DOM – Assessment #3

Assigned 11/21/22

Due 11/21/22

Completed 11/21/22

**LMS:** <https://lms.grandcircus.co/mod/assign/view.php?id=22765>

**Instructions:** <https://docs.google.com/document/d/1jyVZf8IUUrnSeiKNL3BhN_GZsM4xspRUfWyXJJUzTAQ/preview#>

**Preview:** <https://drive.google.com/file/d/1k0FivLiAZMvtvjh02tyuNkuaJbrmPENW/preview>

**Task:** This will exercise your skills at modifying, adding to, and removing from the DOM. Create a webpage with HTML, CSS, and JavaScript. It will have a button that toggles the background color of the page. It will have another button that creates boxes, and clicking those boxes will remove them.

**Setup & Submission:** See readme.md for setup instructions. Commit and push to submit.

**Build Specifications:**Note: Pay special attention to the bolded words. ~~Since this assessment is graded by a computer, it will check for those exact values, including capitalization~~.

* Create a page with a white background and two buttons. One button says “**Toggle Color**”. The other button says “**Add Box**”. [1pt]
* Whenever the “Toggle Color” button is clicked, it must change the background color of the body element. (You may code this in any way you like.)
  + When the background is “**white”**, the button will change it to “**lightcoral**”. [1pt]
  + When the background is “**lightcoral”**, the button will change it back to “**white”**. [1pt]
* When the “Add Box” button is clicked, it will add a div to the page. Each time it is clicked an additional div is added. The new div must have these features:
  + It is a **div**. [1pt]
  + It has class “**box**”. [2pts]
  + It has a title attribute of “I’m a box!”. (Hint: title attribute shows when you hover over the div.) [1pt]
  + For the text inside the div, number the divs starting with 1. (Keep a counter variable to track what number comes next.) [1pt]
* When one of the box divs is clicked, remove (not just hide) that div from the DOM. [2pts]

**Demo:**

[Click here for a video clip](https://drive.google.com/file/d/1k0FivLiAZMvtvjh02tyuNkuaJbrmPENW/preview) of what it might look like. Note: You DO NOT need to have the same CSS styles for the boxes. They are blue squares here for demo purposes. You are not required to style them at all. Any styling of boxes is up to you.

**TESTS** (this part actually doesn’t exist currently)

**HTML**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Assessment #3</title>

    <link rel="stylesheet" href="./assessment3.css">

</head>

<body id="body">

    <!--Buttons to be clicked-->

    <button id="toggle-color">Toggle Color</button>

    <button id="add-box">Add Box</button>

    <!-- Place for my newDivs to go -->

    <div id="container"></div>

    <script src="./assessment3.js"></script>

</body>

</html>

**CSS**

/\* Adding style to my buttons \*/

button {

    height: 40px;

    padding: 0px 10px;

    font-size: 20px;

    margin: 0px 5px;

    border-radius: 7px;

    border: 1px solid black;

}

/\* Creating class toggled when "Toggle Color" button clicked \*/

.coral {

    background-color: lightcoral;

}

/\* Adding style to my newDivs \*/

.box {

    display: inline-block;

    height: 100px;

    width: 100px;

    background: lightblue;

    border: 3px solid darkblue;

    text-align: center;

    margin: 7px 5px;

    font-size: 25px;

    color: darkblue;

}

**JavaScript**

// Grab my elements from HTML

const body = document.getElementById('body');

const buttonColor = document.getElementById('toggle-color');

const buttonAddBox = document.getElementById('add-box');

const container = document.getElementById('container');

// When the "Toggle Color" button is clicked the background changes from

// white to lightcoral.  No need for "if", just toggle classList

// which then references the CSS style to change the background

buttonColor.addEventListener("click", changeColor);

function changeColor(){

    body.classList.toggle("coral");

};

// Each time the "Add Box" button is clicked a new DIV is added to the page

buttonAddBox.addEventListener("click", newDiv);

function newDiv() {

    let newDiv = document.createElement('div');

    newDiv.classList.add('box');

    newDiv.title = "I'm a box!";

    newDiv.innerText = divCount;

    // Adds the new Div element to the "container" in my HTML

    container.appendChild(newDiv);

};

// When you click a DIV element it is removed from the "container" in HTML

container.addEventListener("click", function removeDiv(event){

    event.target.remove();

})

// Each time the "Add Box" button is clicked the divCount increases and

// the current value is added as innerText to the newDiv above

buttonAddBox.addEventListener("click", divCounter);

let divCount = 0;

function divCounter() {

    divCount ++;

}

**Results**

***Change Background Color with Button***

The page starts off with a background color “white” by default

Diagram, text

Description automatically generated

If you click the “Toggle Color” button, then the class “coral” is added to the Body and CSS reads this and changes the background color.

Graphical user interface, text, application, chat or text message

Description automatically generated

If I click the button again, then it changes back to “white”. You can go back and forth with this.

Diagram, text

Description automatically generated

***Add New Box with Button***

When you click the “Add Box” button a new DIV is added and the innerText increases. Even if a DIV is removed, the counter still keeps going up.

A picture containing diagram

Description automatically generated

Text

Description automatically generated

When you click on a DIV, then it is not just hidden, but removed from the HTML

Diagram

Description automatically generated with low confidence

Graphical user interface, text

Description automatically generated