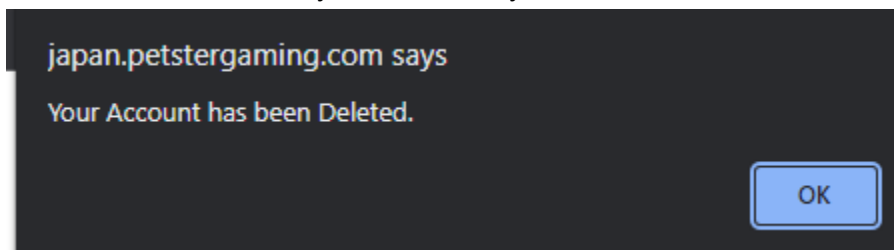Jason Palmeri
Module 2
CSD360
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The four methods given all do different things. Console.log is a tool that we can use as developers to see what is happening on the command line. This is extremely useful to see if what you want to happen is happening or not. For instance if you are testing that a button is responding to a click event you can include in the eventlistener to console.log("clicked"); I use console.log on literally everything javascript, this is the equivalent to PHP's echo/var_dump, Java's system.out.println, and pythons print statement. Window.alert allows us to create event windows that stop the execution of code and give a prompt, on chrome this will appear in the top center, firefox will display it in the middle center, and they go away when clicking OK. This is useful to let a user know that something has happened. For me I use it to display that a user's account was successfully deleted on my PHP based website

I know eventually I would like to make this differently and display a webpage that the account was deleted, but for now this was sufficient for me.
innerHTML is good for two things, getting the content of an html element, and setting the content of an html element. For instance if we have a paragraph tag like this:
<p id="hey">this is my cool paragraph</p>
We can then get that data by setting it into a variable
Let hey = document.getElementbyId("hey").innerHTML where hey now equals "this is my cool paragraph".
We can also change the content by invoking: document.getElementbyId("hey").innerHTML = "now this is a different paragraph";
Document.write is a bit different from innerHTML, where innerHTML allows you to manipulate an element, document.write allows you to create elements inside the body. W3's second example shows how you can do this https://www.w3schools.com/jsref/met_doc_write.asp
Console.log is probably the most common snippet used for testing, it's great for displaying values that you need to see as well as data objects like arrays and json.
 innerHTML is great when you are getting data asynchronously as you can change an elements text to whatever you just fetched.
Window.alert is great for displaying that something just happened, like terminating a login session.
I haven't used document.write too much but It does seem useful for creating new elements in the DOM.