



**Reka Bentuk Antara Muka Berasaskan Web  
(CSF3133)**

**LAB REPORT 6**

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GROUP: K4

PROGRAM: Computer Science (Software Engineering)

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### **6.3 Basic Javascript**

Step 2

My First JS!

Step 4

**My First Java Script**

### **6.4 getElementById()**

Before

## **What can JavaScript Do?**

JavaScript can change HTML content.

**Click Me!**

After

## **What can JavaScript Do?**

Hello JavaScript!

**Click Me!**

## 6.5 Date and Time

---

[Click me to display Date and Time](#)

Wed Dec 03 2025 11:00:38 GMT+0800 (Malaysia Time)

[Click me to display Date and Time](#)

Wed Dec 03 2025 11:01:52 GMT+0800 (Malaysia Time)

[Click me to display Date and Time](#)

Wed Dec 03 2025 11:05:04 GMT+0800 (Malaysia Time)

## 6.6 Change HTML Attribute Values

On the light

### **What can JavaScript \index{JavaScript} Do?**

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

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



[Turn ON the light](#)

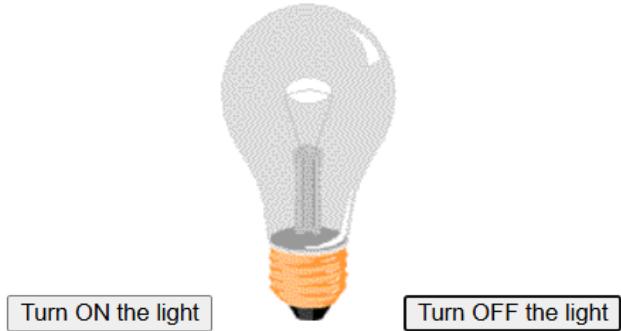
[Turn OFF the light](#)

**Off the light**

## **What can JavaScript \index{JavaScript} Do?**

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

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



### **6.7 Link to file Javascript (\*.js)**

#### **6.7.3 External References**

## **Click the Button to See the Message**

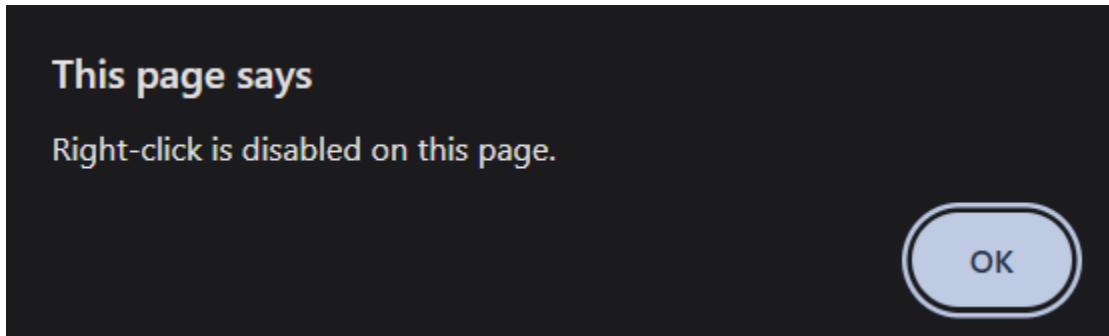
**Click Me**



## 6.8 Working with events

# Right-Click Disabled

Try right-clicking anywhere on this page.



## 6.9 Multiplication Table

### Multiplication Table Generator

Enter number of rows:

Enter number of columns:

1	2	3	4	5	6
2	4	6	8	10	12
3	6	9	12	15	18
4	8	12	16	20	24
5	10	15	20	25	30

## 6.10 Client-side validation

### Multiplication Table Generator

Enter number of rows:

Enter number of columns:

1	2	3	4	5	6
2	4	6	8	10	12
3	6	9	12	15	18
4	8	12	16	20	24
5	10	15	20	25	30

### **6.10.1 Form Validation**

Case 1

## **Form Validation**

First Name:

Submit

This page says

Name must be filled out

OK

Case 2

## **Form Validation**

First Name:

Simon

Submit

## 6.10.2 Numeric Input Validation

Case 1

### Numeric Input Validation Examples

Enter Your Age:

This page says

Age field cannot be empty.

Case 2

### Numeric Input Validation Examples

Enter Your Age:

This page says

Please enter a valid numeric value.

OK

Case 3

## Numeric Input Validation Examples

Enter Your Age:

200

Submit

This page says

Please enter an age between 1 and 120.

OK

Case 4

## Numeric Input Validation Examples

Enter Your Age:

25

Submit

This page says

Form submitted successfully!

OK

## 6.11 Math Function

### 6.11.1 Guess a Number

## Guess the Number Game

Try to guess the random number between 1 and 10!

Play

This page says

Guess a number between 1 and 10.

|

OK

Cancel

**This page says**

Not matched. The correct number was  
7.

OK

**This page says**

Good Work! You guessed it right.

OK

## 6.12 Lab Exercise 6

### Source Code

#### Index.html

```
Lab-Report-CSF3133 > Lab Report 6 > LabExersice6 > index.html > html > body > div#header-container
1  <!DOCTYPE html>
2  <html>
3  |   <head>
4  |       <title>Just Quiz</title>
5  |       <link rel="stylesheet" href="style.css">
6  |   </head>
7  |   <body>
8
9      <div id="header-container">
10         <header>
11             |             Welcome to Just Quiz
12         </header>
13     </div>
14
15     <main>
16         <div id="timer">Time Left: <span id="time">30</span>s</div>
17
18         <div id="quiz-container">
19             <h2 id="question"></h2>
20             <ul id="options"></ul>
21         </div>
22
23         <br><br>
24         <div id="feedback"></div>
25
26         <button id="nextBtn" onclick="nextQuestion()">Next Question</button>
27     </main>
28
29     <footer>
30         <h3 id="score"></h3>
31     </footer>
32     </main>
33
34     <!-- Link the external JavaScript file -->
35     <script src="script.js"></script>
36
37     </body>
38 </html>
```

## style.css

```
Lab-Report-CSF3133 > Lab Report 6 > LabExersice6 > # style.css > ...
1  /* Basic Style*/
2  body {
3      font-family: Arial, sans-serif;
4      background: □#0f2149db;
5      padding: 20px;
6      text-align: center;
7      color: ■#ffffff;
8  }
9
10 #header-container{
11     background: □#210044;
12     padding: 20px;
13     border-radius: 5px;
14     justify-content: center;
15     width: 50%;
16     height: 20%;
17     margin: auto;
18     box-shadow: 0 0px 10px □rgba(0, 0, 0, 0.1);
19     display: flex;
20     font-weight: bold;
21 }
22 header {
23     font-family: 'Times New Roman', Times, serif;
24     font-size: 50px ;
25     text-align: center;
26     padding: 20px;
27     color: ■#f0f0f0;
28 }
29
30 #timer {
31     font-size: 20px;
32     margin: 10px 0;
33     font-weight: bold;
34 }
35
36 #quiz-container {
37     background: □#0b074b;
```

```
38 } padding: 20px;
39 border-radius: 12px;
40 width: 60%;
41 margin: auto;
42 box-shadow: 0 0px 10px □rgba(0, 0, 0, 0.1);
43 font-weight: bold;
44 }
45
46 ↵ #options li {
47 background: □#0f869e;
48 padding: 10px;
49 margin: 10px 20px;
50 border-radius: 6px;
51 cursor: pointer;
52 list-style: none;
53 }
54
55 ↵ #options li:hover {
56 background: □#372469;
57 }
58
59 ↵ #feedback {
60 background: □#b1eae3;
61 width: 60%;
62 height: 30%;
63 border-radius: 10px;
64 font-size: 18px;
65 margin: 15px 0;
66 font-weight: bold;
67 margin: auto;
68 padding: 10px;
69 box-shadow: 0 0px 10px □#000408(0,0,0,0.5);
70 }
```

```
71  
72 #nextBtn {  
73     padding: 10px 20px;  
74     margin-top: 10px;  
75     background: □ #000408;  
76     color: ■#ffff;  
77     border: none;  
78     border-radius: 5px;  
79     cursor: pointer;  
80 }  
81  
82 #nextBtn:hover {  
83     background: □#480375;  
84 }  
85  
86 /* Footer Styles */  
87 footer {  
88     text-align: center;  
89     margin-top: 20px;  
90     font-size: 20px;  
91     color: ■#78ed91;  
92     border-radius: 50%;  
93 }
```

## script.js

```
Lab-Report-CSF3133 > Lab Report 6 > LabExersice6 > js script.js > [?] questions
1 // Questions Array
2 const questions = [
3   {
4     question: "What is the capital of Malaysia?", 
5     options: ["Johor", "Penang", "Kuala Lumpur", "Melaka"], 
6     answer: "Kuala Lumpur"
7   },
8   {
9     question: "Which planet is known as the Red Planet?", 
10    options: ["Earth", "Mars", "Jupiter", "Saturn"], 
11    answer: "Mars"
12  },
13  {
14    question: "How many days are there in a leap year?", 
15    options: ["364", "365", "366", "367"], 
16    answer: "366"
17  },
18  {
19    question: "10000 - 9000 = ?", 
20    options: ["1000", "2000", "3000", "4000"], 
21    answer: "1000"
22  },
23  {
24    question: "What is the course code of this lab course?", 
25    options: ["CSF3133", "CSF3193", "CSF3156", "CSF3103"], 
26    answer: "CSF3133"
27  }
28];
29
30 let currentQuestion = 0;
31 let score = 0;
32 let timer;
33 let timeLeft = 30;
34
35 // Shuffle Questions
36 function shuffleQuestions() {
37   questions.sort(() => Math.random() - 0.5);
```

```
38 }
39
40 // Start Timer
41 function startTimer() {
42     timeLeft = 30;
43     document.getElementById("time").innerText = timeLeft;
44
45     timer = setInterval(() => {
46         timeLeft--;
47         document.getElementById("time").innerText = timeLeft;
48
49         if (timeLeft <= 0) {
50             clearInterval(timer);
51             nextQuestion();
52         }
53     }, 1000);
54 }
55
56 // Display Question
57 function displayQuestion() {
58     const q = questions[currentQuestion];
59     document.getElementById("question").innerText = q.question;
60
61     const optionsList = document.getElementById("options");
62     optionsList.innerHTML = "";
63
64     q.options.forEach(option => {
65         const li = document.createElement("li");
66         li.innerText = option;
67         li.onclick = () => checkAnswer(option);
68         optionsList.appendChild(li);
69     });
70 }
```

```
72 // Check Answer
73 function checkAnswer(selected) {
74     clearInterval(timer);
75
76     const correct = questions[currentQuestion].answer;
77
78     if (selected === correct) {
79         score++;
80         document.getElementById("feedback").innerText = "Correct!";
81         document.getElementById("feedback").style.color = "green";
82     } else {
83         document.getElementById("feedback").innerText = "Wrong!";
84         document.getElementById("feedback").style.color = "red";
85     }
86 }
87
88 // Next Question
89 function nextQuestion() {
90     currentQuestion++;
91
92     if (currentQuestion >= questions.length) {
93         document.getElementById("question").innerText = "Quiz Finished!";
94         document.getElementById("options").innerHTML = "";
95         document.getElementById("feedback").innerText = "";
96         document.getElementById("score").innerText = `Your Score: ${score}/${questions.length}`;
97         document.getElementById("nextBtn").style.display = "none";
98         return;
99     }
100
101    document.getElementById("feedback").innerText = "";
102    displayQuestion();
103    startTimer();
104 }
```

```
105
106 ● 107 // Start Quiz
107 function startQuiz() {
108     shuffleQuestions();
109     displayQuestion();
110     startTimer();
111 }
112
113 // Start when page loads
114 window.onload = startQuiz;
```

## Output

Welcome to Just Quiz

Time Left: 27s

What is the capital of Malaysia?

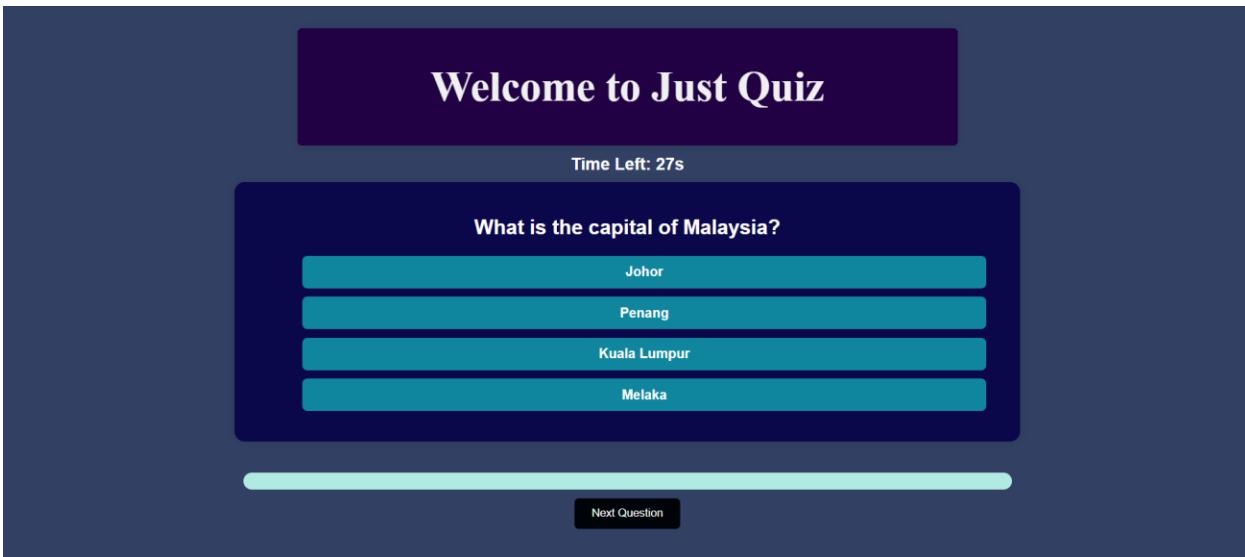
Johor

Penang

Kuala Lumpur

Melaka

Next Question



Welcome to Just Quiz

Time Left: 29s

$10000 - 9000 = ?$

1000

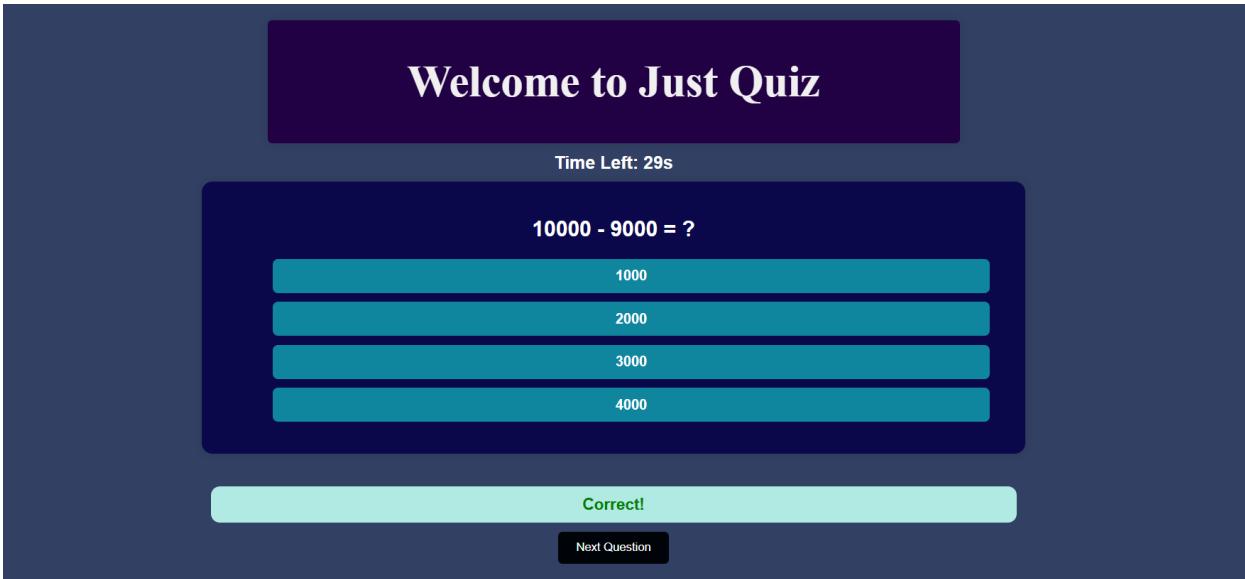
2000

3000

4000

Correct!

Next Question



# Welcome to Just Quiz

Time Left: 30s

How many days are there in a leap year?

364

365

366

367

Wrong!

Next Question

# Welcome to Just Quiz

Time Left: 29s

Quiz Finished!

Your Score: 4/5