Developing Backbone.js Applications

If you want to build your site’s frontend with the single-page application (SPA) model, this hands-on book shows you how to get the job done with Backbone.js. You’ll learn how to create structured JavaScript applications, using Backbone’s own flavor of model-view-controller (MVC) architecture. Start with the basics of MVC, SPA, and Backbone, then get your hands dirty building sample applications—a simple Todo list app, a RESTful book library app, and a modular app with Backbone and RequireJS. Author Addy Osmani, an engineer for Google’s Chrome team, also demonstrates advanced uses of the framework. Learn how Backbone.js brings MVC benefits to the client-side. Write code that can be easily read, structured, and extended. Work with the Backbone.Marionette and Thorax extension frameworks. Solve common problems you’ll encounter when using Backbone.js. Organize your code into modules with AMD and RequireJS. Paginate data for your Collections with the Backbone.Paginator plugin. Bootstrap a new Backbone.js application with boilerplate code. Use Backbone with jQuery Mobile and resolve routing problems between the two. Unit-test your Backbone apps with Jasmine, QUnit, and SinonJS.

Developing Backbone.js Applications: Building Better JavaScript Applications

Learning JavaScript Design Patterns - A JavaScript and jQuery Developer's Guide

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

Beginning Backbone.js
Beginning Backbone.js is your step-by-step guide to learning and using the Backbone.js library in your web projects. Backbone.js is one of the most popular JavaScript libraries among web developers, used to create modular, single-page web apps. This book takes you from downloading Backbone.js and its dependencies all the way to using more advanced libraries to structure your application architecture, and everything in between. With a real-world, practical approach, you will learn how you can integrate Backbone.js into the center of your JavaScript stack, and create scalable applications. James Sugrue shows you how to implement all aspects of templating, work efficiently with RequireJS, and fully understand Grunt and all its plug-ins. Armed with this knowledge you'll be able to architect a continuous integration system that is key to real-world applications. With the explosion of JavaScript-based applications on the web, the need for more structured approaches to code management is more important than ever. Backbone.js helps create applications that separate models from views, enabling developers to avoid spaghetti code. Beginning Backbone.js will gently guide you into this amazingly powerful library, and help you ramp up to building professional applications. Integrate Backbone.js into your work today with this indispensable book.

**Programming JavaScript Applications - Robust Web Architecture with Node, HTML5, and Modern JS Libraries**

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

**Building Node Applications with MongoDB and Backbone - Rapid Prototyping and Scalable Deployment**

Build an application from backend to browser with Node.js, and kick open the doors to real-time event programming. With this hands-on book, you’ll learn how to create a social network application similar to LinkedIn and Facebook, but with a real-time twist. And you’ll build it with just one programming language: JavaScript. If you’re an experienced web developer unfamiliar with JavaScript, the book’s first section introduces you to the project’s core technologies: Node.js, Backbone.js, and the MongoDB data store. You’ll then launch into the project—a highly responsive, highly scalable application—guided by clear explanations and lots of code examples. Learn about key modules in Node.js for building real-time apps Use the Backbone.js framework
to write clean browser code, and maintain better data integration with MongoDB. Structure project files as a foundation for code that will arrive later. Create user accounts and learn how to secure the data. Use Backbone.js templates to build the application's UIs, and integrate access control with Node.js. Develop a contact list to help users link to and track other accounts. Use Socket.io to create real-time chat functionality. Extend your UIs to give users up-to-the-minute information.

**DOM Enlightenment - Exploring JavaScript and the Modern DOM**

With DOM Enlightenment, you'll learn how to manipulate HTML more efficiently by scripting the Document Object Model (DOM) without a DOM library. Using code examples in cookbook style, author Cody Lindley (jQuery Cookbook) walks you through modern DOM concepts to demonstrate how various node objects work. Over the past decade, developers have buried the DOM under frameworks that simplify its use. This book brings these tools back into focus, using concepts and code native to modern browsers. If you have JavaScript experience, you'll understand the role jQuery plays in DOM scripting, and learn how to use the DOM directly in applications for mobile devices and specific browsers that require low overhead. Understand JavaScript node objects and their relationship to the DOM. Learn the properties and methods of document, element, text, and DocumentFragment objects. Delve into element node selecting, geometry, and inline styles. Add CSS style sheets to an HTML document and use CSSStyleRule objects. Set up DOM events by using different code patterns. Learn the author’s vision for dom.js, a jQuery-inspired DOM Library for modern browsers.

**Learning Node**

Provides information on writing scalable network applications using the JavaScript-based platform.

**Vue.js 2 Design Patterns and Best Practices - Build enterprise-ready, modular Vue.js applications with Vuex and Nuxt**

Become an expert Vue developer by understanding design patterns and the component architecture of Vue.js to write clean and maintainable code. Key Features Craft highly modular applications by exploring design patterns and the component architecture of Vue.js. Enforce a Flux-like application architecture in your Vue.js applications with Vuex. Easy-to-follow examples that can be used to create reusable code and extensible designs. Book Description Vue.js 2 Design Patterns and Best Practices starts by comparing Vue.js with other frameworks and setting up the development environment for your application, and gradually moves on to writing and styling clean, maintainable, and reusable Vue.js components that can be used across your application. Further on, you'll look at common UI patterns, Vue form submission, and various modifiers such as lazy binding, number typecasting, and string trimming to create better UIs. You will also explore best practices for integrating HTTP into Vue.js applications to create an application with dynamic data. Routing is a vitally important part of any SPA, so you will focus on the vue-router and explore routing a user between multiple pages. Next, you'll also explore
state management with Vuex, write testable code for your application, and create performant, server-side rendered applications with Nuxt. Toward the end, we'll look at common antipatterns to avoid, saving you from a lot of trial and error and development headaches. By the end of this book, you'll be on your way to becoming an expert Vue developer who can leverage design patterns to efficiently architect the design of your application and write clean and maintainable code. What you will learn Understand the theory and patterns of Vue.js Build scalable and modular Vue.js applications Take advantage of Vuex for reactive state management Create single page applications with vue-router Use Nuxt for FAST server-side rendered Vue applications Convert your application to a Progressive Web App (PWA) and add ServiceWorkers and offline support Build your app with Vue.js by following best practices and explore the common anti-patterns to avoid Who this book is for This book is for Vue developers who are familiar with framework design principles and utilize commonly found design patterns in developing web applications.

**Dojo: The Definitive Guide - The Definitive Guide**

Of all the Ajax-specific frameworks that have popped up in recent years, one clearly stands out as the industrial strength solution. Dojo is not just another JavaScript toolkit—it’s the JavaScript toolkit—and Dojo: The Definitive Guide demonstrates how to tame Dojo’s extensive library of utilities so that you can build rich and responsive web applications like never before. Dojo founder Alex Russell gives a foreword that explains the “why” of Dojo and of this book. Dojo provides an end-to-end solution for development in the browser, including everything from the core JavaScript library and turnkey widgets to build tools and a testing framework. Its vibrant open source community keeps adding to Dojo’s arsenal, and this book provides an ideal companion to Dojo’s official documentation. Dojo: the Definitive Guide gives you the most thorough overview of this toolkit available, showing you everything from how to create complex layouts and form controls closely resembling those found in the most advanced desktop applications with stock widgets, to advanced JavaScript idioms to AJAX and advanced communication transports. With this definitive reference you get: Get a concise introduction to Dojo that's good for all 1.x versions Well-explained examples, with scores of tested code samples, that let you see Dojo in action A comprehensive reference to Dojo’s standard JavaScript library (including fundamental utilities in Base, Dojo’s tiny but powerful kernel) that you'll wonder how you ever lived without An extensive look at additional Core features, such as animations, drag-and-drop, back-button handling, animations like wipe and slide, and more Exhaustive coverage of out-of-the-box Dijits (Dojo widgets) as well as definitive coverage on how to create your own, either from scratch or building on existing ones An itemized inventory of DojoX subprojects, the build tools, and the DOH, Dojo’s unit-testing framework that you can use with Dojo—or anywhere else If you're a DHTML-toting web developer, you need to read this book—whether you're a one-person operation or part of an organization employing scores of developers. Dojo packs the standard JavaScript library you've always wanted, and Dojo: The Definitive Guide helps you transform your ideas into working applications quickly by leveraging design concepts you already know.