

## Introduction

In this lesson you are going to learn some testing techniques and tools that can be used to identify and solve problems in the code. One of the ways to make the code better is by validating it like we saw in the previous lesson. We are going to look at some additional tools now.

## Useful browser extensions

First, while you are developing on your computer, you should get a bit familiar with using browser's **web inspector**. I, for example, like to use **Firefox** as this browser provides its own web inspector. There is also the famous web inspector Firebug that can be installed as an add-on. This is a very useful extension that provides many functionalities. One of the features that is probably used the most is the ability to inspect the code. With this tool, you can see what's happening in the page's code, change it, delete elements, modify CSS rules and much more.

## Browser testing tools

Another useful extension available for Chrome, Firefox and Opera is the **Web Developer toolbar**. It has many tools like disabling CSS, images, provides a ruler, a tool for analysis of the page size, document outline, and much more. This is a must-have for anyone working with web development.

Of course, it's also important to have many browsers installed on your computer so you can test your website in Firefox, Chrome, Opera, and Internet Explorer, for example. However this alone can be truly limited as there are a lot of browser versions on different operating systems and devices like phones and tablets.

If you want to see how the website looks in all of these environments, one solution is to use a browser testing website. I'll recommend two, but there are many more:

- browsershots.org will take screenshots of your website in a lot of different browsers, but it doesn't include mobile devices
- At browserstack.com with a paid account you can do live testing of a website on computers and mobile devices.

In some cases the various versions of Internet Explorer may offer the most problems. For this browser specifically, you can use a tool called **IETester**, which installs many versions of IE on your computer. It's not completely reliable and it is very buggy, but might help with testing in some situations. Another option is to access Microsoft's **Modern.IE** website.

## Windows virtual machines

At Modern.IE you will be presented with links to Windows virtual machines for testing with older versions of IE. And you can also have screenshots taken of your website in nine common web browsers.

Finally, another very useful tool is the website **caniuse.com**. Here you can type in a name of some HTML, CSS or JavaScript feature, and the site will display the current browser support for it. This is a great resource especially when you are trying to use some newer features of a language.

So this was just a quick review of some testing tools and techniques. As always, try to stick to the best practices in coding Semantic HTML, validate your code and test it in as much browsers and devices as you can to ensure that your code works as intended.