



## Lab Report 6

### CSF3133-Web\_Based Interface Design

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## 6.3 Basic Javascript

1. First output

My First JS!

2. After change

My First *Java Script*

## 6.4 getElementById()

Output:

### What Can JavaScript Do?

JavaScript can change HTML content.

Click Me!

After hit button Click me

### What Can JavaScript Do?

Hello JavaScript!

Click Me!

## 6.5 Date and Time

1. First output

Click me go display Date and Time

Wed Dec 03 2025 14:45:22 GMT+0800 (Malaysia Time)

2. After change style variable for demo

Click me to display Date and Time

Wed Dec 03 2025 14:52:43 GMT+0800 (Malaysia Time)

## 6.6 Change HTML Attribute Values

### What Can JavaScript \index{JavaScript} Do?

JavaScript \index{JavaScript} can change HTML attribute values.

In this case, JavaScript \index{JavaScript} changes the value of the `src` (source) attribute of an image.



Turn on the light

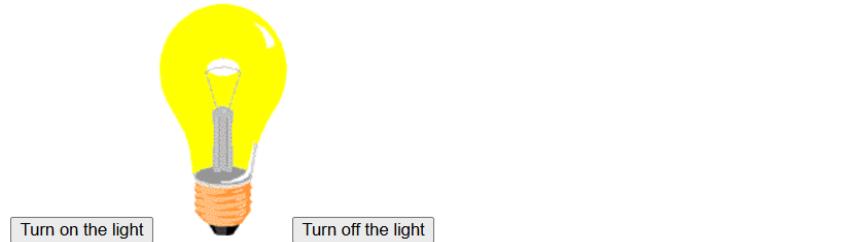
Turn off the light

After hit turn on light button

### What Can JavaScript \index{JavaScript} Do?

JavaScript \index{JavaScript} can change HTML attribute values.

In this case, JavaScript \index{JavaScript} changes the value of the 'src' (source) attribute of an image.



### 6.7 Link to file javascript

Output:

**Click the Button to See the Message**

**Click Me**

After click me



## 6.8 Working with events

### Right-Click Disabling

Try right-clicking anywhere on this page.

This page says

Right-click is disabled on this page.

OK

## 6.9 Multiplication Table Generator

### Multiplication table Generator

Enter number of rows:

2

Enter number of columns:

2

Generate Table

1		2
2		4

### 6.10.1 Form Validation

Case 1: empty field

**Form Validator**

This page says  
First name must be filled out

First Name:

OK

Submit

Case2: submit successfully

### Form Validation Example

First Name:

Nazmi

Submit

### 6.10.2 - numeric input validation

Case 1: Age empty

### Numeric Input

Enter your age:

Enter a number

Submit

This page says

Age field cannot be empty.

OK

Case2: Input character

**Numeric Input**

Enter your age:

Submit

This page says

Please enter a valid numeric value.

OK

Case3: Out of boundry

**Numeric Input**

Enter your age:

Submit

This page says

Please enter a number between 1 and 120.

OK

Case4: In boundry

**Numeric Input**

Enter your age:

Submit

This page says

Form submitted successfully!

OK

## 6.11 Math Function

### 6.11.1 Guess a Number

1. Display if guess Incorrect

**This page says**

Not matched. The correct number was 9.

OK

2. Display if guess Match

**This page says**

Good Work! You guessed it right.

OK

## Lab exercise 6

Index.html

```
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <title>Simple Quiz App</title>
6       <link rel="stylesheet" href="style.css">
7   </head>
8   <body>
9
10  <header>
11      <h1>Simple Quiz Test</h1>
12  </header>
13
14  <section id="quiz-box">
15      <div id="timer">Time: <span id="time">15</span>s</div>
16
17      <h2 id="question">Question text</h2>
18
19      <div id="options">
20          <!-- Answer buttons auto insert -->
21      </div>
22
23      <p id="feedback"></p>
24
25      <button id="nextBtn" onclick="nextQuestion()">Next</button>
26  </section>
27
28  <footer>
29      <h3>Your Score: <span id="score">0</span></h3>
30  </footer>
31
32  <script src="script.js"></script>
33  </body>
34  </html>
```

## Style.css

```
1  body{
2      font-family: Arial, sans-serif;
3      background-color: #f5f5f5;
4      text-align:center;
5  }
6
7  header{
8      background-color:#ff4000;
9      color:white;
10     padding: 10px;
11 }
12
13 #quiz-box{
14     background:#white;
15     width:50%;
16     margin:30px auto;
17     padding:20px;
18     border-radius:10px;
19     box-shadow:0 0 10px rgba(0,0,0,0.2);
20 }
21
22 #timer{
23     font-size:18px;
24     color:red;
25     margin-bottom:10px;
26 }
27
28 #options button{
29     display:block;
30     width:100%;
31     padding:10px;
32     margin:5px 0;
33     border:none;
34     background:#e0e0e0;
35     font-size:16px;
36     cursor:pointer;
37 }
38
```

```
39  #options button:hover{
40  |   background: #90caf9;
41  }
42
43  #feedback{
44  |   font-size:18px;
45  |   font-weight:bold;
46  }
47
48  #nextBtn{
49  |   margin-top:10px;
50  |   padding:10px 20px;
51  |   background: #2196F3;
52  |   color:white;
53  |   border:none;
54  |   cursor:pointer;
55  }
56
57  footer{
58  |   margin-top:20px;
59  }
60
```

## Script.js

```
// 1. QUESTIONS ARRAY

const questions = [
  {
    question: "What color is the sky??",
    options: ["Blue", "Green", "Red", "Yellow"],
    answer: 0
  },
  {
    question: "What color is the ocean??",
    options: ["Red", "Blue", "Pink", "Purple"],
    answer: 1
  },
  {
    question: "1+1=?",
    options: ["2", "3", "4", "5"],
    answer: 0
  }
];

let currentIndex = 0;
let score = 0;
let timer;
let timeLeft = 15;

// 2. SHUFFLE QUESTIONS

function shuffleQuestions(){
  questions.sort(() => Math.random() - 0.5);
}
```

```

34 // 3. START TIMER
35
36 function startTimer(){
37   timeLeft = 15;
38   document.getElementById("time").textContent = timeLeft;
39
40   timer = setInterval(() => {
41     timeLeft--;
42     document.getElementById("time").textContent = timeLeft;
43
44     if(timeLeft === 0){
45       clearInterval(timer);
46       nextQuestion();
47     }
48   },1000);
49 }
50
51
52 // 4. DISPLAY QUESTION
53 function displayQuestion(){
54   const q = questions[currentIndex];
55
56   document.getElementById("question").textContent = q.question;
57
58   const optionsBox = document.getElementById("options");
59   optionsBox.innerHTML = "";
60
61   q.options.forEach((option, index) => {
62     const btn = document.createElement("button");
63     btn.textContent = option;
64     btn.onclick = () => checkAnswer(index);
65     optionsBox.appendChild(btn);
66   });
67 }
68
69 // 5. CHECK ANSWER
70
71 function checkAnswer(selected){
72   clearInterval(timer);
73
74   if(selected === questions[currentIndex].answer){
75     score++;
76     document.getElementById("feedback").textContent = "✅ Correct!";
77   }else{
78     document.getElementById("feedback").textContent = "❌ Wrong!";
79   }
80
81   document.getElementById("score").textContent = score;
82 }
83
84
85 // 6. NEXT QUESTION
86
87 function nextQuestion(){
88   currentIndex++;
89   document.getElementById("feedback").textContent = "";
90
91   if(currentIndex < questions.length){
92     displayQuestion();
93     startTimer();
94   }
95   else{
96     document.getElementById("question").textContent = "Quiz Finished 🎉";
97     document.getElementById("options").innerHTML = "";
98     document.getElementById("time").textContent = "0";
99   }
100 }
101 }
```

```
103 // 7. START QUIZ
104
105 function startQuiz(){
106     shuffleQuestions();
107     displayQuestion();
108     startTimer();
109 }
110
111 startQuiz();
112
```

Output:

### Simple Quiz Test

Time: 6s

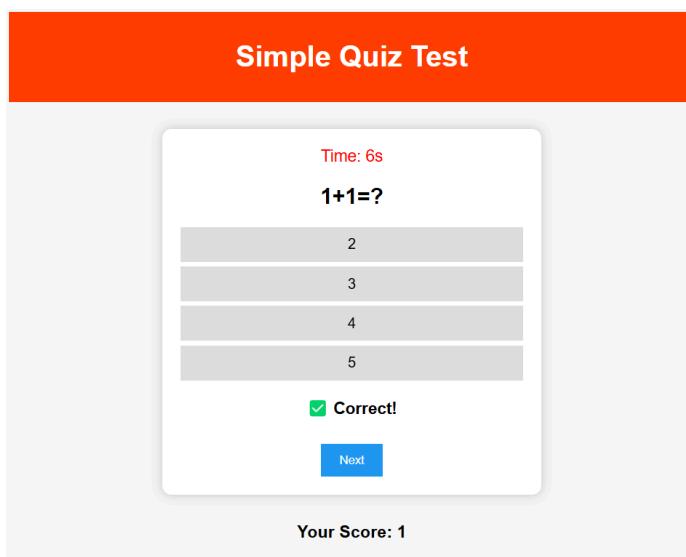
1+1=?

2  
3  
4  
5

✓ Correct!

Next

Your Score: 1



### Simple Quiz Test

Time: 14s

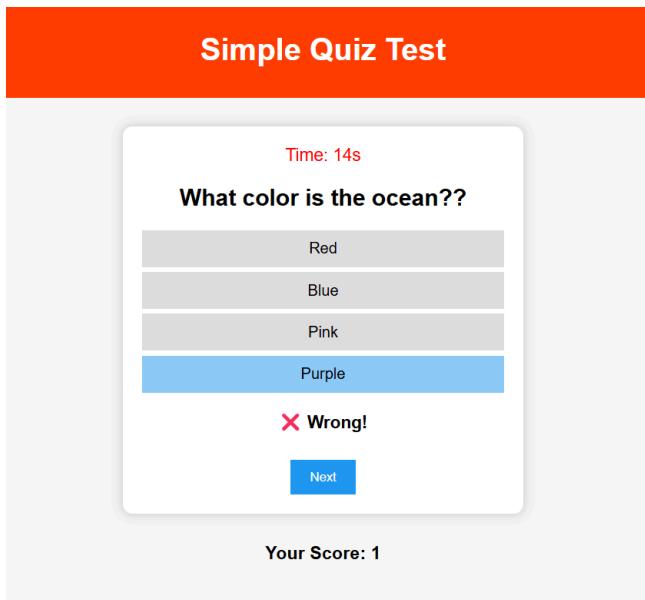
What color is the ocean??

Red  
Blue  
Pink  
Purple

✗ Wrong!

Next

Your Score: 1



Time: 0s

**Quiz Finished** 🎉

Next

**Your Score: 1**