is expected, and a working knowledge of AngularJS is preferred.

Assemble the complete stack required to build a modern web app using MongoDB, Express, React, and Node. This book also covers many other complementary tools: React Router, GraphQL, React-Bootstrap, Babel, and Webpack. This new edition will use the latest version of React (React 16) and the latest React Router (React Router 4), which has a significantly different approach to routing compared to React Router 2 which was used in the first edition of the book. Though the primary focus of Pro MERN Stack is to equip you with all that is required to build a full-fledged web application, a large portion of the book will be devoted to React 16. The popular MEAN (MongoDB, Express, AngularJS, Node) stack introduced Single Page Apps (SPAs) and front-end Model-View-Controller (MVC) as new and efficient paradigms. Facebook's React is a technology that competes indirectly with AngularJS. It is not a full-fledged MVC framework. It is a JavaScript library for building user interfaces (in some sense the View part). Yet, it is possible to build a web app by replacing AngularJS with React – hence the term MERN stack What You Will Learn Discover the features of React 16 to get the maximum out of this library Gain the basics of MongoDB, Express, and Node to build a web app Work with other libraries complementary to React, including React-Bootstrap, React Router, and GraphQL Use tools such as Babel and Webpack required to build JavaScript-based SPAs Tie all the components together to build a complete web app. Who This Book Is For Developers and architects who have prior experience in any web app stack other than the MERN stack will find the book useful to learn about this modern stack. Prior knowledge of JavaScript, HTML, and CSS is required.

Beginning Node.js is your step-by-step guide to learning all the aspects of creating maintainable Node.js applications. You will see how Node.js is focused on creating high-performing, highly-scalable websites, and how easy it is to get started. Many front-end devs regularly work with HTML, CSS, PHP, even WordPress, but haven't yet got started with Node.js. This book explains everything for you from a beginner level, enabling you to start using Node.js in your projects right away. Using this book you will learn important Node.js concepts for server-side programming. You will begin with an easy-to-follow pure JavaScript primer, which you can skip if you're confident of your JS skills. You'll then delve into Node.js concepts such as streams and events, and the technology involved in building full-stack Node.js applications. You'll also learn how to test your Node.js code, and deploy your Node.js applications on the internet. Node.js is a great and simple platform to work with. It is lightweight, easy to deploy and manage. You will see how using Node.js can be a fun and rewarding experience - start today with Beginning Node.js.

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

non-blocking concurrency. Through a series of practical programming domains, use the latest available ECMAScript features and harness key Node.js classes and popular modules. Create rich command-line tools and a web-based UI using modern web development techniques. Join the smart and diverse community that's rapidly advancing the state of the art in JavaScript development. What You Need: Node.js 8.x Operating system with bash-like shell OMQ (pronounced "Zero-M-Q") library, version 3.2 or higher Elasticsearch version 5.0 or higher jq version 1.5 or higher Redis version 3.2 or higher

Build Full-Stack applications with simple to use, yet powerful JavaScript technologies and host everything in the cloud in an economic and agile way. This book contains an all-encompassing presentation of theory, reference and implementation for building three tier architectures - Data Layer (MongoDB), Service Layer (Express/Node.js) and Presentation Layer (Angular). Learn how to architect, develop, test, secure, deploy and manage a RESTful Web Service. In-depth coverage of NPM modules like express, async, joi, helmet, jwt-simple, supertest, mongodb and more. Utilize Mocha, Fiddler and Selenium.

Node.js, MongoDB and Angular Web Development The definitive guide to using the MEAN stack to build web applications Node.js is a leading server-side programming environment, MongoDB is the most popular NoSQL database, and Angular is the leading framework for MVC-based front-end development. Together, they provide an easy-to-implement, fully integrated web development stack that allows web programmers to create high-performance sites and applications built completely in JavaScript, from server to client. Updated for Angular 2, Angular 4, and subsequent versions, this new edition of Node.js, MongoDB and Angular Web Development shows you how to integrate these three technologies into complete working solutions. It begins with concise, crystal-clear tutorials on each technology and then quickly moves on to building common web applications. You'll learn how to use Node.js and MongoDB to build more scalable, high-performance sites, how to leverage Angular's innovative MVC approach to structure more effective pages and applications, and how to use all three together to deliver outstanding next-generation Web solutions. Implement a highly scalable and dynamic web server using Node.js and Express Implement a MongoDB data store for your web applications Access and interact with MongoDB from Node.js JavaScript code Learn the basics of TypeScript Define custom Angular directives that extend the HTML language Build server-side web services in JavaScript Implement client-side services that can interact with the Node.js web server Build dynamic browser views that provide rich user interaction Add authenticated user accounts and nested comment components to your web applications and pages Contents at a Glance Part I: Getting Started 1 Introducing the Node.js-to-Angular Stack 2 JavaScript Primer Part II: Learning Node.js 3 Getting Started with Node.js 4 Using Events, Listeners, Timers, and Callbacks in Node.js 5 Handling Data I/O in Node.js 6 Accessing the File System from Node.js 7 Implementing HTTP Services in Node.js 8 Implementing Socket Services in Node.js 9 Scaling Applications Using Multiple Processors in Node.js 10 Using Additional Node.js Modules Part III: Learning MongoDB 11 Understanding NoSQL and MongoDB 12 Getting Started with MongoDB 13 Getting Started with MongoDB and Node.js 14 Manipulating MongoDB Documents from Node.js 15 Accessing MongoDB from Node.js 16 Using Mongoose for Structured Schema and Validation 17 Advanced MongoDB Concepts Part IV...

Provides information for building dynamic, high performance websites and Web applications completely in JavaScript, from server to client, using the Node.js, MongoDB, and AngularJS Web development technologies.

Os stacks tradicionais de web usam linguagens de programação diferentes em cada camada, resultando em uma confusão complexa de códigos e frameworks. Juntos, o banco de dados MongoDB, os frameworks Express e AngularJS, mais o Node.js, constituem o stack MEAN – uma plataforma poderosa que usa apenas uma linguagem, o JavaScript, de ponta a ponta. Os desenvolvedores e as empresas o idolatram porque é escalonável e econômico. Os usuários finais o adoram porque os apps criados com ele são rápidos e responsivos. Todo mundo sai ganhando! MEAN Definitivo ensina como desenvolver aplicações web usando o MEAN. Primeiro, criamos o esqueleto de um site estático em Express e Node, depois o enviamos a um servidor web na internet. Em seguida, criamos um banco de dados no MongoDB e construímos uma API para ele antes de empregar o Angular para transferir ao navegador do usuário a manipulação de dados e a lógica da aplicação. Por fim, adicionamos autenticação à aplicação usando todo o stack. Ao terminar, o leitor terá desenvolvido todas as habilidades e conhecimento necessários para construir uma aplicação web dinâmica e rica em dados. O livro inclui • Desenvolvimento em full-stack usando JavaScript • Técnicas responsivas para a web • Tudo o que é necessário para começar a desenvolver aplicações MEAN • Boas práticas para eficiência e reutilização de código Os leitores devem ter alguma bagagem de desenvolvimento web. Este livro é baseado no MongoDB 2, Express 4, Angular 1 e Node.js 4.

Learning Angular, Second Edition A Hands-On Guide to Angular 2 and Angular 4 Learning Angular teaches modern application development with Angular 2 and Angular 4. It begins with the basics of Angular and the technologies and techniques used throughout the book, such as key features of TypeScript, newer ES6 syntax and concepts, and details about the tools needed to write professional Angular applications. The reader will next build an Angular application from scratch while learning about the primary pieces of an Angular application and see how they work together. Using lots of examples, the core parts of Angular will be introduced, such as Components, the Router, and Services. The book also covers techniques like server-side rendering and how to incrementally add Angular 2+ features to existing AngularJS applications. Finally, the reader will gain insight into advanced skills that should be part of any professional Angular developer's toolkit such as testing, tooling options, and performance tuning. Understand how Angular is organized and learn best practices for designing Angular applications Quickly build Angular templates with built-in directives that enhance the user experience Bind UI elements to your data model, so changes to your model and UI occur automatically in tandem Define custom Angular directives that extend HTML Implement zoomable images, expandable lists, and other rich UI components Implement client-side services that interact with web servers Build dynamic browser views to provide even richer user interaction Create custom services you can easily reuse Implement rich UI components as custom Angular directives Contents at a Glance Introduction What is Angular Why Use Angular Who this Book is For How to Use this Book Getting the Source Code Chapter 1: Jumping into JavaScript Setting Up a JavaScript Development Environment Defining Variables Understanding JavaScript Data Types Using Operators Implementing Looping Creating Functions Understanding Variable Scope Using JavaScript Objects Manipulating Strings Working with Arrays Adding Error Handling Chapter 2: Jumping into TypeScript Learning the Different Types Understanding Interfaces Implementing Classes Implementing Modules Understanding Functions Chapter 3: Getting Started with Angular Why Angular? Understanding Angular Separation of Responsibilities Adding Angular to Your

Environment Using the Angular CLI Creating a Basic Angular Application Chapter 4: Angular Components Component Configuration Building the Template Using Constructors Using External Templates Implementing Directives Chapter 5: Expressions Using Expressions Using Pipes Building a Custom Pipe Chapter 6: Data Binding Understanding Data Binding Interpolation Property Binding Attribute Binding Class Binding Style Binding Event Binding Two-Way Binding Chapter 7: Built-in Directives Understanding Directives Using Built-in Directives Structural Directives Attribute Directives Chapter 8: Custom Directives Creating a Custom Attribute Directive Creating a Custom Directive with a Component Chapter 9: Events and Change Detection Using Browser Events Emitting Custom Events Using Observables Chapter 10: Implementing Angular Services in Web Applications Understanding Angular Services Using the Built in Services Sending HTTP GET and PUT Requests with the http Service Implementing a Simple Mock Server Using the http Service Changing Views with the router Service Implementing a Router with a Navigation Bar Implementing a Router with Parameters Chapter 11: Creating Your Own Custom Angular Service Integrating Custom Services into Angular Applications Implementing a Simple Application That Uses a Constant Data Service Implementing a Data Transform Service Implementing a Variable Data Service Implementing a Service that Returns a Promise Implementing a Shared Service Chapter 12: Having Fun with Angular Implementing an Angular Application That Uses the Animation Service Implementing an Angular Application That Zooms in on Images Implementing an Angular Application That Enables Drag and Drop Implementing a Star Rating Angular Component

Provides information on how to create interactive web applications using AngularJS, including how to define modules and utilize dependency injection, build dynamic browser views, and create custom directives to extend HTML.

This book is a mini tutorial full of code examples and strategies to give you plenty of options when building your own applications with MongoDB.This book is ideal for people who want to develop applications on the Node.js stack quickly and efficiently. Prior knowledge of the stack is not essential as the book briefly covers the installation of the core components and builds all aspects of the example application. The focus of the book is on what Mongoose adds to you applications, so experienced Node.js developers will also benefit.

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.

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.

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 lanaguages, 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. Fully supported by a continuously updated source code repository on GitHub and with full-color code examples, learn what you can do with Node.js 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 Implement a third-party OAuth strategy with Everyauth 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.

Build fast, robust, and maintainable modern full-stack web applications using MongoDB, Express, Angular, and Node.js. Key Features Build highly scalable, asynchronous, and event-driven APIs Develop a user authentication system with MEAN Build a full-fledged application using the MEAN stack Book Description MongoDB, Express, Angular and Node.js Fundamentals is a practical guide to the tried-and-true production-ready MEAN stack, with tips and best practices. The book begins by demystifying the MEAN architecture. You'll take a look at the features of the JavaScript libraries, technologies, and frameworks that make up a MEAN stack. With this book, you'll not only learn how to develop highly scalable, asynchronous, and event-driven APIs quickly with Express and Node.js, but you'll also be able put your full-stack skills to use by building two full-fledged MEAN applications from scratch. You'll understand how to build a blogging application using the MEAN stack and get to grips with user authentication using MEAN. As you progress through the chapters, you'll explore some old and new features of Angular, such as pipes, reactive forms, modules and optimizing apps, animations and unit testing, and much more. By the end of the book, you'll get ready to take control of the MEAN stack and transform into a full-stack JavaScript developer, developing efficient web applications using Javascript technologies. What you will learn Understand the MEAN architecture Create RESTful APIs to complete CRUD tasks Build a blogging application with basic features Describe best practices to secure node applications Implement authentication and authorization Creating simple animations using Angular Perform unit testing on Angular applications Who this book is for If you are a beginner or intermediate frontend developer who wants to become full-stack JavaScript developer, this book is ideal for you. You'll need some prior exposure to MongoDB as we skim over its basics before getting straight to work.