



MODERN WEB PRACTICES v1.0

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Modern Web Practices

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*This book is dedicated to all the ponytails and propellerheads who worked, at one time or another,
for appendTo.*

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Automate Your Workflow with Grunt

by Aaron Bushnell

If you find yourself performing the same development tasks over and over again this chapter was written for you. Maybe you endlessly add browser prefixes to your CSS properties. Or maybe you *know* it's a good idea to minify your JavaScript and CSS files, but you don't really know *how*. Or maybe you have five or six pages with the same header and footer on them and changing those means editing five or six different HTML files.

This chapter is about letting the computer do the hard, repetitive, or downright boring work for you. Because no one gets excited to do work that a computer could do faster and more reliably.

We should be *building* LEGOs, not making sure the set has all the pieces.

Read the rest of Aaron's chapter in the [full Modern Web Practices ebook](#)!

¹<http://bit.ly/mwpebook>

Offline Web Applications

by Nicholas Cloud

There was a time not long ago when my mobile phone was just a phone. I made phone calls and cursed it when those calls got dropped. Now I have a “smart” phone with the web at my fingertips. Well, when I have data connectivity that is. If my call is dropped I can dial a phone number again with little effort. If my network connection stalls while I’m submitting a lengthy form or while I’m retrieving critical data the impact may be far more substantial. If I’m just browsing reddit or reading the news, connectivity loss can be mildly annoying. If I’m entering data at a client site for my job, it can be downright vexing and potentially costly.

Mobile web traffic now accounts for more than 50% of total internet traffic, of which [8% comes from mobile browsers](#)². Users expect applications on mobile devices to behave like applications on traditional computers when their devices go offline; that is, they expect the application to keep working, though in a limited capacity.

Read the rest of Nicholas’s chapter in the [full Modern Web Practices ebook](#)³!

²<http://money.cnn.com/2014/02/28/technology/mobile/mobile-apps-internet>

³<http://bit.ly/mwpebook>

Data Binding

by Ryan Conaway

What exactly *is* data binding?

In the simplest terms (and in the scope of this chapter), data binding in the web development space is attaching JavaScript data, whether that be a simple variable or a complex object, to a DOM node or vice versa by using DOM node information as a value for said variable or object. If both cases are present then you have a 2-way binding.

You might also view data binding as *extending* HTML and the DOM's API in a way that seamlessly integrates JavaScript and HTML content. When done right, the DOM and your JavaScript are decoupled so that neither is dependent on the other and should also be able to fail without any dire consequences.

Read the rest of Ryan's chapter in the [full Modern Web Practices ebook](http://bit.ly/mwpebook)⁴!

⁴<http://bit.ly/mwpebook>

Making Things Move with CSS3 Transitions and Animations

by Trevan Hetzel

Modern web browsers have supported CSS3 transitions and animations for a few years now. Transitions, especially, are becoming pretty common ways of visualizing changes to elements on a website. Many animating effects for which that developers often rely on jQuery are now available as plain CSS.

For readability and future relevance, I'm omitting vendor prefixes in my code examples. You should always check the browser support when using transition and animation properties, though. The [Can I use...](#)⁵ website is a great reference to check CSS3 property availability in different browsers.

While oftentimes used together, transitions and animations are a completely different set of CSS properties that work independent of each other. Transitions are typically used to animate state changes, while animations are used for more robust motion sequences. For example, fading a button's background color in and out when a user hovers over it would be done with a transition, while bouncing a ball or spinning a wheel would be done with an animation. Transitions can only be initialized when a CSS property has changed and they can only run once. Animations, however, run automatically and can be programmed to loop as many times as specified.

Read the rest of Trevan's chapter in the [full Modern Web Practices ebook](#)⁶!

⁵<http://caniuse.com>

⁶<http://bit.ly/mwpebook>

HTML and CSS Bad Practices

by Ted Waller

This chapter covers a number of things I've learned to avoid over my years of reading, writing, and maintaining CSS and HTML. Although some of these have been bad practices for a long time, this chapter is written in the context of modern front-end development and responsive web design. Some of the examples are perhaps worse than you'll typically encounter, but they are that way for demonstrative purposes and serve as an example of what these patterns can devolve into over the life of a project.

Best practices vary from team to team and even project to project. I'm not going to pretend to know what works for every circumstance. However, the bad practices and patterns identified here are almost always unhelpful in the long-run.

Read the rest of Ted's chapter in the [full Modern Web Practices ebook](#)⁷!

⁷<http://bit.ly/mwpebook>

Bower in Practice: A Package Manager for the Web

by Bob Yexley

Modern software development of nearly every flavor involves some kind of package manager. These have become essential tools for helping developers manage complex collections of utilities, libraries and dependencies of all kinds. Web development is no different in that it can benefit from a tool to help manage your web application dependencies. The biggest question that most web developers seem to have about Bower is: *do I really **need** it?* That decision can only be made by the individual developer or team with the right information. This chapter will provide you with an in-depth look at Bower, how it works, how it can help you, and arm you with the information you need to determine if Bower is the tool for you.

Read the rest of Bob's chapter in the [full Modern Web Practices ebook](#)⁸!

⁸<http://bit.ly/mwpebook>