



Web Development with Node & Express

LEVERAGING THE JAVASCRIPT STACK

Ethan Brown

Web Development with Node and Express

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 sample application that exposes a public website and a REST 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

“Writing a book that is simultaneously engaging and informative is no easy feat, but Ethan Brown has achieved exactly that – *Web Development with Node and Express* is one of the best technical introductions to the subject that I have seen. Impressive in scope, it covers everything one needs to know in order to build a production-ready web application powered by Node.js and the Express framework.”

—Semmy Purewal
Senior Software Engineer at Netflix

Ethan Brown is a senior software engineer at Pop Art, an interactive marketing agency in Portland, Oregon. He's responsible for the architecture and implementation of web applications for clients ranging from small businesses to international enterprises.

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by Ethan Brown

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[LSI]

This book is dedicated to my family:

*My father, Tom, who gave me a love of engineering; my mother, Ann, who gave me a love
of writing; and my sister, Meris, who has been a constant companion.*

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Foreword

The combination of JavaScript, Node, and Express is an ideal choice for web teams that want a powerful, quick-to-deploy technology stack that is widely respected in the development community and large enterprises alike.

Building great web applications and finding great web developers isn't easy. Great apps require great functionality, user experience, and business impact: delivered, deployed, and supported quickly and cost effectively. The lower total cost of ownership and faster time-to-market that Express provides is critical in the business world. If you are a web developer, you have to use at least some JavaScript. But you also have the option of using a *lot* of it. In this book, Ethan Brown shows you that you can use a lot of it, and it's not that hard thanks to Node and Express.

Node and Express are like machine guns that deliver upon the silver-bullet promise of JavaScript.

JavaScript is the most universally accepted language for client-side scripting. Unlike Flash, it's supported by all major web browsers. It's the fundamental technology behind many of the attractive animations and transitions you see on the Web. In fact, it's almost impossible not to utilize JavaScript if you want to achieve modern client-side functionality.

One problem with JavaScript is that it has always been vulnerable to sloppy programming. The Node ecosystem is changing that by providing frameworks, libraries, and tools that speed up development and encourage good coding habits. This helps us bring better apps to market faster.

We now have a great programming language that is supported by large enterprises, is easy-to-use, is designed for modern browsers, and is supplemented with great frameworks and libraries on both client-side and server-side. I call that revolutionary.

—Steve Rosenbaum
President and CEO, Pop Art, Inc.