**Manipulating the DOM**

**Objective:**

Use JavaScript to manipulate the DOM by selecting HTML elements, updating content dynamically, and responding to user events.

**Scenario:**

You are tasked with creating a Quote of the Day feature for a personal website. Every time the user clicks a button, a new quote will be displayed on the page. This feature should dynamically update the content of a <p> element with each new quote.

**Step 1: Set Up Your Environment**

* Use the Visual Studio Code console application you created at the start of the course. Remove any existing code in the Program.cs file of your console application.
* Copy and edit the code in this activity into the Program.cs file to complete the steps**.**

**Step 2: HTML Setup**

Create a simple HTML structure with a heading, a paragraph, and a button.

**HTML Template:**

<!DOCTYPE html>

<html lang="en">

<head>

   <meta charset="UTF-8">

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

   <title>Quote of the Day</title>

</head>

<body>

   <h1 id="quoteHeader">Quote of the Day</h1>

   <p id="quoteDisplay">Click the button to see today's quote!</p>

   <button id="newQuoteButton">Get New Quote</button>

   <script src="script.js"></script>

</body>

</html>

**Step 3: JavaScript Setup**

1. Select HTML Elements: Use getElementById to select the button and paragraph elements.
2. Create an Array of Quotes: Define at least three quotes in an array.
3. Add an Event Listener: Add an event listener to the button to display a new quote each time the button is clicked.

**HTML:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Quote of the Day</title>

</head>

<body>

<h1 id="quoteHeader">Quote of the Day</h1>

<p id="quoteDisplay">Click the button to see today's quote!</p>

<button id="newQuoteButton">Get New Quote</button>

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

</body>

</html>

**JavaScript:**

// Select HTML Elements

**const** quoteDisplay = document.getElementById("quoteDisplay");

**const** newQuoteButton = document.getElementById("newQuoteButton");

// Create an Array of Quotes

**const** quotes = [

"The only limit to our realization of tomorrow is our doubts of today. – Franklin D. Roosevelt",

"In the middle of every difficulty lies opportunity. – Albert Einstein",

"Success usually comes to those who are too busy to be looking for it. – Henry David Thoreau"

];

// Add an Event Listener

newQuoteButton.addEventListener("click", () => {

**const** randomIndex = Math.floor(Math.random() \* quotes.length);

quoteDisplay.textContent = quotes[randomIndex];

});