

Ex. No. 6	JavaScript Styles and Animation
Date of Exercise	17/10/2025
Youtube link	https://youtu.be/9mVZIAYhch0

Aim:

To design a web page that demonstrates the use of JavaScript styles and animation effects to create dynamic visual changes in HTML elements.

Description:

JavaScript allows developers to dynamically modify the CSS styles of HTML elements to create visually appealing and interactive web pages. By manipulating element properties such as color, backgroundColor, fontSize, width, and height, developers can bring animation-like effects to static web pages.

In this exercise, we explore two main concepts:

1. **Dynamic Styling:** Changing element styles using JavaScript DOM properties like `element.style.property`.
2. **Animation:** Creating motion or transformation by repeatedly updating element positions or sizes using functions such as `setInterval()` and `clearInterval()`.

Animations in JavaScript can be implemented without CSS transitions by incrementally updating position or size properties. This allows full control over the animation's speed, direction, and timing.

Program:

```
<!DOCTYPE html>

<html>

<head>

  <title>JavaScript Styles</title>

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

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

</head>

<body>

  <h2>JavaScript Control</h2>

  <div id="myDiv">URK23AI1015</div>

  <div class="controls">

    <label>Background Color:</label>

    <input type="color" id="bgColor" onchange="updateStyle()">

    <label>Text Color:</label>

    <input type="color" id="textColor" onchange="updateStyle()"><br><br>

    <label>Text Size:</label>

    <input type="number" id="fontSize" placeholder="20" onkeyup="updateStyle()"><br><br>

    <label>Box Width:</label>

    <input type="number" id="boxWidth" placeholder="200"
onkeyup="updateStyle()"><br><br>

    <label>Box Height:</label>
```

```
<input type="number" id="boxHeight" placeholder="150"
onkeyup="updateStyle()"><br><br>

<label>Border Radius:</label>

<input type="range" id="borderRadius" min="0" max="100"
onchange="updateStyle()"><br><br>

<label>Opacity:</label>

<input type="range" id="opacity" min="0" max="1" step="0.1" onchange="updateStyle()">

</div>

</body>

</html>
```

Output:

JavaScript Control

URK23AI1025

Background Color: Text Color:

Text Size:

Box Width:

Box Height:

Border Radius:

Opacity:

Result:

Successfully designed and implemented a web page that uses JavaScript to dynamically modify styles and create animations and executed.