

## CODE EXERCISE

# CREATING HTML ELEMENTS DYNAMICALLY

## LAB 1

1) Create an element: Use the `document.createElement()` method to create a new HTML element. You can then set its properties, such as its id, class, and innerHTML, and append it to an existing element using the `appendChild()` method.

```
const newDiv = document.createElement("div");
newDiv.innerHTML = "Hello World!";
document.body.appendChild(newDiv);
```

2) Modify an existing element: Use the `getElementById()` method to grab a reference to an existing element, and then modify its properties as needed.

```
const existingDiv = document.getElementById("existing-div");
existingDiv.innerHTML = "New Text";
```

3) Remove an element: Use the `removeChild()` method on the parent element to remove an existing element.

```
const existingDiv = document.getElementById("existing-div");
document.body.removeChild(existingDiv);
```

4) Add an event listener: Add an event listener to the element using the `addEventListener()` method. This can be used to execute a function when an event such as a click or a hover occurs.

```
const newDiv = document.createElement("div");
newDiv.innerHTML = "Hello World!";
newDiv.addEventListener("click", () => alert("You clicked the div"));
document.body.appendChild(newDiv);
```

## LAB 2

Create a simple web application that allows users to add, edit, and delete todo items from a list. The application should have the following features:

## SUBMITTING EXERCISES

To earn certification all exercises must be submitted and accepted.

1) When you've completed all of the HTML exercises, please zip them into a single file and submit to our Dropbox at <http://bit.ly/CWDP2324>.

2) Next, fill out the certification completion form at <https://forms.gle/5EiUGCM6dGdIF2Py6>.

Remember, that all of your exercises for each module should be included in a separate zip file.

## GETTING HELP

We always want to ensure that your questions are answered. There are a number of ways to get in touch.

1) We operate a lively Discord server. Join us at <https://discord.gg/tgxX2fCrv5> and you can ask your question on Discord. Mark and our team of instructional assistants monitor this Discord and answer questions ASAP.

2) This certification program is offered on several platforms. Most platforms have a Q & A section where you can post questions. We monitor these and respond as quickly as we can.

3) You may use our question hotline email at [questions@dollardesignschool.com](mailto:questions@dollardesignschool.com).

**Remember to always to include which section your question is from and send any code you're working on!**



## CODE EXERCISE

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- 1) A form for adding new todo items, with fields for the task name and a completion status.
- 2) The ability to view, edit, and delete existing todo items using dynamic HTML manipulation.
- 3) Use of LocalStorage or IndexedDB to save the todo items, so that the items are not lost when the user closes the browser or refreshes the page.
- 4) Use of JSON format to store and retrieve the todo items.
- 5) A filter feature that will allow the user to filter the list by completed or active items.
- 6) Use of CSS to style the list items and form.
- 7) Proper error handling mechanism

### Technical requirements:

- Use of JavaScript and the DOM to create and manipulate the elements of the application.
- Use of JSON to store and retrieve the todo items data.
- Use of LocalStorage or IndexedDB to save the todo items data.
- Use of dynamic HTML manipulation to add, edit, and delete list items.
- Use of CSS and JavaScript to style the elements and add interactivity
- Use of Event listeners for handling user interactions and form submissions

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