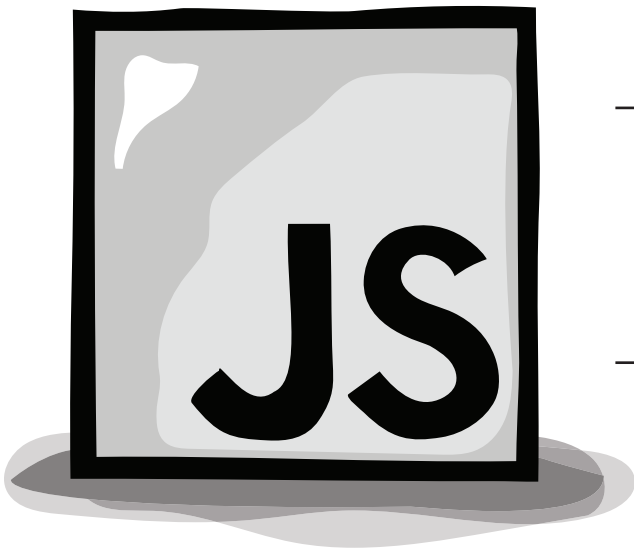


GYMNASIUM

JAVASCRIPT FOUNDATIONS

Lesson 4 Assignment

Creating Elements, Fragments and Templates



CORE CONCEPTS

1. You can create new HTML element objects using `document.createElement`, passing in the name of the element you want to create.
2. Elements created this way are not automatically put on the DOM and have no `textContent` or `innerHTML`.
3. Add elements to the DOM using the `appendChild` and `insertBefore` methods.
4. If an element is already on the DOM, using `appendChild` or `insertBefore` will remove it from its current location.
5. Adding and removing elements or changing styles or properties of elements on the DOM triggers a document reflow, where the entire HTML document is re-rendered.
6. Create complex bits of HTML in a document fragment, then add the fragment to the DOM for a single reflow.
7. Templating engines are a way to write chunks of HTML in advance that can be filled in with dynamic data at run time.

ASSIGNMENT

1. Quiz
2. Go to a site of your choice. Open the console and practice creating elements, and adding them to the page using `appendChild`. Try locating specific points within the DOM to add them using `insertBefore`. Practice removing the elements you added, or removing existing elements, and re-adding them at different positions. Do this until you feel comfortable creating, adding, and removing elements?
3. Check out the documentation for Mustache.js at this site: <https://github.com/janl/mustache.js>

Try some of the more advanced techniques, such as using an array of data to make multiple items, or any other techniques that look interesting, or useful.

4. Take a look at Handlebars.js, <http://handlebarsjs.com/>, and compare and contrast it to Mustache. Try converting over the final project, or the Mustache demo project from earlier in this lesson, so that it uses Handlebars instead of Mustache. Are there any advantages?

RESOURCES

- In addition to the Mustache and Handlebars documentation, you may want to do some research on other templating engines, and see what they have to offer.