00:00 Let’s practice with some of the DOM basics that we learned. And we're going to go ahead and use the page that we had in our last ponder.

00:11 So you're welcome to use this, um, meta.css.html. And we're going to have a different JavaScript file with it. You can either add to that one or change that one.

00:22 However, I'm just going to make a new one since we are talking about the DOM, even though it says really the same file.

00:28 Um, so I'm going to just go ahead and put DOM.html. And I'll go ahead and use this starting code here for what's inside of the body.

00:41 So I will start a shortcut here, put DOM basics, or maybe DOM practice. And then I'll go ahead and paste what I got from the ponder inside of the body area.

00:59 Alright, so remember we had, it should look exactly like what we had. We had before with the different, um, IDs and classes and all the different elements that we had here.

01:11 Alright, I'm going to make a new CSS, even though it is the same CSS as well. And I'll go ahead and copy that from this.

01:20 Start code as well. And when I save both those, you should be able to see that we have, um, no connection.

01:29 Let's go ahead and link that. You might have already had a link if you're using the old one. So I'm just linking up the CSS file.

01:41 And making sure it knows that it's a style sheet. Okay, there we go. Alright, so. Let me close that out.

01:55 We're going to come back to this little bit of code here in a minute. But let's just go ahead and play around a little bit with how we can maybe target and do a different few different things with the elements that are on our page using DOM through.

02:08. JavaScript. So let's go ahead and make a JavaScript file and I'm naming them all the same just so I kind of know which ones go together.

02:17 You could also create folders within your ponder, which might be nice. Umm. Clean way to do that as well. So.

02:24 So, Let's go ahead and see if we can target one of the things that's on the HTML. Say I want to change or add or do something to the H1 on my page.

02:35 So we're using that query selector that we learned it out. Let's go ahead and put it into a constant. And I'll just call it, you can call it whatever you want.

02:43 I'll just call it title. But now we're saying, hey, let's look at the document, the document object. And let's use the query selector method to target the H1 on our page.

02:58 And we didn't have an ID or class, it was just the H1 tag, so we're going to put that inside of quotes, inside the parens with query selector.

03:06 And that's actually going to assign the constant title that element in our document. So if we wanted to, quickly take a look at what that's doing, we can just kind of see what's inside of title when we look at the console here.

03:25 And I have not had that one up yet either, so. we're going to put a script tag. And we also want to make sure that we have defer on here because- We are going to be referencing things in the HTML and it will give us an error because it has not seen that yet if we don't put defer up here first.

03:48 To wait till it loads the HTML. Alright, so now we can see that what that title constant is holding. Is that whole h1 along with its content in there.

04:01 Okay, so now we could do a few different things with that. Now that we've targeted it, have it inside of a variable, we can go ahead and say something like title, text content.

04:12 Remember there, these are camel case. And we'll assign it a new, um, text. So instead of saying HTML, CSS, and JavaScript, we can have it say something like web page components.

04:30 And it will actually change on the page. To that. Okay, so we targeted an element in the DOM, and put it into a constant, then we used that constant to take, take its text content property and assign it a new string.

04:50 So once that happened, we eliminated the original one that said HTML, CSS, and JavaScript, and we replaced it, the text content with this new content.

05:01 So two things, selecting or targeting our element and then using a property to change that element. Alright, let's do a few other little things.

05:13 Let's go ahead and grab, instead of a tag name, We'll be right Let's go ahead and grab this whole div with the id of topics.

05:21 So, again, we don't have to always put it into a variable. In fact, I'll show you, you don't have to put it into a variable.

05:27 A lot of times you will. Cause it's, um, just depending on what you're doing. But, this time. I'm, let's target it with a CSS selector syntax, which would be the hashtag for IDs.

05:41 It was the id topics. And then it's the style property. And we can go ahead and change the style color.

05:50 Well, it tried to help me. Ah. Sometimes auto help. It's not helpful. Okay. And we're gonna assign that the color red.

06:06 We say that. We'll see you at that whole top. And here it's that whole color of the font to be red.

06:15 So again, I couldn't put this into a variable. I'll show you how we could have done that. So, or a constant, either one.

06:23 We could have said, um. Topics equals this. And then we could have said topics here to match this variable. And it would do the same thing.

06:37 But I was just showing you how you don't always have to put it into a variable if you don't want to.

06:42 Alright, let's go ahead and do it a different way. I'm going to comment this one out. Instead of using the query selector with the hashtag, if we could have also, since that was an ID, we could have also said, I'm going to go back to without a variable.

07:07 Let's do get element by ID. See. And this time we don't need the hashtag because we're referencing right here that we're getting an ID.

07:21 So it already knows that we're getting an ID. So we don't have to put the hashtag with that one. Okay.

07:26 And then again, we could just go ahead and put it here. Let's do a different color just so we can.

07:40 Okay. And then it's going to be purple. Alright. So a few different ways to select. And a few different things.

07:48 The text content property and the style and color property. No notice for kind of, uhm, stacking these on top of each other.

07:56 Style could be any, any style. It could be background color. It could be all sorts of. Different things. So, the style can go with a lot of different properties.

08:08 Alright, let's go ahead and grab now one of the classes. So let's go, we got these three U.L.s with the class list.

08:18 And so we could target the first child of that, of those, um, classes with a dot instead of a hashtag.

08:28 So let's put this one into a variable. And let's go ahead. And say document query selector. And this time it's a class.

08:41 And so we're going to put dot list. So what's kind of nice about that query selector is whatever's in these quotes is going to look a lot like how you select things in.

08:50 And CSS, dots for classes, hashtags for IDs, and then just the tag name like we had here for, you know, paragraphs, divs, h1s, things like that.

08:59 Alright, so now we could take list. And we can go ahead and say let's style. It's border. And border's kind of that shortcut style that needs three properties.

09:16 How thick is the border? What kind of a border is it? And what color is the border? And it goes ahead and it finds that first one with the class list, and it puts a border around it.

09:34 Okay. So targeting and- and putting different styles on what we've done so far here. Okay, let's go ahead and- and a different background color to one of our paragraphs.

09:51 Well, the only paragraph I could- actually that we have is this first paragraph. The rest are all a different kind of element.

09:59 So let's go ahead and target that paragraph, and I'll put it in a variable again. And we'll call it para.

10:09 And again, those variables are anything I want to call them. And we'll go ahead and target our paragraph. And since we only have one paragraph, it doesn't have a class for ID, whoops, but P.

10:22 And we can say, Uhm, let's give it a background. But this time, instead of giving it style dot background, well, let's go ahead and do it both.

10:32 We'll do both of them. We could say para, and we could say umm, style. Background color. And then we can see that our background gets a color of white blue.

10:56 Okay, there's another one. The way you can also do this. We can have a CSS rule that's already in place here.

11:05 So we could say something like, um, background. We'll call this the rule background class. And we'll give it a background.

11:17 And remember, don't get mixed up because in JavaScript it's camel case, but in CSS it's got dashes. And we'll go ahead and we'll make this one black.

11:30 And we'll also change the font color of whatever gets this class to white. So, let's do this again. Let's take Pera, and this time, let's go ahead and just add this class to it.

11:47 So, we're going to use class list, add, and then we're going to have the background. And that's what it was called in our CSS.

11:57 Was background. So, out the dot there, this reason we don't have the dot here is because we know we're getting- a class, and we save that, and we can see that our paragraph now has a black background color, and white not color.

12:12 So, different ways to go ahead and do kind of the same thing, but you'll notice that that was quick. It's got two- Thank you.

12:18 So, different things happening here. I could have a whole number of things in this class, and it would automatically get everything that was in that class with something like this, which is kind of cool.

12:28 Okay. have also- And I know in your homework, you'll do something like this. You could have said, you know, I want the whole body of the- of the document, so we could actually target the entire body of the document, and we could- I'll also either add the class, or do a style.

12:51 Let's go ahead and just add that class just like we did before. And there we go. So. So, that's anything that you want to target, you can go ahead and talk about.

13:07 I'm going to comment that out because we don't have a very good contrast with that one. Okay. Let's go ahead and grab an image because I want to show you how you can change an image in.

13:19 JavaScript as well. So I'm just going to go in. I'll try to find a image that might match our page.

13:28 Uhm, and I want to make sure it's not copyright. If I'm going to use it, so I'll go and look for creative comments.

13:40 Maybe the Wikimedia ones are usually safe and, and so maybe I like this one. Uhm. I'll go ahead and save the image as.

13:53 And put it inside of, uhm, well, I'll just download it for now, web. I'll just call it web. Web.png is what downloaded into my downloads file.

14:07 I can go ahead- Head. And create an images folder inside of Ponder to go ahead and put that downloaded image in here.

14:19 Alright, so now I have a new image to play around with. This was kind of a hot link. So, maybe in JavaScript I want to change that image.

14:28 So, I could come down here, and I could say I could use the set attribute. So let's go ahead and target that image.

14:40 I'm going to put it, um, maybe I'll put it into a constant time. And I'm gonna say document, pre-selector, and I'm gonna get the one, the one image we have.

14:55 Again, if there was more- more than one image, which is usually the case on a page, you would definitely want to give it a class or ID and target it that way.

15:01 I know it's the only image on my page. So I thought, okay. Doing that. And then we can say image.

15:11 Duh. Not attribute. And the set attribute takes two parameters. It's gonna say what attribute are you trying to change? I want to change the source attribute.

15:24 you. So the entire picture will change. And then the second attribute, separated with a comma, is going to be what are you replacing with?

15:34 What's the value you're putting into, into the SRC property? So we're going to. Reference the images folder and that web.png file that we just got.

15:46 Yeah. and then we go- Go ahead and see that. It will replace it. So, we'll see that we have that new image showing up in there.

15:56 Now, at this point, umm, usually students are able to- So, like, well, if you wanted that image, or you wanted this text to be purple, or you wanted that border, or wanted this background color, why didn't you just put it that way in the HTML and CSS to begin with?

16:11 Well, remember, JavaScript is about interactivity or behavioral- umm, things that with the user. So usually, none of this is going to happen, and if these things are going to happen until the user does something.

16:24 So we're just quickly, like, you know, putting onto our page this way without anything happening. So you'll notice- assignment this week, even though it's going to use some things that we haven't gotten to, it makes more sense to wait until the user actually does something before these change.

16:41 Now, they click the image and changes to a different image, or, you know, something like that. So, let's go ahead and look at those last two, um, code examples here that that will make a little more sense.

16:54 So, these ones I've included here because, and there's a few things on here that we haven't gotten to yet. This brings me the first one.

17:02 I'm going to go ahead and just copy this one. This is going to go on the HTML. It's actually a drop-down.

17:07 Umm, and I'll go ahead and just put it underneath the image before the div. And this is going to, give us a select, um, tag with different options.

17:25 And when you take a look at what this looks like on our page, it's going to give us this little drop-down here.

17:31 And these different values to choose. And right now, nothing's going to happen because we have nothing hooked up with JavaScript.

17:39 But normally, we're going to wait to have something happen on our page until the user chooses something, clicks something, hovers over something.

17:47 Some sort of event happens before we'll change. So, let's go ahead and grab that other code. And put that into JavaScript.

18:00 And again, we will have a whole section just on events. And what those are, we will talk more about what a function is later.

18:10 Uhm, but we do know what's going on here. We are getting the web dev list. So we can come back here and we can see the ID is getting this.

18:21 We're going select element with the ID of web dev list. That's what's happening here. And they're placing it in this variable called select element.

18:30 They are listening for something to happen. And that's when a user changes the value. Then this code's going to run.

18:40 So again, we will go over that kind of stuff later. But we did look at the dot value in our introduction to DOM.

18:49 And what it's going to do is it's going to say, hey, look at that drop down that we just targeted here.

18:54 And grab the value that the user put in there. Assign it to a variable called code value. And then we're just going to put it on the console.

19:03 So, I go ahead and save this and go back to our page. We've got the console open. So as soon as I change, choose something here, it's going to show up on the console.

19:13 So it's getting that dot value, that property, from the drop-down, and it's putting it on to the console. Okay. So then you could use that then to target different things or do different things.

19:26 In there, for example, maybe, um, you wanted to give your titles, maybe you give your HTML, your hypertext the next market language title, the ID of HTML.

19:40 So you could come in here and see. Something like document. Let's do the get element by ID this time. And instead of putting hashtag HTML, we could actually use that code.

19:58 Value, variable, there, and say change the style, color, to be red. So again, if we wanted the JavaScript and CSS one to work as well, we would have to go in and give them a different idea.

20:14 But, if the user chooses HTML now, it's actually going to make that one red. So that's the interactivity and behavioral things that I'm talking about with JavaScript.

20:26 But it's still using this DOM information that we've just learned by targeting elements, and then, you know, just getting the values that the user put into an element, changing the color, uh, font color of an element.

20:42 That's what we're learning this week, is how to change those DOMs. So, in- your homework this week, don't be thrown by some of the new things that we are going to go over again later.

20:51 You'll be given that code just like I gave it to you here. But what you do want to really understand is how these DOM properties are working.