Browser Developer Tools

[A header saying "Misty Mountain Valley" is shown. Beneath it is an image of a mountain range. Beneath the image is a paragraph that has a plain background and a border.]

Instructor: Browser developer tools are a great way to inspect elements of a web page. Each browser has their own developer tools, but I will be describing and showing the Chrome developer tool. If you're having a hard time understanding why a certain element is not doing what you'd expect or you just want to inspect what styles were used on an element. Try right-clicking it, and select Inspect from the pop-up menu.

[The instructor moves their mouse over the mountain image and right-clicks it. A pop-up menu appears and the instructor selects "Inspect" out of the list. A panel on the right side of the screen opens displaying the website's HTML on the top and CSS on the bottom.]

A panel will open that shows the HTML, the styles, and the box model for that element.

[The instructor scrolls down on the CSS side. A box model appears for the image.]

This tool is powerful and can do many things. We'll look at just a small number of things. Notice in the HTML, the element you are on when you clicked inspect will be highlighted and the styles or CSS, and the box model information will show the information for that highlighted element.

[The image tag is highlighted on the HTML portion of the panel. The CSS and box model below show the information and changes on the image.]

You can click and expand and contract any of the code to look at other elements too. The styles or CSS that affect the highlighted element will also show below the HTML.

[The instructor expands the paragraph element, showing all the text in the paragraph. The paragraph element is now highlighted, and the CSS portion displays the lines of CSS that affect the element.]

It will show if it's a style that you added to the CSS file. And it would even show what line this lecture is on in your CSS file.

[The instructor circles a line that the is in the top right corner of the CSS. It says "styles.css: 229"]

And it might show the user agent styles or browser default styling.

[The instructor scrolls down the CSS portion. More CSS for tags is shown. In its upper right corner it says "user agent stylesheet".]

You can also uncheck boxes next to the styles to turn off and on that particular declaration, and the browser will show the results for that page. For example, here, I could see what it looks like if I turn off the box sizing or I could see what it looks like if I changed a width.

[The instructor unchecks a box for the line "box-sizing: border-box;" the line gets crossed out and the paragraph in the website becomes wider than the image. The instructor clicks on the "width" line of the paragraph and changes it to 400px. The paragraph in the website becomes 400 px wide.]

Or I could even make a new declaration for that selector. Perhaps I want my text color to be a dark, olive green.

[The instructor clicks right below the last line of the CSS and a new line appears. The instructor types in "color: darkolivegreen". The text color of the paragraph changes to a dark green.]

I can even click the color square to open up a color picker and make it darker or choose a different color.

[Next to the text saying "darkolivegreen", is a dark green square. When the instructor clicks on it a color picker appears. The instructor clicks a darker green. The text changes to the shade of green.]

All of these changes are not permanent. It is not actually changing our CSS file. It's just the browser showing us what it would look like. As soon as we refresh the page, it will go back to what is actually in the CSS file.

[The instructor refreshes the page. All the changes that were made revert back.]

If you see declarations that are crossed out, it might be because they've been overridden by more specific rules. Or in my case, it's because I have them commented out in my CSS code. Also notice as I rest my mouse pointer over the code here, I will see colors surrounding my element.

[The instructor hovers their mouse over the paragraph element. In the website an opaque blue covers the text, a green shows the padding, a brown shows the border, and a tan shows the rest of the space that the paragraph takes up.]

They represent parts of the box model. Also, if you scroll down, you can also see that graphic of a box model with the actual numbers of pixels for padding, border, and margin.

[The instructor scrolls down until the box model appears. In each section, there is a number on all sides saying how big, in pixels, the side is.]

As I rest my mouse pointer over each part, I can see the colors in my browser.

[The instructor moves their mouse pointer over the different areas on the box model. The part of the box model is highlighted on the website.]

Notice they're all in pixels, even though I might have used a different type of measurement in CSS. The auto, in this case is showing as pixels.

[The instructor shows the CSS of the paragraph, highlighting the line saying "margin: 30 auto;". The margin in the box model says the top and bottom are 30px and the sides are 111px.]

As I resize the page, you will see that they can change.

[The instructor shrinks the website's width. The sides of the margin in the box model shrink with it.]

Okay, just a few more things. If you want to see pseudo-selectors, for example, maybe the CSS for a hover effect. I can click here and then I'd be able to play around with that.

[Below the HTML portion and above the CSS portion of the panel, text saying ":hov" is displayed. A menu appears with checkboxes. The instructor checks the box that says ":hover". Nothing happens except the box is now checked.]

I don't happen to have any hover effects, but that's where you would find it. Also, at the very top there's a toggle device icon. It's the second one.

[At the top of the panel are two icons and a menu. The instructor clicks the second one icon. A menu at the top of the website appears displaying the dropdown menus, height and width, and other information.]

It lets me choose different devices to show me how my page would look on a certain type of phone, a tablet, et cetera, et cetera.

[The instructor opens up a dropdown menu that says "Responsive". A list of different devices appears and the instructor selects the one that says "iPhone 6/7/8". The height and width of the website change to show how the website would look on that device's screen.]

There are lots to choose from, or maybe even enter a pixel size to represent a really big monitor.

[The instructor changes the width and height of the website to be large.]

I'm going to toggle that back off.

[The instructor clicks the second icon in the panel again. The menu disappears and the website returns to its normal size.]

One more thing. Notice as I resize the width of my page, I can see the pixel width of my page in the top right.

[The instructor drags the panel to the left and right. As they drag it, the website resizes and text in the upper right corner of the website changes with it.]

This comes in handy when setting media queries that we'll touch on later. So lots of very cool helps with developer tools.

[End of video.]