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\* Title: Assignment 9.4

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\* Description: Describe three things developer tools can do.

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The Developer tools options in most browsers are fairly similar. Chrome, Opera, Firefox, Safari and even Microsoft’s Edge all provide similar opportunities to inspect the DOM, CSS, JavaScript console, files sources, network activity, utilize device emulation, element highlighting, and more. While most developers will want or need to test their sites and pages across multiple devices and browsers, ultimately whatever dev tools, like whatever IDE or code editor, are more personal preference than anything else.

Among the features that are most helpful to front end developers working on turning mock-ups into functional pages in the Firefox browser is the ability to select and highlight elements in the DOM and have a ruler or guide automatically appears to show where corners and borders line up compared to other elements on the page (Keeton, 2018). It may seem like a small detail, but when going back and forth with a designer to ensure things are perfectly aligned based on their original design, this is a wonderful feature, and as you’re resizing the page, or using a device emulator, you may notice slight inconsistencies. For example, if one element relies on hard-coded REM values for margins, and another is utilizing percentages or viewport height/width. On desktop these elements might all appear to line up correctly, but on a smaller device, like a phone or tablet, they may not align as expected. There are several similar add-ons available for Chrome, but Firefox includes this as part of their standard developer tools.

Utilizing the CSS editor is another wonderful tool which most browsers provide as part of their developer tools (Smith, 2011). Within the CSS as several tools which allow users to see changes in real-time as they make them, which can be an incredible time saver as opposed to saving CSS in an editor and then refreshing to see the updates. Additionally, since these changes aren’t saved, it allows a more free-flow, without having to worry about changes impacting other elements.   
  
Within the CSS, there are several tools which make editing easy and fun. One that is included in Firefox is the eyedropper tool. This tool appears automatically next any color noted within the CSS in the Firefox browser. By simply selecting an element with a color value, and then clicking the eyedropper tool, an eyedropper will appear as the selector, and any element which is hover4ed over will reveal it’s color as a hex value which can be utilized to match the same color elsewhere. If for example, a jpg image is given as part of the assets for a page, and a designer wants to match the exact shade of red of the purse in the image to a call to action button on the same page, with just a few clicks, a developer can have the exact shade of red desired!  
  
Within the CSS, developers can also alter states for buttons or links. Focus, Hover, Active, and Visited states can all be seen without having to actually perform any actions on the page, allowing developers to see what their work will look like to users at different parts of their journey.

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