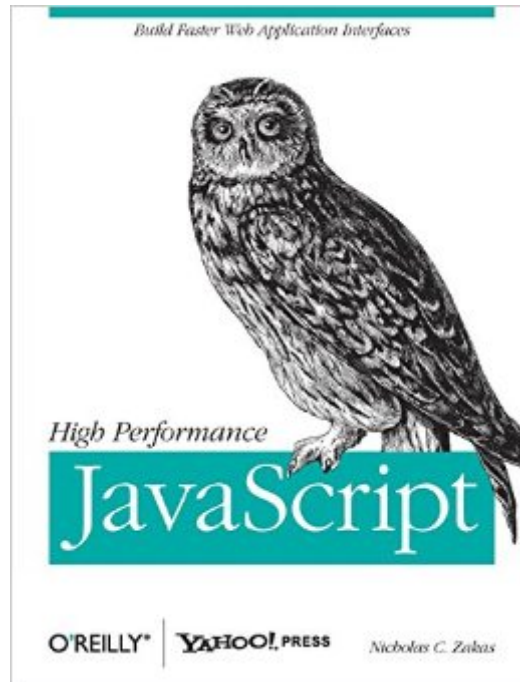# High Performance JavaScript (Build Faster Web Application Interfaces)

Synopsis

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

Book Information

Series: Build Faster Web Application Interfaces

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Average Customer Review: 4.4 out of 5 starsÂ Â See all reviewsÂ (33 customer reviews)

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Customer Reviews

This book is a good reference on how to optimize JavaScript applications and also an interesting

read in case you want to know how things work "under the hood".Many of the techniques presented also works for other programming languages (and are well-known performance tricks) and can be used without increasing too much the code complexity, which is a huge gain, you're not just becoming a better JavaScript developer but also a better developer.One thing that should be clear is that this book is NOT intended for BEGINNERS, since it already presumes that you have a good knowledge and experience with JS programming.If you already readÂ Professional JavaScript for Web Developers (Wrox Programmer to Programmer)Â (also written by Zakas),Â High Performance Web Sites: Essential Knowledge for Front-End EngineersÂ andÂ Even Faster Web Sites: Performance Best Practices for Web DevelopersÂ you will find that some of the techniques were already present on those books, so if you're up-to-date with the new technologies/tools and been researching about the subject probably you already know a good part of what this book has to teach, nevertheless it still a nice and interesting read since it explains how the JavaScript engines work and why those techniques are faster, the fact that it is concise is a big plus too.The book has some typo mistakes (which doesn't affect the understanding) and some of the line graphs (used to show browsers benchmark) are hard to read since all the lines look the same (as of 1st Edition).I strongly recommend this book to any intermediate to advanced developer who wants to learn how to improve the overall performance of JavaScript applications since it is a concise and accurate compilation of best practices, even if you know a lot about the subject you may learn a few new tricks or understand a little bit better why it works...

While reading Nicholas Zakas' "High Performance JavaScript", it occurred to me that there were actually two different reviews that I wanted to write. So, rather than try to reconcile them into one review, I'll simply apply them here as an ordered list.(1) To continue with the JavaScript University metaphor (from my review of Zakas'Â Professional JavaScript for Web Developers (Wrox Programmer to Programmer)): Finals are coming up in Prof. Crockford's upper-division JavaScript class. You've been a diligent student all semester and although you're not failing, it always seems like you're somewhere in the middle of the pack. You want desperately to ace the final exam, so you reach out for some help. Zakas (the graduate student/teaching assistant for the class) offers to show you the thesis he is working on. Then It hits you like a bolt from the blue -- every bit of it resonates with you. "It's so simple! so clear!" you exclaim. The inner machinations of the language snap together in a way that makes it all feel new and exciting -- the possibilities are boundless! You go back over your notes. You were close -- oh so close -- the whole time. But the last little bits drop in. A refinement here, a re-factor there... and the next thing you know, things are blazing. Your

pages load 60% faster, execution time is down an average of 40%. You're amazed at yourself. And when the grades for the final exam come back, you're pleased to see that you aced it (aside from that little Oops on scoping closures -- but you try to think of that as a conscious trade-off). Prof. Crockford is pleased (if a little disappointed that it took you this long to Get It) and you're the envy of your peers. At least until next semester's RegEx class with Prof. Levithan. [Rated: 5 of 5](2) The frustrating part about working at a well-organized shop is that you get yourself all excited for a book like this and then half the recommendations in there are things that you're already doing. Put scripts at the bottom of the document? Check. Minify and compress? Check. Concatenate and package? Check. So on the one hand you say: "I guess I can sleep a little easier at night knowing that our build system adheres to the best practices recommended by the experts out there." But on the other hand, you're a little disappointed because you were hoping for some startling revelations. Again: not that this makes it without merit. From this perspective, what is noteworthy about this book is that these best practices and techniques are all gathered up in one place and presented in a logical order; even if "you're already doing it right", it is still a worthwhile exercise to meditate on the specifics, and to really go deep on why these best practices are important. (Plus, it's great to see the data -- nothing beats a little chartporn for proving the point.) [Rated: 4 of 5]

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