DOM – Exercise 2: Circle and Mouse

Assigned: N/A

Due: N/A

Completed: TBD

<https://lms.grandcircus.co/course/view.php?id=231>

<https://docs.google.com/document/d/1-lqLEwc9UFRH3It9MmbksyxoAgSE430ZAMqXDs8WwSo/preview>

**Skills:** DOM, event object

Create a circle that follows the mouse around the page. Whenever the mouse moves, the circle immediately moves to the new location.

Hint: The event parameter to the event handler provides information on the location of the mouse.

**Extended Challenges:**

* Toggle the color of the circle when the mouse button is down, return to normal color when the mouse button is released.
* Create a trail behind the mouse as it moves.
* Instead of the circle immediately moving to the new mouse location, have it slowly make progress toward the cursor.

**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>DOM - Exercise 2: Circle and Mouse</title>

    <link rel="stylesheet" href="circle\_and\_mouse.css">

</head>

<body>

    <div id="my-div">Click Me!</div>

    <script src="./circle\_and\_mouse.js"></script>

</body>

</html>

**CSS**

body {

    padding: 0;

    margin: 0;

    height: 100vh;

    background: linear-gradient(135deg, #8fc7f1, #7173f5);

}

#my-div{

    width: 120px;

    height: 120px;

    background-color: lightpink;

    position: absolute;

    transform: translate(-50%, -50%);

    border-radius: 50%;

    box-shadow: 0 0 20px rgba(16, 0, 54, 0.7, 0.2);

    transition: 0.1s ease-out;

    display: flex;

    justify-content: center;

    align-items: center;

    font-size: 15px;

}

#my-div:active {

    width: 500px;

    height: 500px;

    background: rebeccapurple;

    border: 3px solid white;

    transition: 0.5s;

    color: white;

    font-size: 50px;

}

**JavaScript**

let myDiv = document.getElementById("my-div");

const move = (e) => {

    var x = e.pageX;

    var y = e.pageY;

    myDiv.style.left = x + "px";

    myDiv.style.top = y + "px";

};

document.addEventListener('mousemove', (e) => {

    move(e);

});

myDiv.addEventListener('click', () => {

    myDiv.innerText = "Clicked Off";

    myDiv.style.backgroundColor = "red";

    window.setTimeout(() => {

        myDiv.innerText = `Click (and hold)`;

        myDiv.style.width = 85;

        myDiv.style.height = 85;

        myDiv.style.backgroundColor = "lightpink";

    }, 2000);

});

**Result:**

This circle will follow around the mouse

Chart, bubble chart

Description automatically generated

From here I added two different options that can be selected in CSS or JavaScript:

* Click vs. Click and Hold:
  + If you ‘click’ on the DIV, then it turns from Light Pink to Red and the text changes from “Click (and hold)” to “Clicked Off”.

Diagram

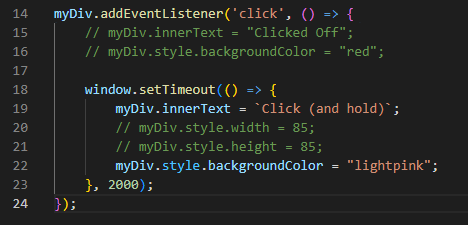
Description automatically generated with low confidence

* + If you ‘click’ and ‘hold’, then it grows from 85px to 500px and stays Light Pink, but text and border changes to White. When you let go, then it will Timeout and change back to original size, color, and text.

Chart, bubble chart

Description automatically generated

* Click with CSS Active pseudo class
  + If you delete / comment out the items shown below, then ‘click’ and ‘hold’ on the DIV, then it grows from 85px to 500px and changes to Rebecca Purple with white text and border.



Chart, bubble chart

Description automatically generated

I tried to find a way to combine these where:

* If you just click, then it changes to the red option
* If you click and hold, then it grows to the big purple option
* Either option returns to the original state

But I’m just missing something that would allow me to do all the options.