

# 20CYS202

## LABSHEET 7

BY

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### All using getElementById Method

#### Exercise 7.1

How can you use onclick to dynamically toggle the text of a button between "Show" and "Hide"?

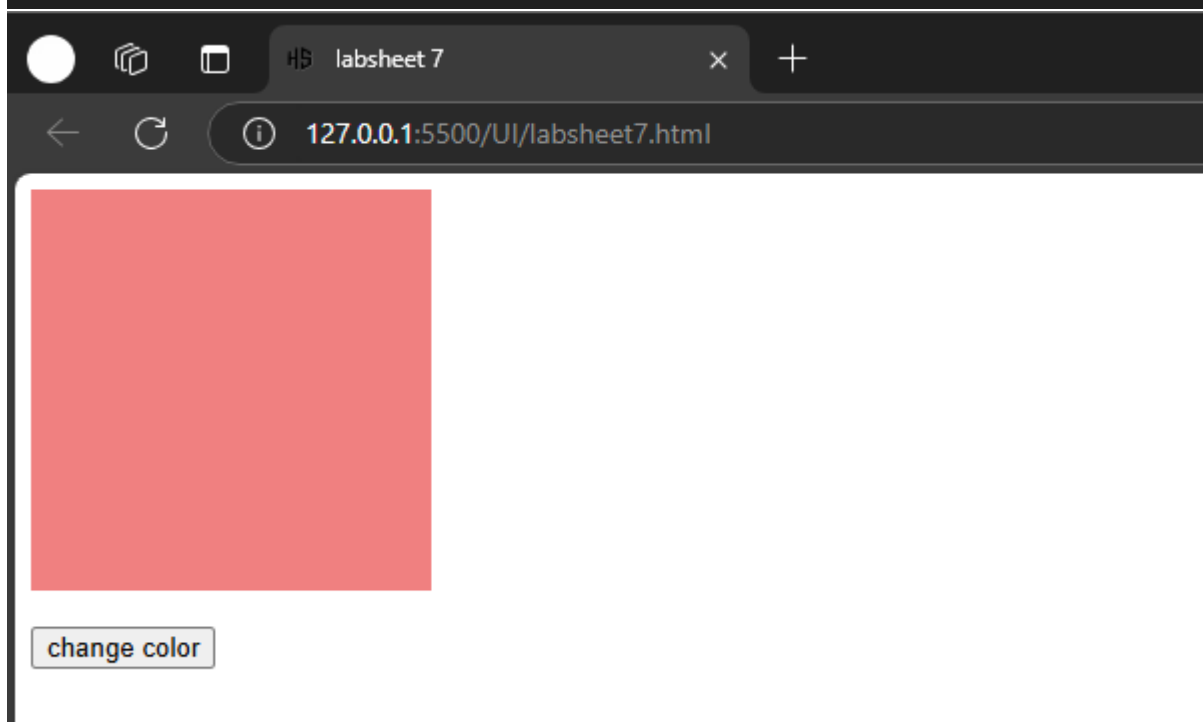
Hide

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <script>
    function toggle(){
      let button = document.getElementById('toggleButton');
      if(button.innerHTML === "Show"){
        button.innerHTML = "Hide";
      }else{
        button.innerHTML = "Show";
      }
    }
  </script>
</head>
<body>
  <button id="toggleButton" onclick="toggle()">Hide</button>
</body>
</html>
```

## Exercise 7.2

Write an example where clicking a button changes the background color of a <div>.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <style>
    #colorDiv{
      width: 200px;
      height: 200px;
      background-color: lightcoral;
    }
  </style>
  <script>
    function changeColor(){
      document.getElementById('colorDiv').style.backgroundColor = 'red';
    }
  </script>
</head>
<body>
  <div id="colorDiv"></div>
  <br>
  <button onclick="changeColor()">change color</button>
</body>
</html>
```



## Exercise 7.3

Guess a number between 1 and 10. Display a message indicating whether the user won or lost. Also, show the total number of attempts made to win.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <script>
    let randomNumber = Math.floor(Math.random() * 10) + 1;
    let attempts = 0;
    function checkGuess(){
      let userguess = document.getElementById('guess').value;
      attempts++;
      if(userguess == randomNumber){
        document.getElementById('result').innerText = "Congrats! you guessed the correct number.";
      }else{
        document.getElementById('result').innerText = "Sorry, try again";
      }
      document.getElementById('attempts').innerText = "Total attempts: " + attempts;
    }
  </script>
</head>
<body>
  <h2>Guessing Game</h2>
  <p>Guess a number between 1 and 10: </p>
  <input type="number" id="guess" min="1" max="10">
  <button onclick="checkGuess()">Submit</button>
  <p id="result"></p>
  <p id="attempts"></p>
</body>
</html>
```

## Guessing Game

Guess a number between 1 and 10:

## Exercise 7.4

How would you change the font size of a heading (<h1>) with the ID "mainTitle " to 36px using getElementById()?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <script>
    function changeFontSize(){
      document.getElementById('mainTitle').style.fontSize = '36px';
    }
  </script>
</head>
<body>
  <h1 id="mainTitle">this is the main title</h1>
  <button onclick="changeFontSize()">change Font Size</button>
</body>
</html>
```

# this is the main title

change Font Size

## Exercise 7.5

Reveal the button names when clicked using getElementById

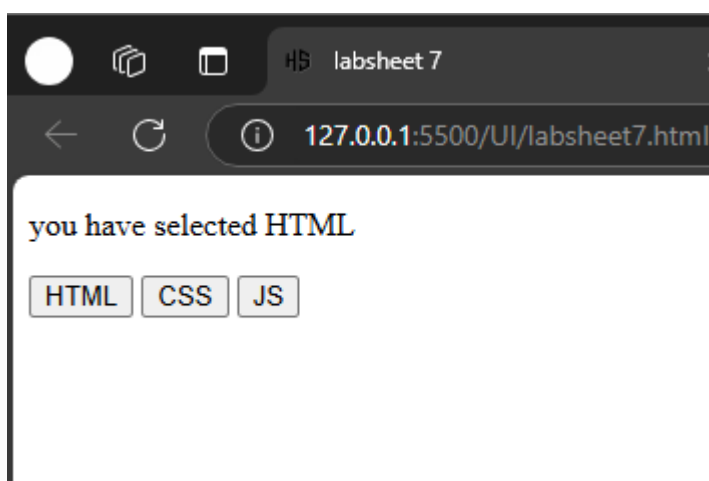
You have selected

HTML

Javascript

CSS

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <script>
    function revealName(buttonId){
      const buttonName = document.getElementById(buttonId).innerText;
      document.getElementById('message').innerText = `you have selected ${buttonName}`
    }
  </script>
</head>
<body>
  <p id="message"></p>
  <button id="button1" onclick="revealName('button1')">HTML</button>
  <button id="button2" onclick="revealName('button2')">CSS</button>
  <button id="button3" onclick="revealName('button3')">JS</button>
</body>
</html>
```



## Exercise 7.6

display the eligibility message when the check eligibility button is clicked using `getElementById` method.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <script>
    function checkEligibility(){
      const age = document.getElementById('age').value;
      const message = document.getElementById('message');
      if(age >= 18){
        message.innerText = "you are eligible to vote.";
      }else{
        message.innerHTML = "you are not eligible to vote.";
      }
    }
  </script>
</head>
<body>
  <label for="age">Enter your age: </label>
  <input type="number" id="age" min="1">
  <button onclick="checkEligibility()">check Eligibility</button>
  <p id="message"></p>
</body>
</html>
```

← ↻ ⓘ 127.0.0.1:5500/UI/labsheet7.html

Enter your age:

you are not eligible to vote.

## Exercise 7.7

Display the difference between the 2 dates selected.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>labsheet 7</title>
  <script>
    function calculateDifference(){
      const startDate = new Date(document.getElementById('startDate').value);
      const endDate = new Date(document.getElementById('endDate').value);
      if(startDate && endDate){
        const Difference = endDate - startDate;
        const differenceInDates = Difference / (1000 * 3600 * 24);
        document.getElementById('result').innerText = `the diffrence is ${differenceInDates} days.`;
      }
    }
  </script>
</head>
<body>
  <h1>Date Diffrence Calculator</h1>
  <label for="startDate">Start Date: </label>
  <input type="date" id="startDate">
  <label for="endDate">End Date: </label>
  <input type="date" id="endDate">
  <br>
  <button onclick="calculateDifference()">Calculate Diffrence</button>
  <br>
  <p id="result"></p>
</body>
</html>
```

# Date Difference Calculator

Start Date:   End Date:  

the diffrence is 14 days.