

1. To make a website responsive it is crucial that the website works and adapts to a wide array of environments: desktop, mobile, etc. One technique that can help accomplish this task is using the `<meta>` tag and setting the name to "viewport": `name="viewport"`. This lets a device's browser know how to scale a website so it fits on the screen. Other techniques include using CSS and the "max-width" property to scale things such as images to a device's screen size, and using the "vw" unit to scale text to the size of a device's browser window.
2. There are a plethora of free and paid tools online that allow web designers to test the responsiveness of their website on varying platforms. These tools give designers the ability to test their websites on virtual environments that simulate mobile devices, desktop devices, and different browsers on those devices. Moreover, modern browsers such as Google Chrome have dev tools (mobile simulation and other browser emulation) that allow developers to test the "viewport" on various devices, set breakpoints for media queries, and throttle CPU and network connections.
3. My favorite text editor is Atom. I like that it is customizable, has lots of free and useful packages, and supports many different programming languages. I also like that depending on the project, Atom can be used more like an IDE or more like a simple text editor. It also syncs seamlessly with Github.
4. Ctrl + F. I use this shortcut all the time. It's such a fast way to get relevant information.
5. I just read a TechCrunch article on AWS launching a service called "Monitron". This service is tailored to the industrial sector and "is designed to monitor equipment and send signals to the engineering team when the equipment could be breaking down". The advantage for industrial engineers using "Monitron" is that "Monitron" easily syncs with the cloud (legacy sensors can't easily do this) and informs engineers via an easy to use application when potential issues might arise. Moreover, "Monitron" has the option of using machine learning algorithms to detect issues with industrial machines giving better predictive power to organizations. From this article I learned that there are many novel uses of cloud computing and machine learning in the industrial sector.
6. Yes. For a Udemy course, I used the Yahoo Finance API to retrieve historical data on stock prices. I also used the dog API for the small project I was asked to complete for Alchemy. That said, APIs are used to set the rules for one piece of software interacting with another piece of software. For example, in my dog project, I used the fetch function to manage the http pipeline and the url `"https://dog.ceo/api/breeds/image/random"` to retrieve a JSON object from the dog API. This is what the API required so that I can parse the JSON objects and display random pictures of dogs.
7. Developers can use Web Storage APIs, IndexedDB, and CacheStorage.
8. The first thing I would change about the YouTube interface is making subscribed content more prominent. Currently, my subscriptions are featured on a sidebar that is not prominently featured. The second thing I would change is removing the bubbles that feature topics you have recently interacted with underneath the search bar. I don't feel these bubbles add anything to the UI. The third thing I would change is not making random videos so prominent on the homepage. The fourth thing I think YouTube should do is categorize their video suggestions in a similar manner to Netflix: YouTube should have random videos on the homepage but have them under a specific category. For example, if the user watched ski videos put similar videos under the category "skiing".