



WEB-BASED INTERFACE DESIGN

(CSF3133)

Lab Report 6

Name : Siti Zulaikha Binti Shamsuri

Matric : S75309

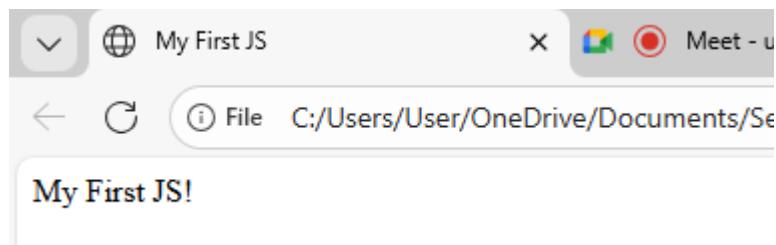
Date : 3/12/2025

Group : K4

Programme : Computer Science (Software Engineering)

6.3 Basic Javascript

1.

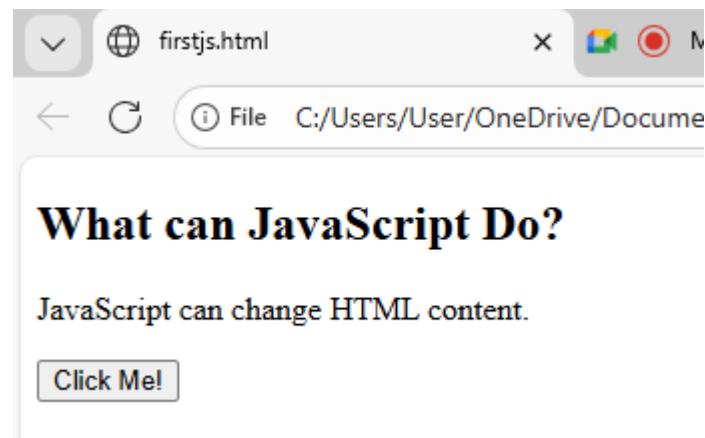


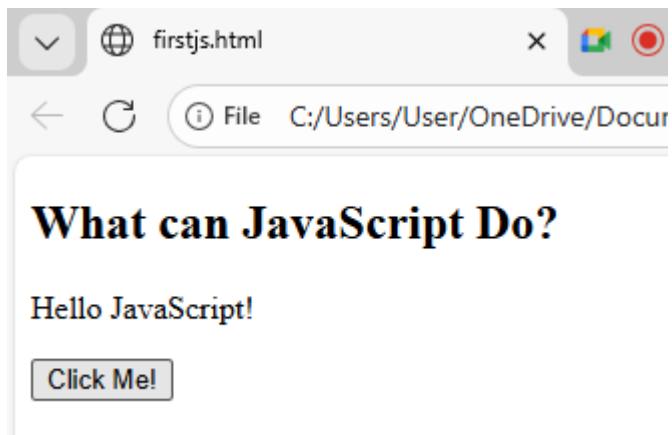
3.



6.4 getElementById()

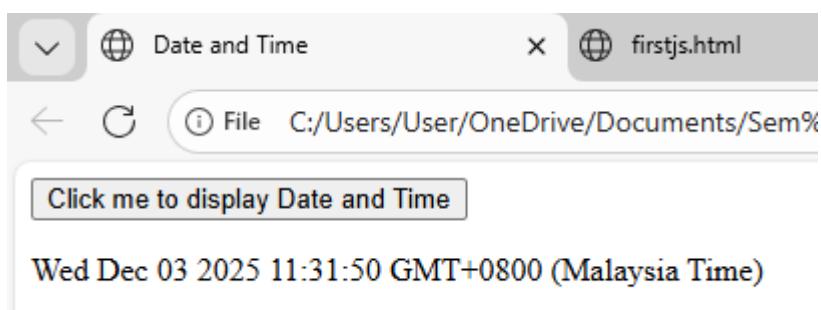
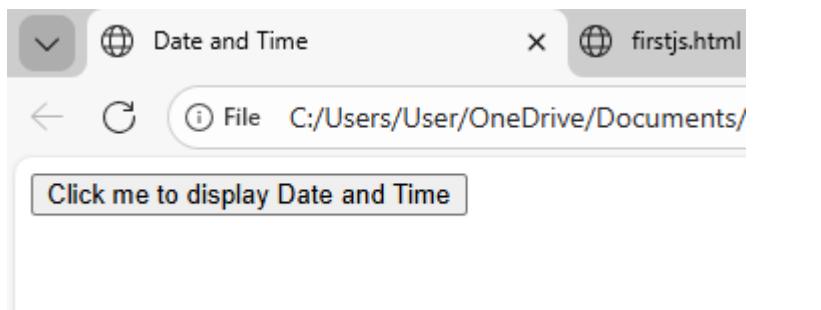
1.



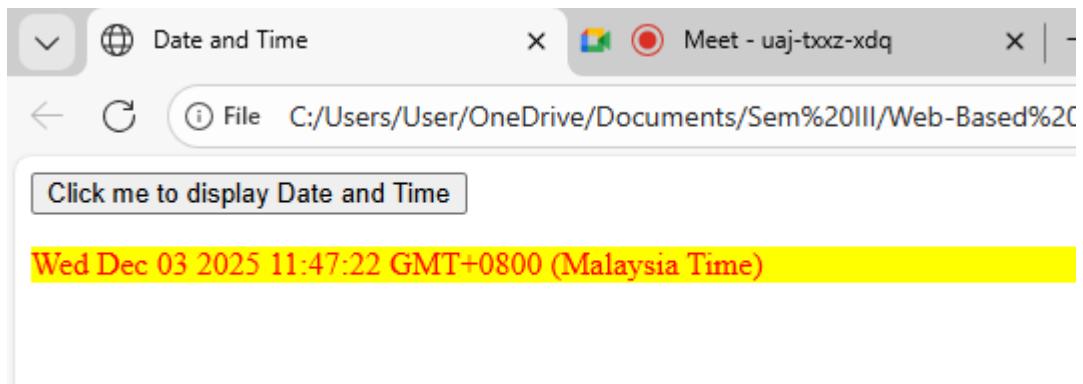


6.5 Date and Time

1.



2.



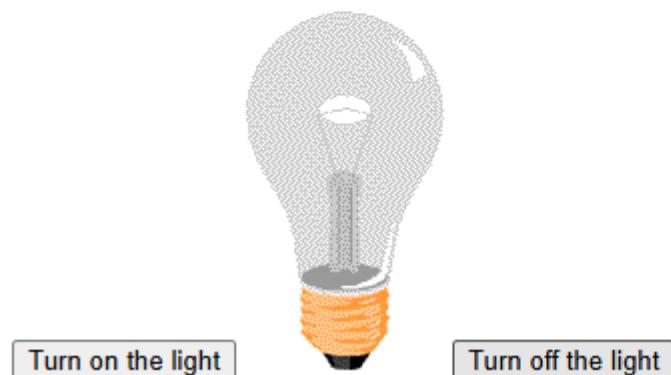
6.6 Change HTML Attribute Values

A screenshot of a web browser window titled "changelight.html". The address bar shows the file path "C:/Users/User/OneDrive/Documents/Sem%20III/Web-Ba...". The main content area displays a lightbulb icon with a grey glass and an orange base. Below the bulb are two buttons: "Turn on the light" on the left and "Turn off the light" on the right.

What Can JavaScript Do?

JavaScript can change HTML attribute values.

In this case, JavaScript changes the value of the 'src' attribute of an image.

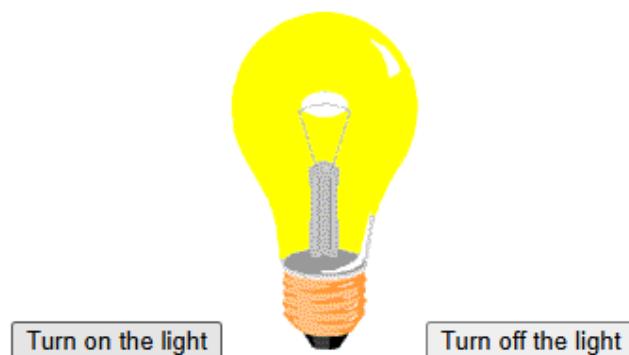


A screenshot of a web browser window titled "changelight.html". The address bar shows the file path "C:/Users/User/OneDrive/Documents/Sem%20III/Web-Ba...". The main content area displays a yellow lightbulb icon with a bright yellow glow. Below the bulb are two buttons: "Turn on the light" on the left and "Turn off the light" on the right.

What Can JavaScript Do?

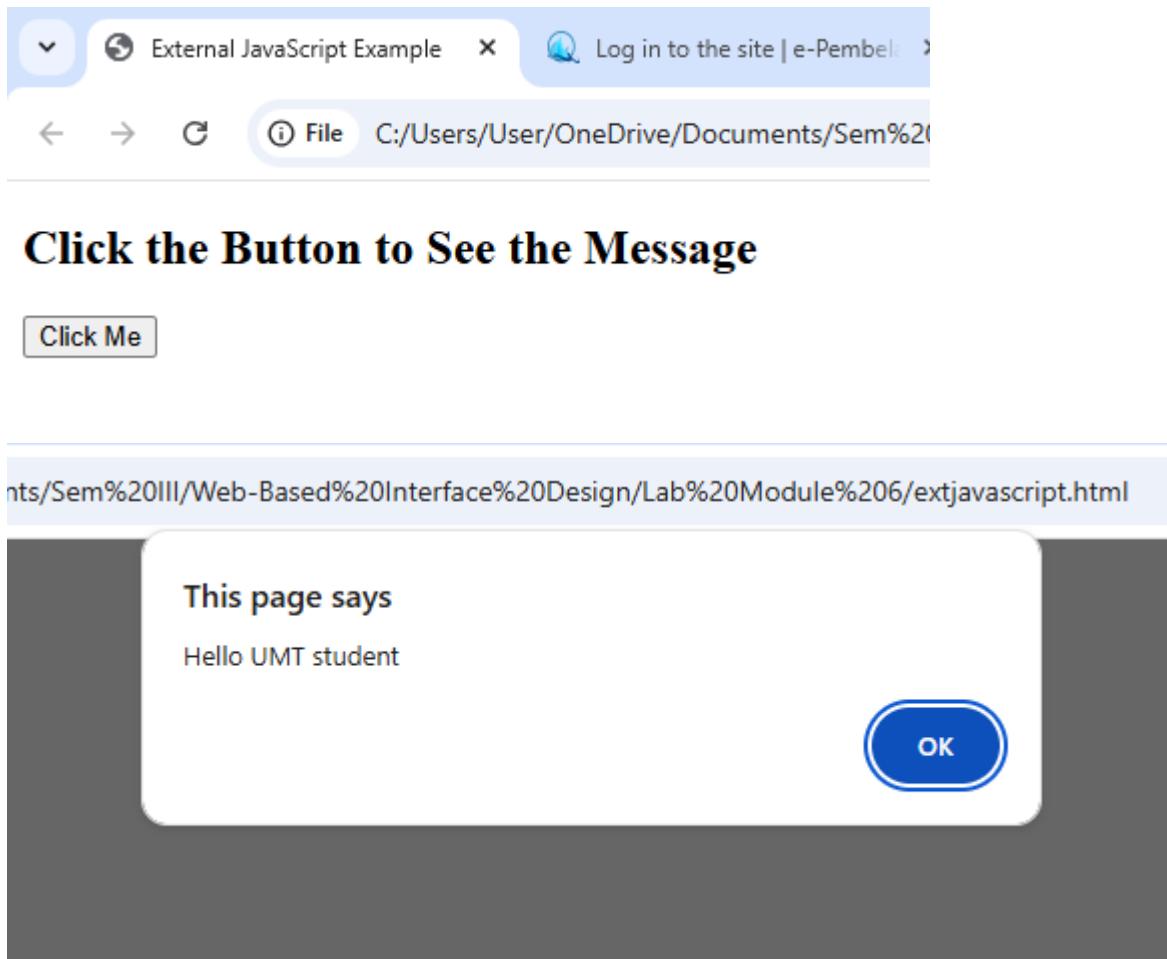
JavaScript can change HTML attribute values.

In this case, JavaScript changes the value of the 'src' attribute of an image.

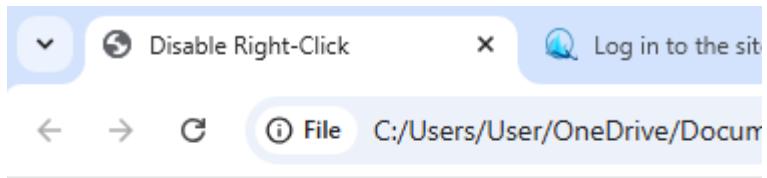


6.7 Link to file Javascript (*.js)

6.7.3 External References



6.8 Working with events



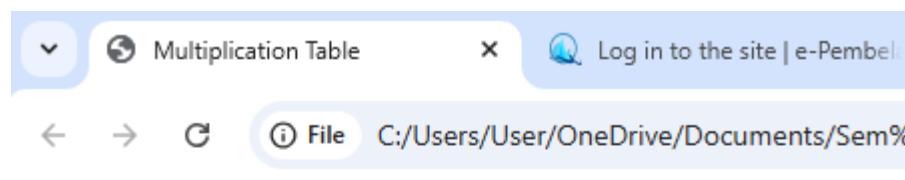
This page says

Right-click is disabled on this page.

OK

6.9 Multiplication Table

2.



Enter number of rows:

Enter number of columns:

5.

The screenshot shows a web browser window with three tabs: 'Multiplication Table', 'Log in to the site | e-Pembelajaran', and 'CSF3133: Web-Based Interface'. The main content area is titled 'Multiplication Table Generator'. It has two input fields: 'Enter number of rows:' with value '3' and 'Enter number of columns:' with value '4'. Below these is a 'Generate Table' button. The generated table is a 3x4 grid with all cells containing the placeholder text '\$(i * j)'.

\$i * j	\$i * j	\$i * j	\$i * j
\$i * j	\$i * j	\$i * j	\$i * j
\$i * j	\$i * j	\$i * j	\$i * j

6.10 Client-side validation

6.10.1 Form Validation

Case 1 :

The screenshot shows a web browser window with three tabs: 'Form Validation', 'Log in to the site | e-Pembelajaran', and 'C:/Users/User/OneDrive/Documents/Sem%20III/Web-Based%20Interface%20Design/Lab%20Module%206/form-validation.html'. The main content area is titled 'Form Validation Example'. It contains a 'First Name:' label and a text input field. Below it is a green 'Submit' button. A modal dialog box is displayed, showing the text 'This page says' and 'First Name must be filled out.' with an 'OK' button.

Case 2 :

The screenshot shows a browser window with the title "Form Validation". The address bar shows the URL "C:/Users/User/OneDrive/Documents/Sem%20III/Web-Based%20Interface%20Design/Lab%20Module%206/numeric-validation.html". The main content area displays the heading "Form Validation Example" and a form field labeled "First Name:" containing the value "Zulaikha". A green "Submit" button is visible below the input field.

Form Validation Example

First Name:

Submit

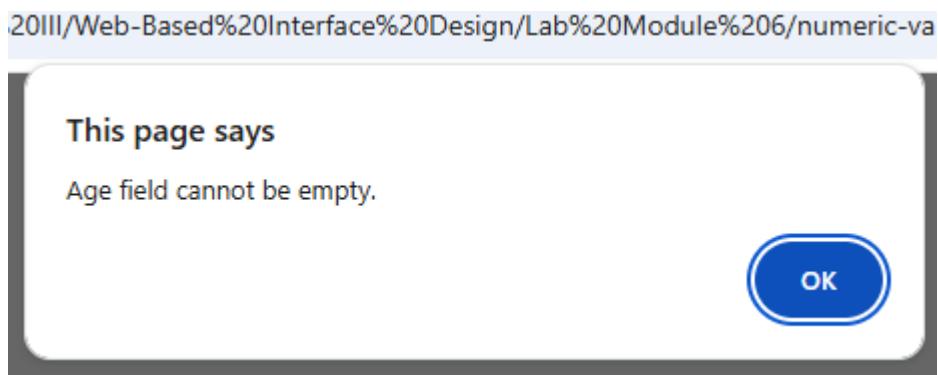
6.10.2 Numeric Input Validation

Case 1 :

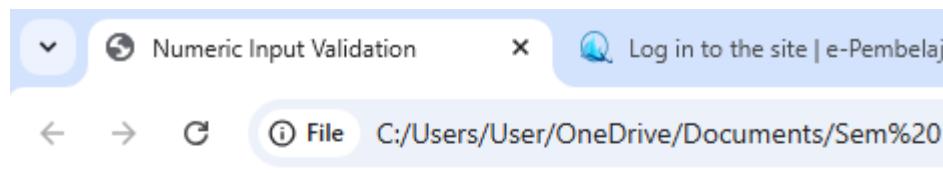
The screenshot shows a browser window with the title "Numeric Input Validation". The address bar shows the URL "C:/Users/User/OneDrive/Documents/Sem%20III/Web-Based%20Interface%20Design/Lab%20Module%206/numeric-validation.html". The main content area displays the heading "Numeric Input Validation Example" and a form field labeled "Enter Your Age:" containing the placeholder text "Enter a number". A blue "Submit" button is visible below the input field.

Numeric Input Validation Example

Enter Your Age:

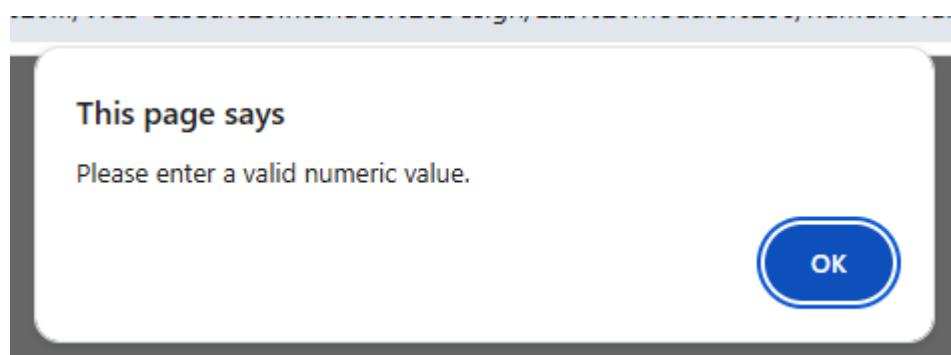
Submit

Case 2 :

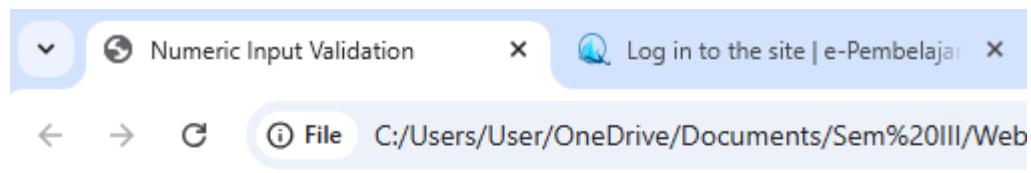


Numeric Input Validation Example

Enter Your Age:

Submit

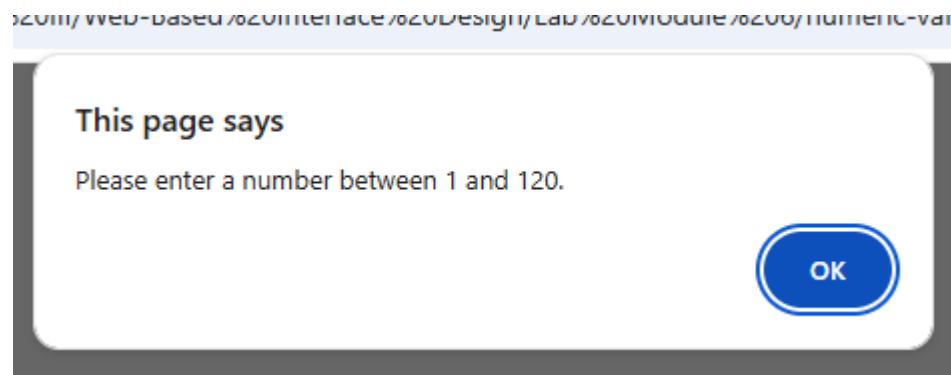
Case 3 :



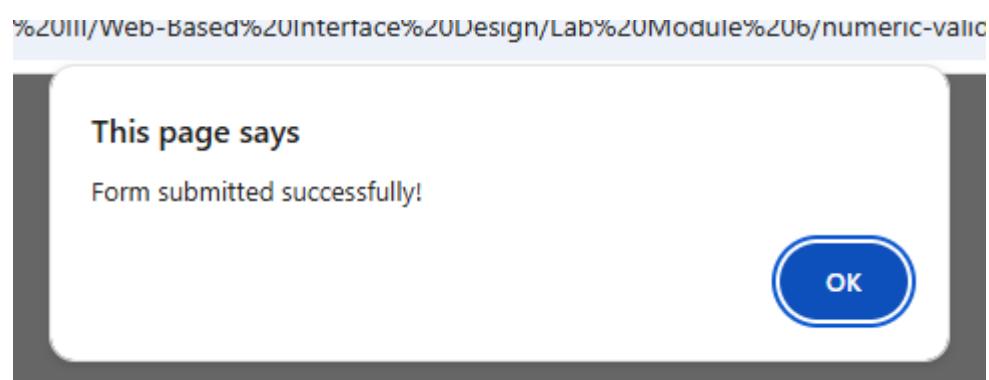
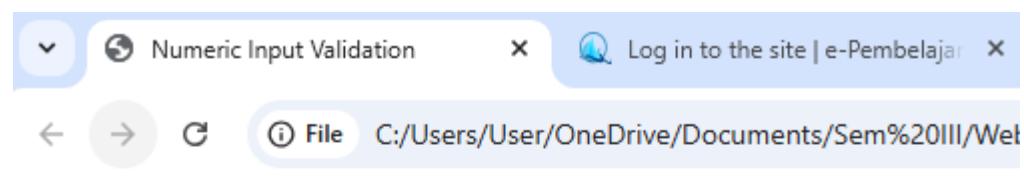
Numeric Input Validation Example

Enter Your Age:

Submit

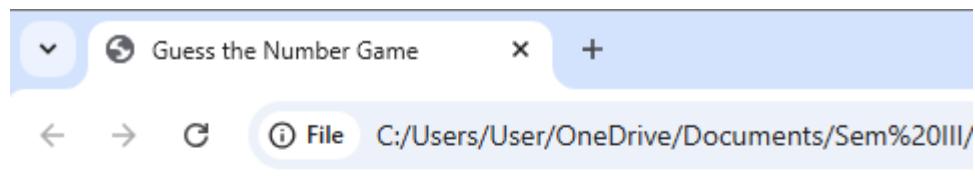


Case 4 :



6.11 Math Function

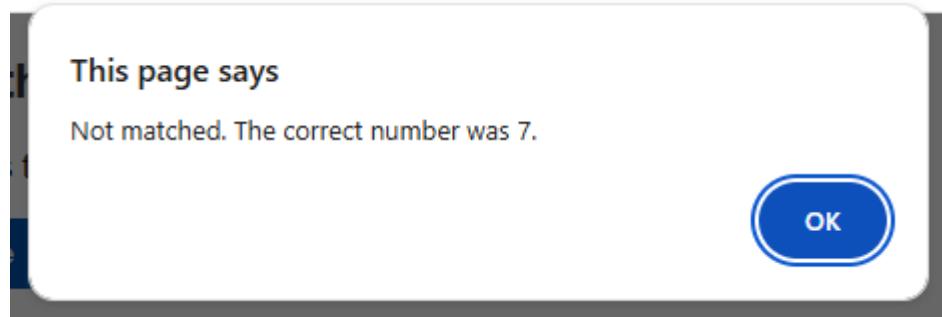
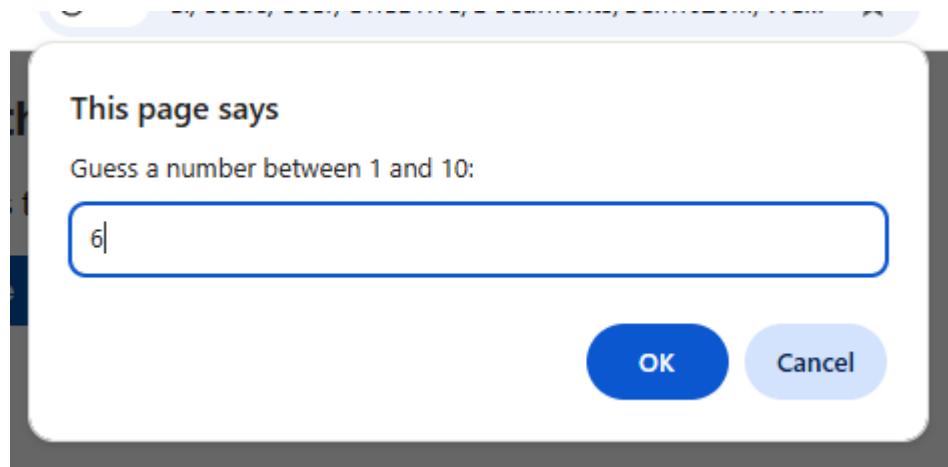
6.11.1 Guess a Number



Guess the Number Game

Try to guess the random number between 1 and 10!

Start Game



This page says

Guess a number between 1 and 10:

5

OK

Cancel

This page says

Good Work! You guessed it right.

OK

6.12 Lab Exercise 6

index.html :

```
index.html # style.css 1 ● JS script.js
C: > Users > User > OneDrive > Documents > Sem III > Web-Based Interface Design > Lab Module 6 > index.html > html > head
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Enhypen Quiz</title>
7      <link rel="stylesheet" href="style.css">
8  </head>
9  <body>
10     <header> <!-- Intro -->
11         <h1>Welcome to the ENHYPEN Quiz!</h1>
12         <figure>
13              <!-- Image -->
14             <figcaption class="image-caption">Enhypen MAMA Awards 2025</figcaption>
15         </figure>
16     </header>
17
18     <h2>Choose the right answer!</h2>
19     <section id="quiz"> <!-- Display question -->
20         <div id="question-container"></div>
21         <div id="options-container"></div> <!-- Display options -->
22
23         <div id="timer">Time left: <span id="time">30</span> seconds</div> <!-- Display timer -->
24         <div id="feedback"></div> <!-- Display feedback -->
25         <button id="submit-btn">Submit Answer</button> <!-- Display submit button -->
26         <button id="next-btn" style="display:none;">Next Question</button> <!-- Display navigate button -->
27
28     <footer>
29         <div id="score-container"></div> <!-- Display score -->
30     </footer>
31
32     <script src="script.js"></script>
33 </body>
34 </html>
```

style.css :

```
index.html # style.css 1 × JS script.js
C: > Users > User > OneDrive > Documents > Sem III > Web-Based Interface Design > Lab Module 6 > style.css > header h1
1  body {
2      font-family: 'Poppins', Arial, sans-serif;
3      margin: 0;
4      background: linear-gradient(135deg, #1a1a2e, #16213e, #0f3460); /* Dark contra background */
5      color: #fff; /* Light text for contrast */
6  }
7
8  header h1 {
9      text-align: center;
10     font-size: 2.5em;
11     font-weight: bold;
12     background: linear-gradient(90deg, #ffeb3b, #ff9800, #f44336); /* bright yellow → orange → red */
13     -webkit-background-clip: text;
14     -webkit-text-fill-color: transparent;
15     text-shadow: 2px 2px 8px rgba(0,0,0,0.6);
16     margin-bottom: 10px;
17     animation: glow 3s infinite alternate;
18 }
19
20 h2 {
21     text-align: center;
```

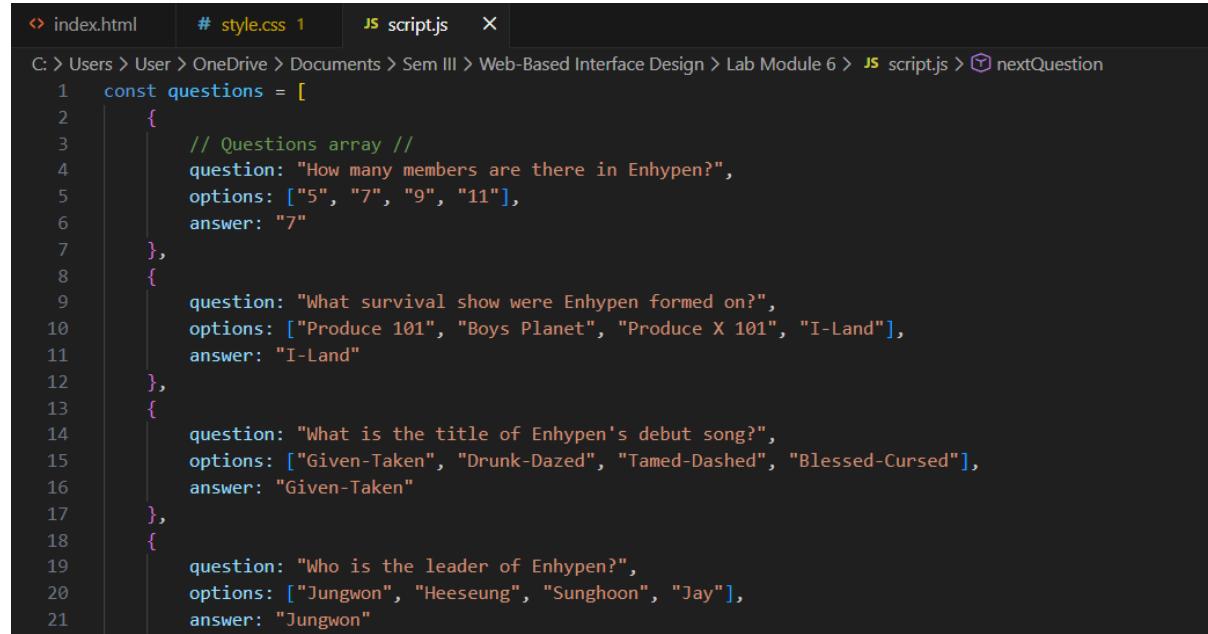
```
22     font-size: 1.5em;
23     color: #00e5ff; /* neon cyan for contrast */
24     margin-bottom: 15px;
25     text-shadow: 1px 1px 6px #rgba(0,0,0,0.7);
26   }
27
28   @keyframes glow {
29     from { text-shadow: 0 0 10px #fffeb3b, 0 0 20px #ff9800; }
30     to { text-shadow: 0 0 20px #f44336, 0 0 30px #00e5ff; }
31   }
32
33
34   /* ENHYPEN image */
35   .enhypen-img {
36     display: block;
37     margin: 15px auto;
38     max-width: 80%;
39     border: 4px solid #6a1b9a;
40     border-radius: 12px;
41     box-shadow: 0 6px 15px #rgba(0,0,0,0.6);
42   }
43
44   .image-caption {
45     text-align: center;
46     font-size: 0.9em;
47     color: #ddd; /* lighter caption for dark background */
48     margin-top: 5px;
49     font-style: italic;
50   }
51
52   /* Quiz contrasts against dark background */
53   #quiz {
54     max-width: 650px;
55     margin: 40px auto;
56     padding: 25px;
57     background: linear-gradient(135deg, #ffffff, #f0f8ff); /* Light card */
58     color: #333;
59     border: 3px solid #007BFF;
60     border-radius: 15px;
61     box-shadow: 0 8px 20px #rgba(0,0,0,0.6);
62     animation: fadeIn 1s ease-in;
63   }
64
65   @keyframes fadeIn {
66     from { opacity: 0; transform: translateY(20px); }
67     to { opacity: 1; transform: translateY(0); }
68   }
69
70   #question-container {
71     font-size: 1.4em;
72     margin-bottom: 15px;
73     font-weight: bold;
74     color: #6a1b9a; /* ENHYPEN-inspired purple */
75   }
76
77   #options-container button {
78     display: block;
79     margin: 8px 0;
80     padding: 12px;
81     width: 100%;
```

```

82    border: none;
83    border-radius: 8px;
84    background: linear-gradient(135deg, #e7f0ff, #d1c4e9);
85    cursor: pointer;
86    transition: background 0.3s, transform 0.2s;
87  }
88  #options-container button:hover {
89    background: linear-gradient(135deg, #007BFF, #6a1b9a);
90    color: #fff;
91    transform: scale(1.05);
92  }
93
94  #score-container {
95    text-align: center;
96    font-size: 2em;
97    font-weight: bold;
98    color: #000;
99    background-color: #fff;
100   margin: 30px auto;
101   padding: 20px;
102
103   width: 300px;
104   border: 2px solid #000;
105   border-radius: 10px;
106   box-shadow: 0 4px 10px rgba(0,0,0,0.2);
107 }

```

script.js :



```

C: > Users > User > OneDrive > Documents > Sem III > Web-Based Interface Design > Lab Module 6 > script.js > nextQuestion
1  const questions = [
2    {
3      // Questions array //
4      question: "How many members are there in Enhypen?",
5      options: ["5", "7", "9", "11"],
6      answer: "7"
7    },
8    {
9      question: "What survival show were Enhypen formed on?",
10     options: ["Produce 101", "Boys Planet", "Produce X 101", "I-Land"],
11     answer: "I-Land"
12   },
13   {
14     question: "What is the title of Enhypen's debut song?",
15     options: ["Given-Taken", "Drunk-Dazed", "Tamed-Dashed", "Blessed-Cursed"],
16     answer: "Given-Taken"
17   },
18   {
19     question: "Who is the leader of Enhypen?",
20     options: ["Jungwon", "Heeseung", "Sunghoon", "Jay"],
21     answer: "Jungwon"

```

```

22     },
23     {
24         question: "Which member was a professional figure skater before debut?",
25         options: ["Heeseung", "Ni-ki", "Sunghoon", "Jake"],
26         answer: "Sunghoon"
27     },
28     {
29         question: "What is the name of Enhypen's fandom?",
30         options: ["Carat", "Engene", "E.L.F", "Wannable"],
31         answer: "Engene"
32     },
33     {
34         question: "Who is the maknae of Enhypen?",
35         options: ["Sunoo", "Ni-ki", "Jake", "Jungwon"],
36         answer: "Ni-ki"
37     },
38     {
39         question: "When did Enhypen debut?",
40         options: ["October 2020", "November 2019", "December 2020", "November 2020"],
41         answer: "October 2020"
42     },
43     {
44         question: "Which Enhypen member used to live in Australia?",
45         options: ["Sunoo", "Ni-ki", "Jay", "Jake"],
46         answer: "Jake"
47     },
48     {
49         question: "Who is the eldest member in Enhypen?",
50         options: ["Sunoo", "Sunghoon", "Jay", "Heeseung"],
51         answer: "Heeseung"
52     }
53 ];
54
55 let shuffledQuestions = [];
56 let currentQuestionIndex = 0;
57 let score = 0;
58 let timer;
59 let timeLeft = 30;
60
61 function shuffleQuestions() { // Shuffle questions //
62     shuffledQuestions = questions.sort(() => Math.random() - 0.5);
63 }
64
65 function startTimer() { // Timer //
66     timeLeft = 30;
67     document.getElementById("time").textContent = timeLeft;
68     timer = setInterval(() => {
69         timeLeft--;
70         document.getElementById("time").textContent = timeLeft;
71         if (timeLeft <= 0) {
72             clearInterval(timer);
73             checkAnswer();
74         }
75     }, 1000);
76 }
77
78 function displayQuestion() { // Display questions //
79     const questionObj = shuffledQuestions[currentQuestionIndex];
80     document.getElementById("question-container").textContent = questionObj.question;
81     const optionsContainer = document.getElementById("options-container");

```

```

82     optionsContainer.innerHTML = "";
83     questionObj.options.forEach(option => {
84         const btn = document.createElement("button");
85         btn.textContent = option;
86         btn.onclick = () => {
87             document.querySelectorAll("#options-container button").forEach(b => b.disabled = true);
88             btn.classList.add("selected");
89         };
90         optionsContainer.appendChild(btn);
91     });
92     document.getElementById("feedback").textContent = "";
93     document.getElementById("submit-btn").style.display = "inline-block";
94     document.getElementById("next-btn").style.display = "none";
95     startTimer();
96 }
97
98 function checkAnswer() {
99     clearInterval(timer);
100    const selected = document.querySelector("#options-container .selected");
101    const feedback = document.getElementById("feedback");
102
103    if (!selected) {
104        feedback.textContent = "No answer selected.";
105    } else {
106        const answer = shuffledQuestions[currentQuestionIndex].answer;
107        if (selected.textContent === answer) {
108            feedback.textContent = "Correct!";
109            score++;
110        } else {
111            feedback.textContent = `Incorrect. The correct answer was ${answer}.`;
112        }
113        document.getElementById("submit-btn").style.display = "none";
114        document.getElementById("next-btn").style.display = "inline-block";
115    }
116
117    function nextQuestion() {
118        currentQuestionIndex++;
119        if (currentQuestionIndex < shuffledQuestions.length) {
120            displayQuestion();
121        } else {
122            document.getElementById("quiz").style.display = "none";
123            document.getElementById("score-container").textContent = `Your score: ${score} / ${shuffledQuestions.length}`;
124        }
125    }
126
127    function startQuiz() {
128        shuffleQuestions();
129        currentQuestionIndex = 0;
130        score = 0;
131        displayQuestion();
132    }
133
134    document.getElementById("submit-btn").onclick = checkAnswer;
135    document.getElementById("next-btn").onclick = nextQuestion;
136    startQuiz();

```

Output :

Welcome to the ENHYPEN Quiz!



Enhyphen MAMA Awards 2025

Choose the right answer!

How many members are there in Enhyphen?

- 11

Time left: 23 seconds

Time left: 23 sec

Choose the right answer!

What survival show were Enhypen formed on?

Time left: 23 seconds
Correct!

Next Question



Enhypon MAMA Awards 2025

Choose the right answer!

Your score: 10 / 10