

**MIT Art Design and Technology University**  
**MIT School of Computing, Pune**  
**Department of Computer Science and Engineering**  
**Third Year B. Tech Academic Year 2022-2023. (SEM-I)**  
**Subject: Web Technology Laboratory**

## **Assignment 4-A**

**Assignment Title:** Create one button on every click of button different colors should be applied to the background. Also Create one button on every click of button different images should be applied.

**Aim:** Create Buttons to let user interact with webpage and change color and image using JS

**Objectives:**

1. To understand how JS methods manipulate CSS works
2. Understand the different type of JS methods

**Outcomes:**

Upon Completion of the assignment the students will be able to

1. Create User accepting webapps
2. Understand relationship between JS, HTML and CSS

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**Course Name:** Web Technology Lab

## HTML :

```
<!DOCTYPE html>

<html>

    <head>

        <link rel="stylesheet" href="ctyle.css">

        <title>Color and Image Change
Buttons</title>

        <style li>

        </style>

    </head>

    <body>

        <div id="colorSection">

            <button id="colorButton">Change
Color</button>
```

```
        </div>

        <div id="imageSection">

            <button id="imageButton">Change
Image</button>

        </div>

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

    </body>
</html>
```

CSS:

```
#colorSection, #imageSection {

    width: 50%;

    height: 100vh;

    float: left;

}

#colorSection {
```

```
        background-color: white;
    }

    #imageSection {

        background-image: url('image1.jpg');

    }
```

JS :

```
const colors = ['red', 'orange', 'yellow', 'green',
'blue', 'indigo', 'violet'];

let currentColorIndex = 0;

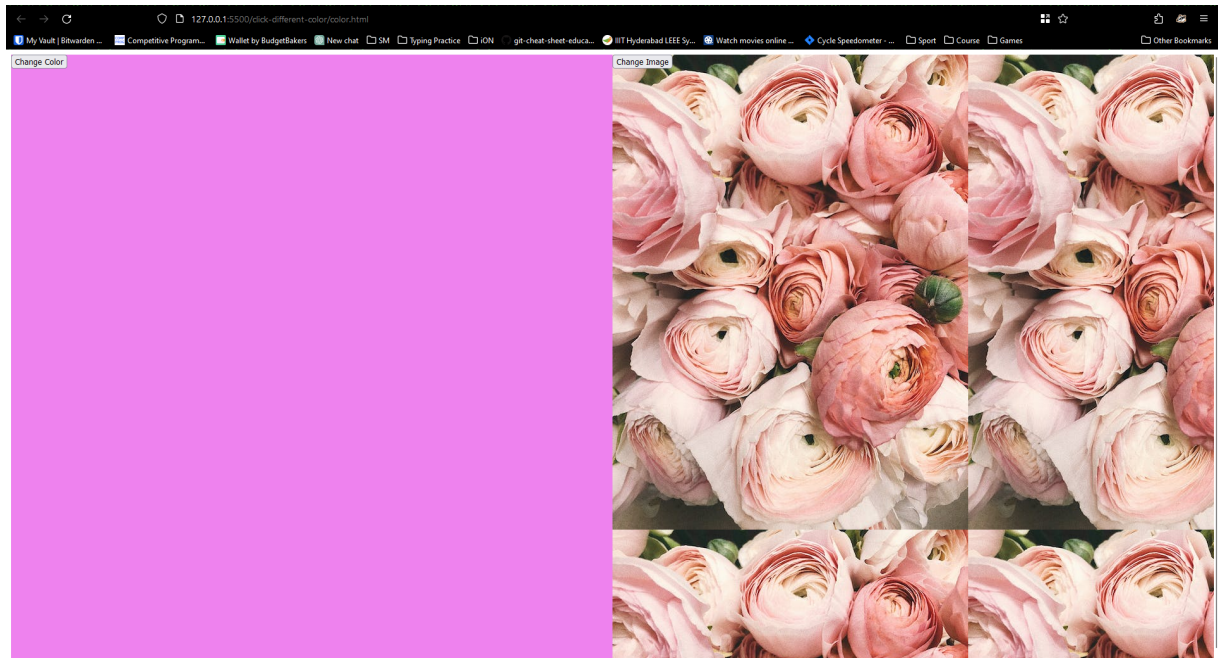

const images = ['flower-1.jpg', 'flower-2.jpg',
'flower-3.jpg', 'flower-4.jpg'];

let currentImageIndex = 0;


document.getElementById('colorButton').addEventListener('click', function() {
```

```
document.getElementById('colorSection').style.backgr  
oundColor = colors[currentColorIndex];  
  
    currentColorIndex = (currentColorIndex + 1) %  
colors.length;  
  
});  
  
document.getElementById('imageButton').addEventListener('click', function() {  
  
document.getElementById('imageSection').style.backgr  
oundImage = `url(${images[currentImageIndex]})`;   
  
    currentImageIndex = (currentImageIndex + 1) %  
images.length;  
  
});
```

## Output :



## Explanation :

This is a HTML, CSS and JavaScript code that creates a web page with two buttons that can change the color and the image of the two sections of the page. The code does the following steps:

- It defines the HTML structure of the page, which consists of two `<div>` elements, one for each section, and two `<button>` elements, one for each function. It also links the CSS and JavaScript files to the HTML file using the `<link>` and `<script>` tags.
- It defines the CSS style of the page, which sets the width and height of each section to 50% of the viewport width and height, and floats them to the left. It also sets the initial background color of the color section to white, and the initial background image of the image section to `image1.jpg`.
- It defines the JavaScript logic of the page, which does the following:
  - It declares two arrays, one for the colors and one for the images, and assigns

them to the `colors` and `images` variables. It also declares two variables to keep track of the current index of each array, and assigns them to `currentColorIndex` and `currentImageIndex`.

- It adds an event listener to the color button, which executes a function when the button is clicked. The function changes the background color of the color section to the color at the current index of the colors array, and then increments the index by one modulo the length of the array. This way, it cycles through all the colors in the array in a loop.
- It adds an event listener to the image button, which executes a function when the button is clicked. The function changes the background image of the image section to the image at the current index of the images array, using template literals to create a URL string. It then increments the index by one modulo the length of the array. This way, it cycles through all the images in the array in a loop.