



K4 CSF3123 WEB-BASED INTERFACE DESIGN

SEM 3

LAB REPORT 6

PREPARED FOR:

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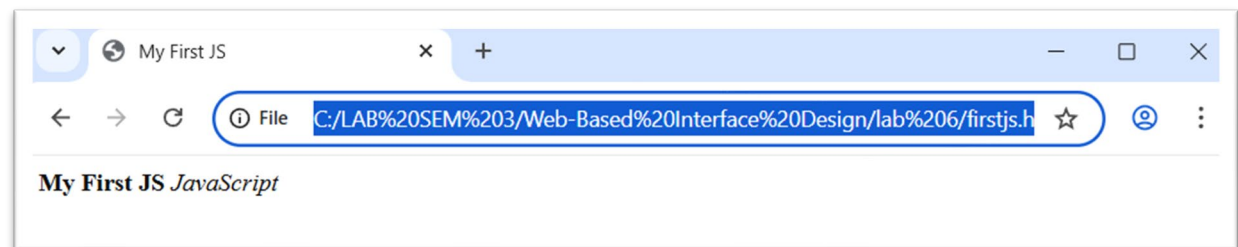
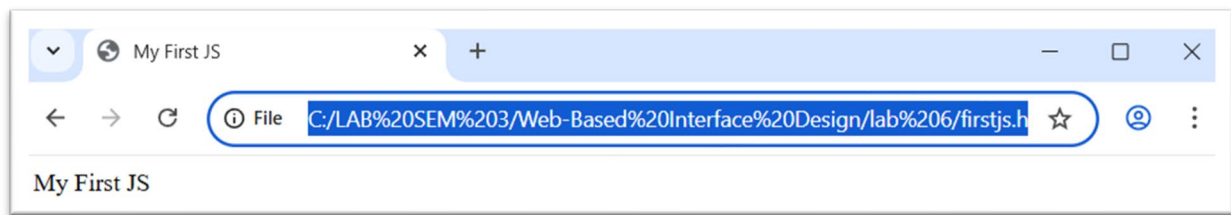
PREPARED BY:

WAN NUR SYAFIQAH IZANI BINTI WAN HIZHAN

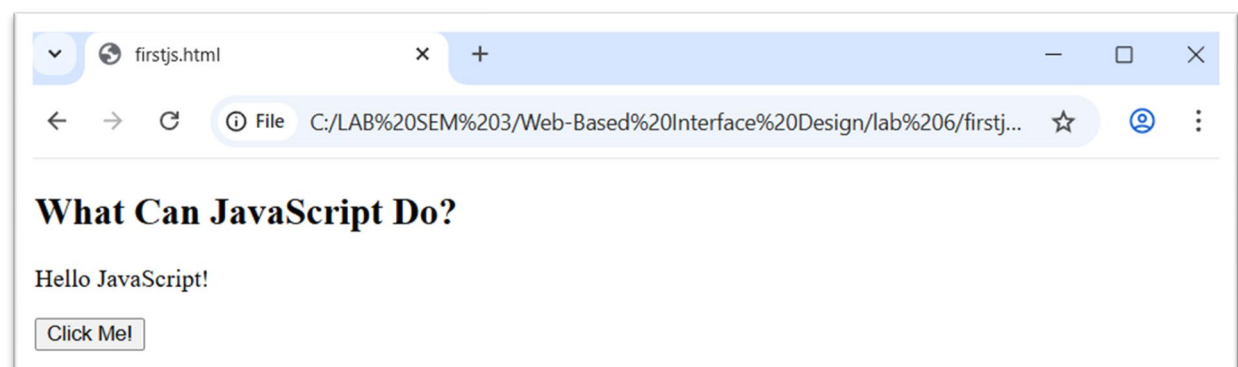
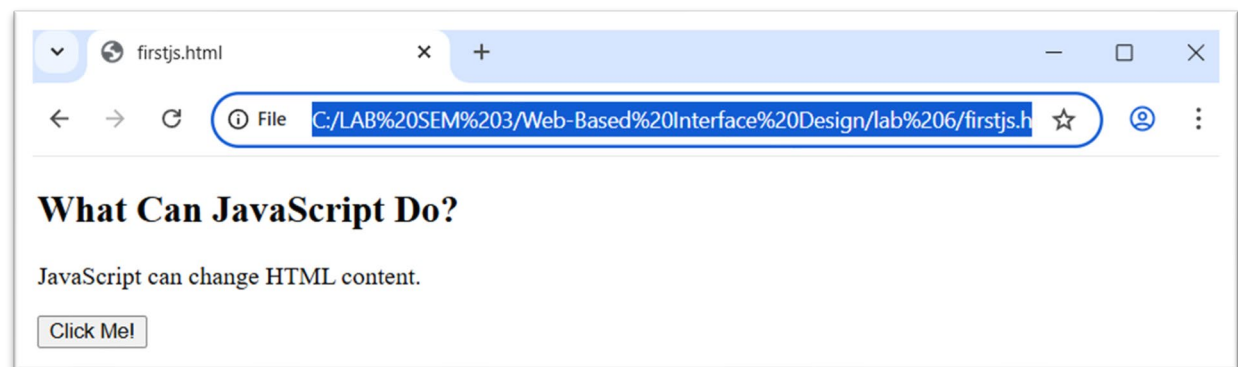
NO. MATRIC: **S75776**

SUBMIT BY: **4/12/2025**

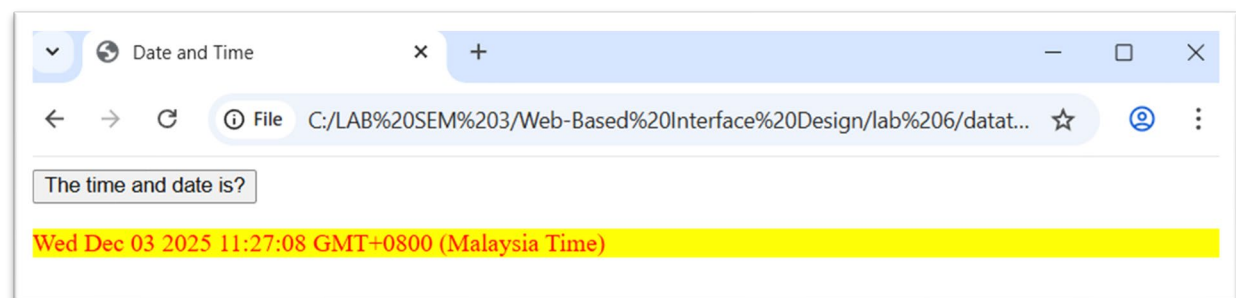
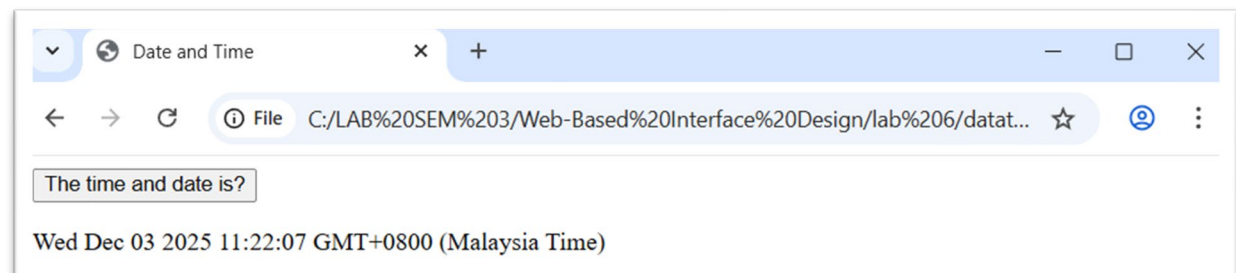
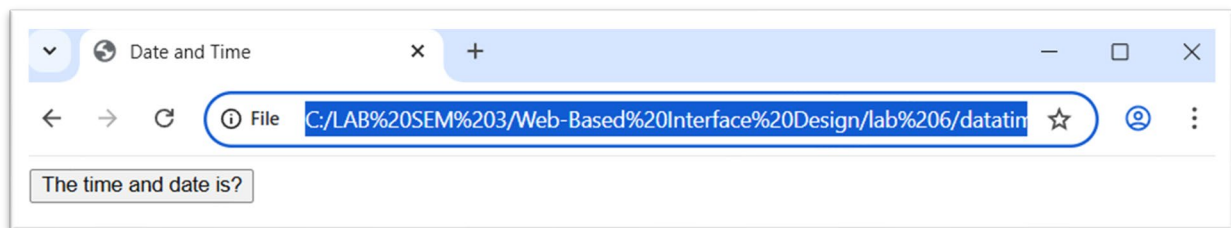
6.3 Basic JavaScript



6.4 getElementById()

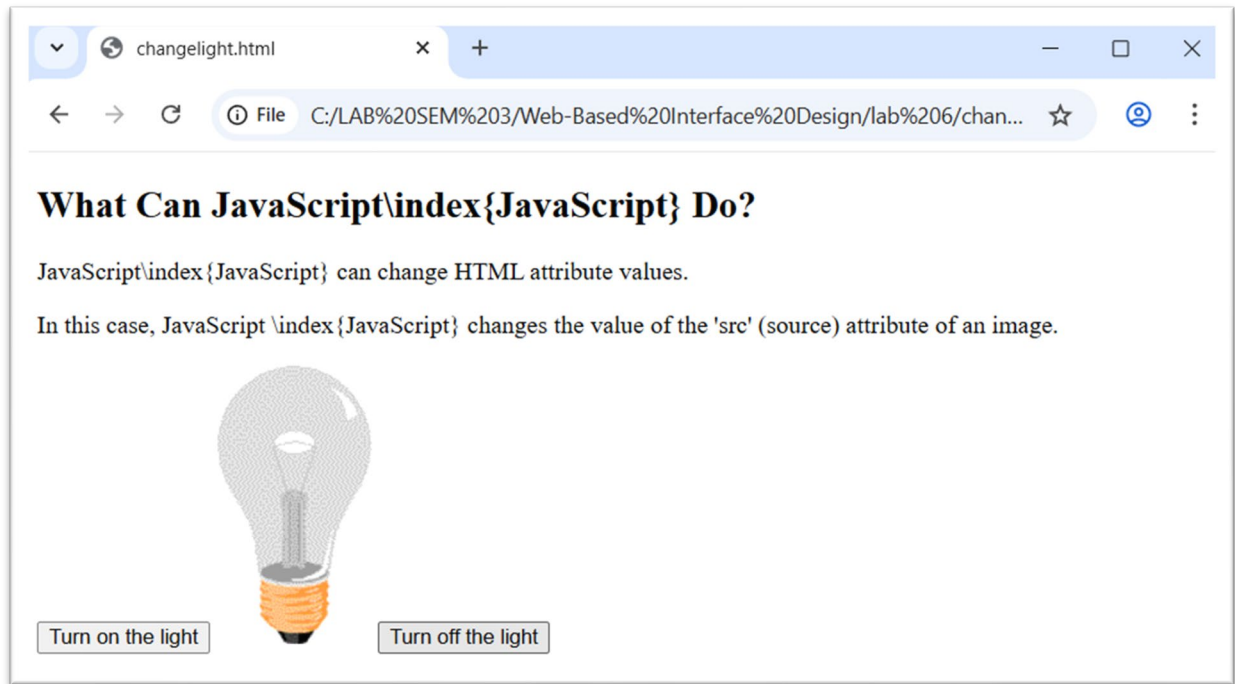


6.5 Date and Time

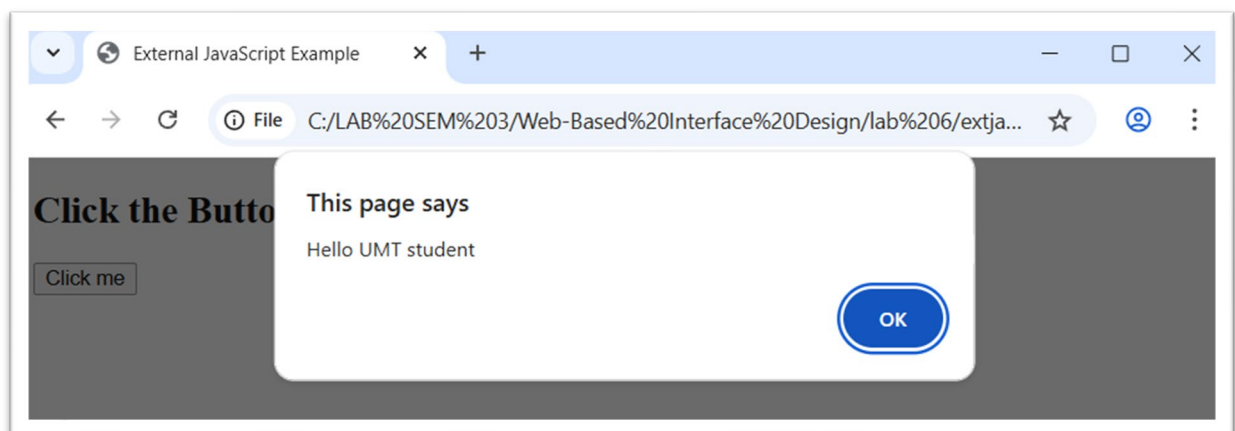
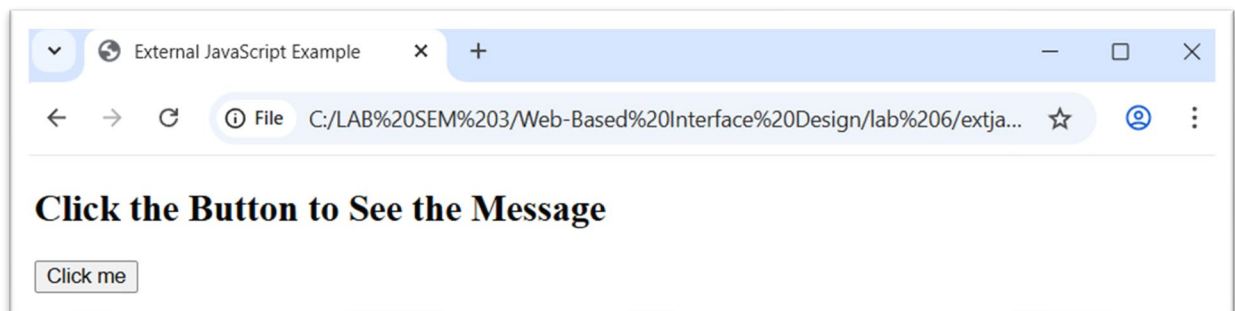


6.6 Change HTML Attribute Values

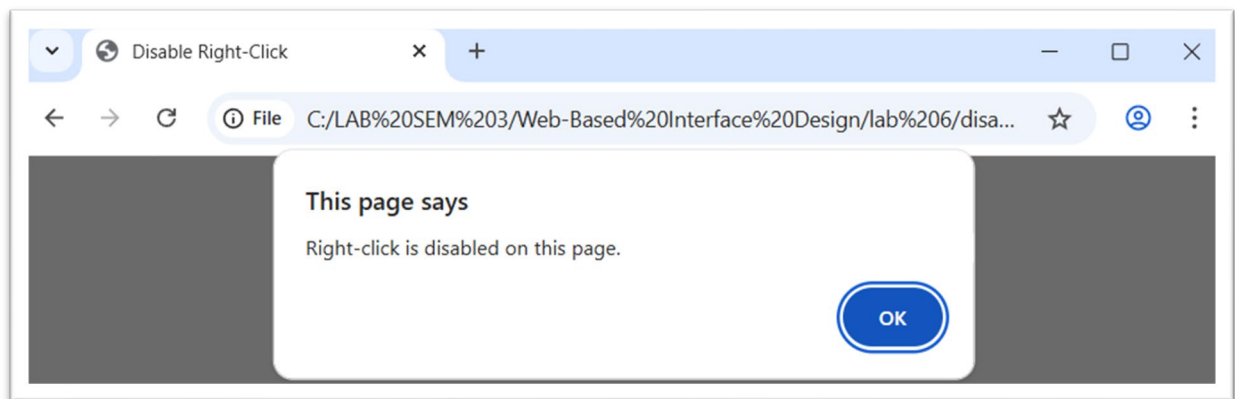




6.7 Link to file JavaScript



6.8 Working with events



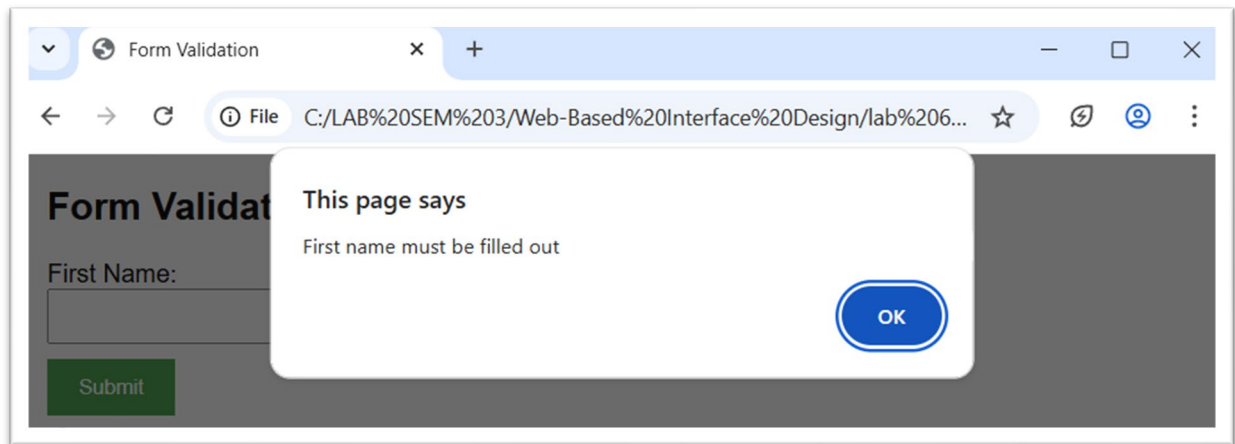
6.9 Multiplication Table

A screenshot of a web browser window. The title bar shows 'Multiplication Table'. The address bar shows a file path: 'C:/LAB%20SEM%203/Web-Based%20Interface%20Design/lab%206/multi...'. The page content includes a heading 'Multiplication Table Generator', two input fields for 'Enter number of rows: 6' and 'Enter number of columns: 5', a 'Generate Table' button, and a resulting 6x5 multiplication table.

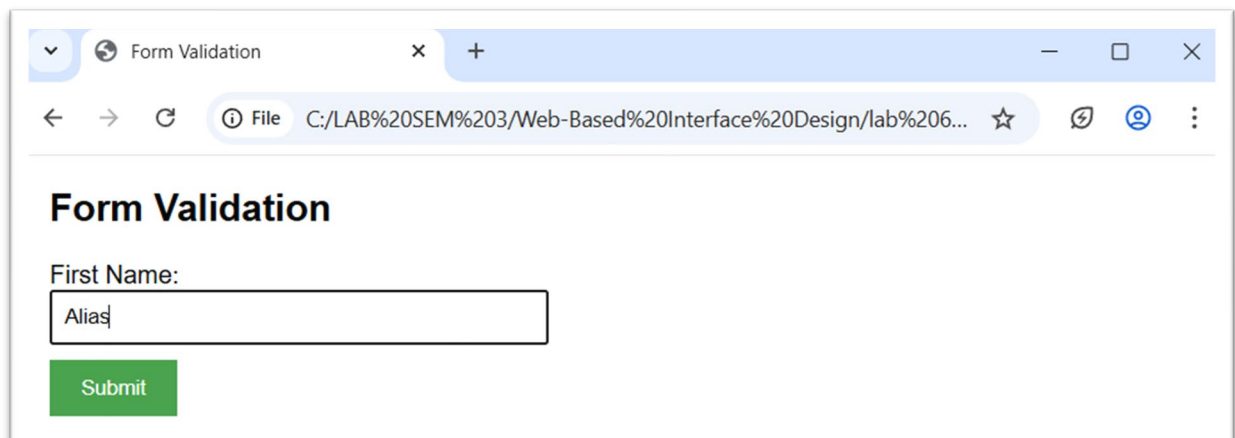
1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25
6	12	18	24	30

6.10.1 Form Validation

Case 1

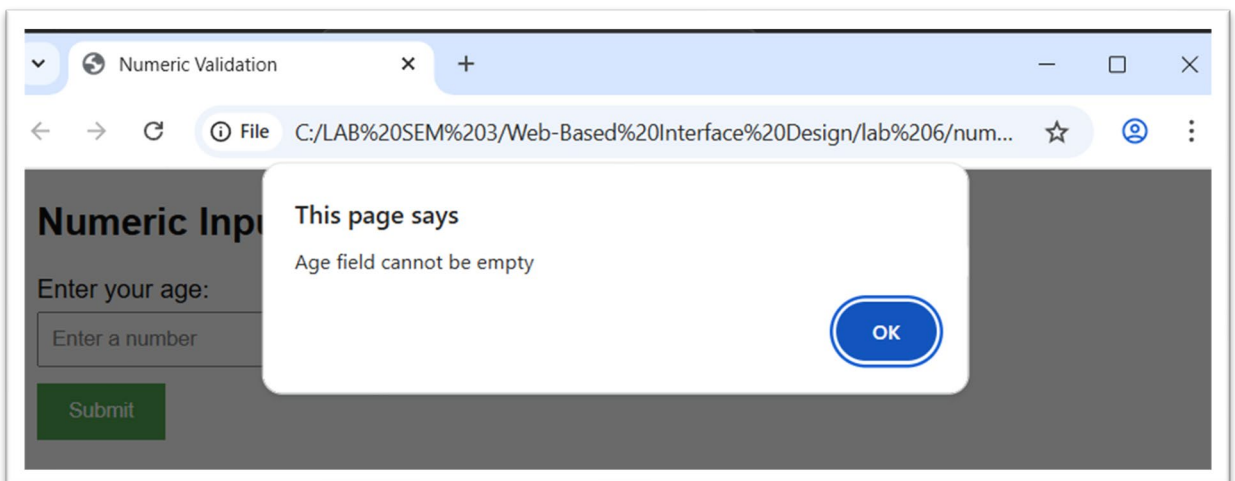


Case 2

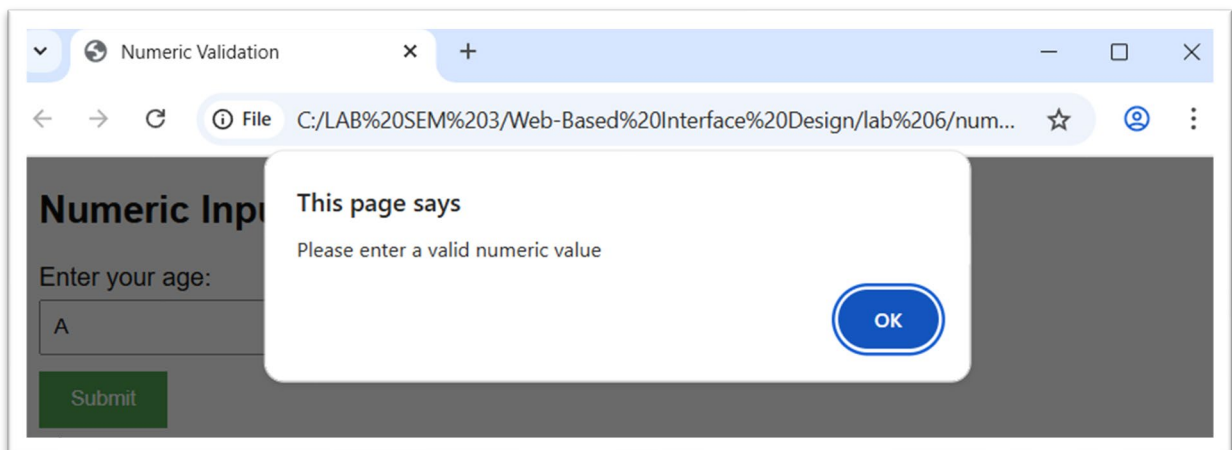


6.10.2 Numeric Input Validation

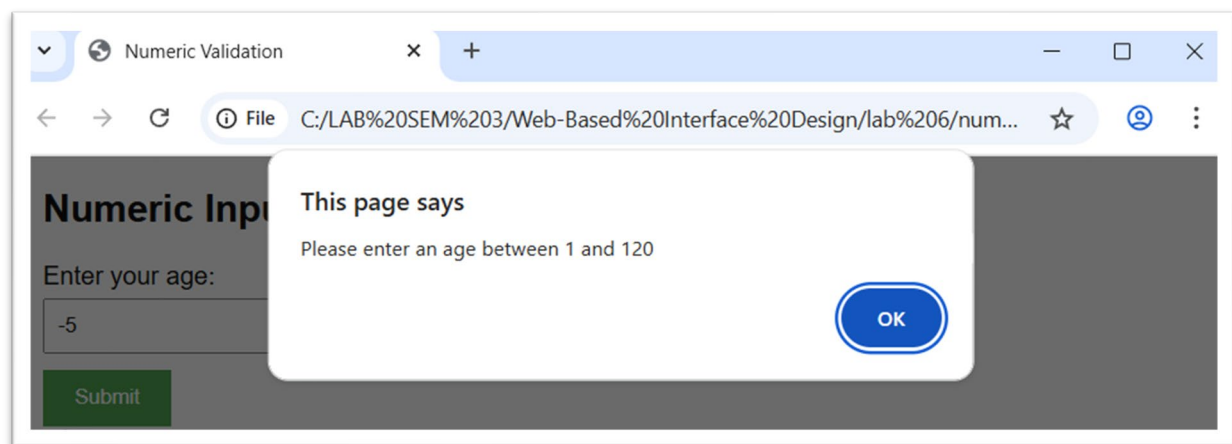
Case 1:



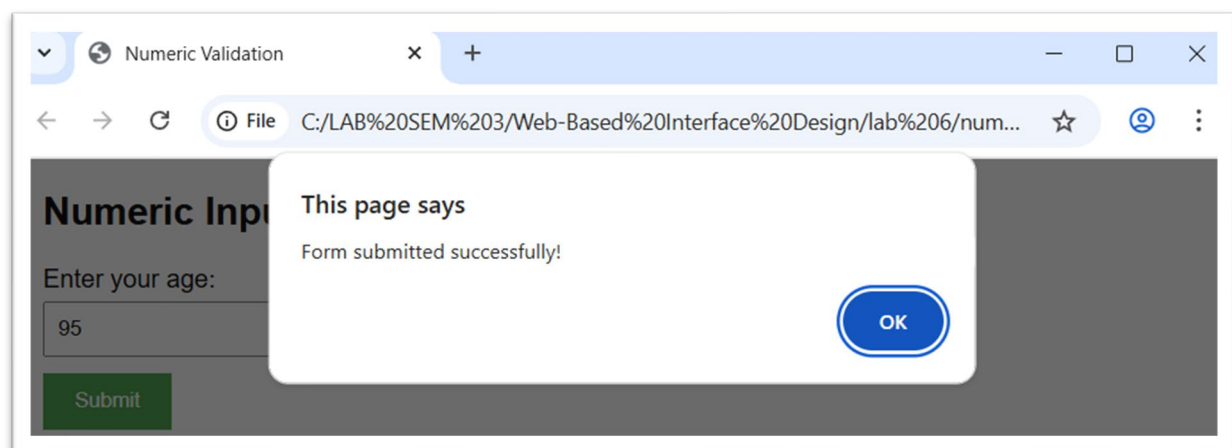
Case 2:



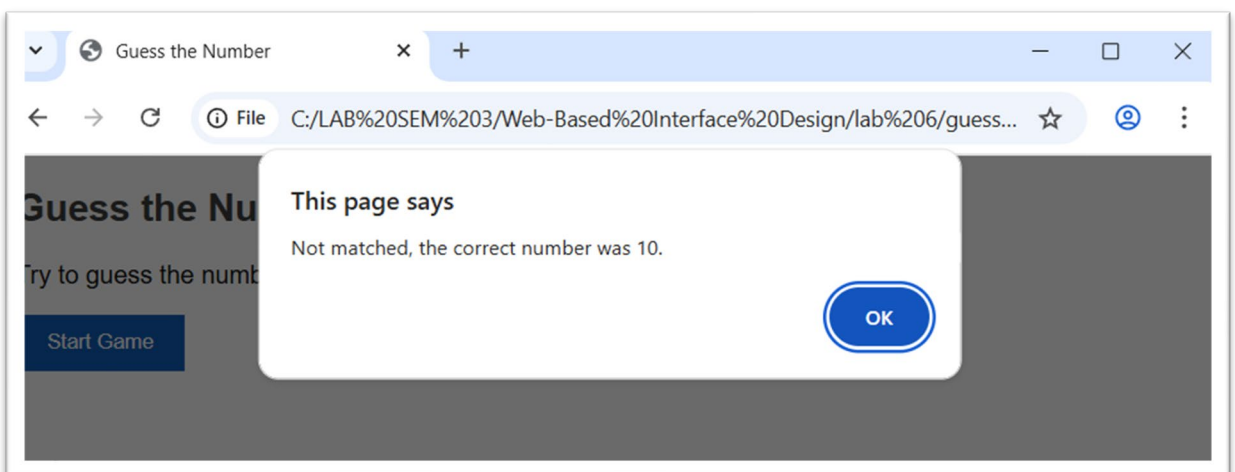
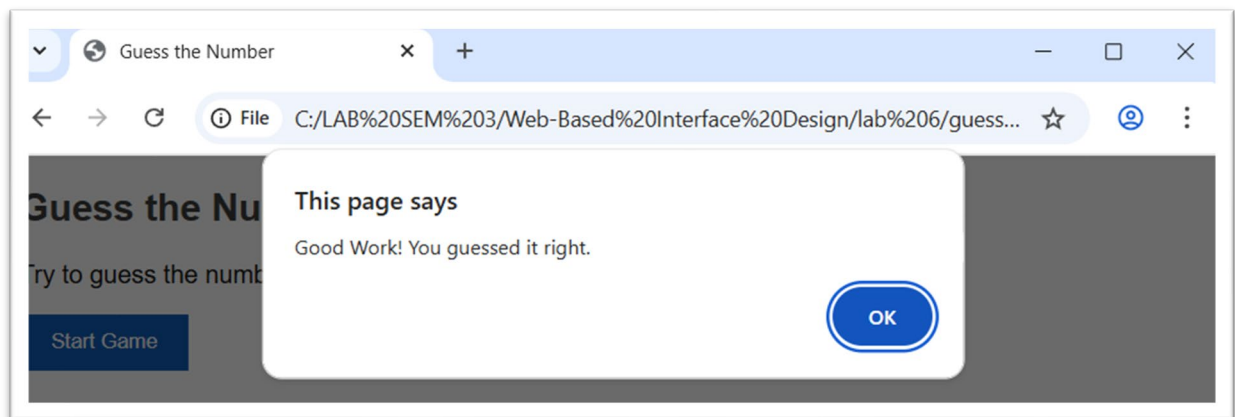
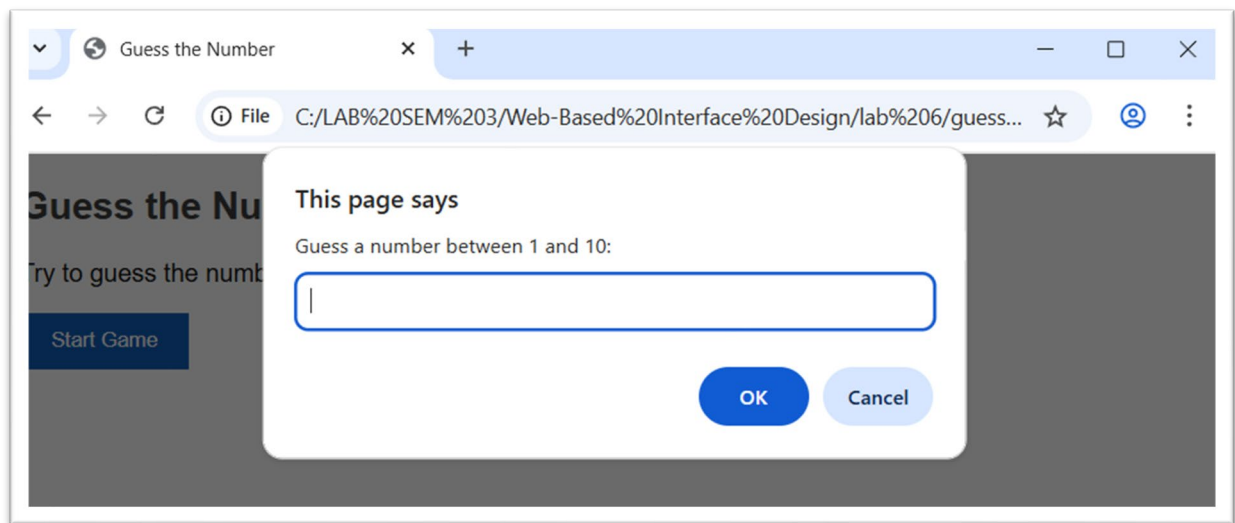
Case 3:



Case 4:



6.11.1 Guess a Number



Lab Exercise

index.html

C: > LAB SEM 3 > Web-Based Interface Design > lab 6 > index.html > ...

```
1  |<!DOCTYPE html>
2  |<html lang="en">
3
4  |<head>
5  |   <meta charset="UTF-8">
6  |   <title>Quiz Application</title>
7  |   <link rel="stylesheet" href="style.css">
8  |</head>
9
10 |<body>
11 |
12 |   <header>
13 |     <h1>
14 |       Welcome to the Quiz Application
15 |     </h1>
16 |   </header>
17
18 |   <main>
19 |     <div id="quiz-box">
20 |       <div id="timer">Time left <span id="time">10</span></div>
21
22 |       <div id="question-container">
23 |         <h2 id="question-text"></h2>
24 |         <div id="options"></div>
25 |       </div>
26
27 |       <div id="feedback"></div>
28
29 |       <button id="next-btn">Next Question</button>
30 |     </div>
31
32 |     <div id="result-box" class="hidden">
33 |       <h2>Your Final Score:</h2>
34 |       <p id="score"></p>
35 |       <button onclick="startQuiz()">Restart Quiz</button>
36 |     </div>
37 |   </main>
38
39 |   <script src="script.js"></script>
40 </body>
41
42 </html>
```

style.css

```
1  h1{
2      color: #0f0b0e;
3      background-color: #dc0872;
4
5
6  }
7  body {
8      font-family: Arial, sans-serif;
9      text-align: center;
10     background: #f4f4f4;
11     padding: 20px;
12 }
13
14 #quiz-box, #result-box {
15     background: rgb(118, 47, 107);
16     padding: 20px;
17     width: 50%;
18     margin: auto;
19     border-radius: 10px;
20     box-shadow: 0 0 10px gray;
21 }
```

```
23 button {
24     margin-top: 15px;
25     padding: 10px 20px;
26     background: #c30f87;
27     color: white;
28     border: none;
29     border-radius: 5px;
30 }
31
32 .option-btn {
33     display: block;
34     width: 100%;
35     margin: 10px 0;
36     padding: 10px;
37     background: #978194;
38     border-radius: 5px;
39     cursor: pointer;
40 }
41
42 .correct {
43     background: #3eaf5c !important;
44     color: white;
45 }
46
47 .incorrect {
48     background: #e63946 !important;
49     color: white;
50 }
51
52 .hidden {
53     display: none;
54 }
```

script.js

```
numeric-validation.html  guess-number.html  index.html  # style.css  JS script.js  JS guess-number.js  JS numeric-validation.js
C: > LAB SEM 3 > Web-Based Interface Design > lab 6 > JS script.js > ...
1  // 1. Questions Array
2  let questions = [
3      {
4          question: "what does HTML stand for?",
5          options: ["Hyper Text Markup Language", "Home Tool Markup Language", "High Tech Modern Language"],
6          answer: 0
7      },
8      {
9          question: "Which language runs in a web browser?",
10         options: ["Python", "C++", "JavaScript"],
11         answer: 2
12     },
13     {
14         question: "What does CSS control?",
15         options: ["Structure", "Styling", "Database"],
16         answer: 1
17     }
18 ];
19
20 let currentIndex = 0;
21 let score = 0;
22 let timer;
23 let timeLeft = 10;
```

```
25 // 2. Shuffle Questions
26 function shuffleQuestions() {
27     questions.sort(() => Math.random() - 0.5);
28 }
29
30 // 3. Display Question
31 function displayQuestion() {
32     const q = questions[currentIndex];
33     document.getElementById("question-text").textContent = q.question;
34
35     const optionBox = document.getElementById("options");
36     optionBox.innerHTML = "";
37
38     q.options.forEach((opt, index) => {
39         const btn = document.createElement("button");
40         btn.textContent = opt;
41         btn.classList.add("option-btn");
42         btn.onclick = () => checkAnswer(index);
43         optionBox.appendChild(btn);
44     });
45
46     document.getElementById("feedback").textContent = "";
47 }
```

```

49 // 4. Check Answer
50 function checkAnswer(selected) {
51     const correct = questions[currentIndex].answer;
52     const optionButtons = document.querySelectorAll(".option-btn");
53
54     if (selected === correct) {
55         optionButtons[selected].classList.add("correct");
56         document.getElementById("feedback").textContent = "Correct!";
57         score++;
58     } else {
59         optionButtons[selected].classList.add("incorrect");
60         optionButtons[correct].classList.add("correct");
61         document.getElementById("feedback").textContent = "Incorrect!";
62     }
63
64     clearInterval(timer);
65 }
66
67 // 5. Move to Next Question
68 function nextQuestion() {
69     currentIndex++;
70
71     if (currentIndex >= questions.length) {
72         showScore();
73     } else {
74         startTimer();
75         displayQuestion();
76     }
77 }

```

```

79 // 6. Timer
80 function startTimer() {
81     timeLeft = 10;
82     document.getElementById("time").textContent = timeLeft;
83
84     timer = setInterval(() => {
85         timeLeft--;
86         document.getElementById("time").textContent = timeLeft;
87
88         if (timeLeft <= 0) {
89             clearInterval(timer);
90             nextQuestion();
91         }
92     }, 1000);
93 }
94
95 // 7. Start Quiz
96 function startQuiz() {
97     shuffleQuestions();
98     currentIndex = 0;
99     score = 0;
100
101     document.getElementById("quiz-box").classList.remove("hidden");
102     document.getElementById("result-box").classList.add("hidden");
103
104     startTimer();
105     displayQuestion();
106 }

```

```

108 function showScore() {
109     document.getElementById("quiz-box").classList.add("hidden");
110     document.getElementById("result-box").classList.remove("hidden");
111
112     document.getElementById("score").textContent =
113         `You scored ${score} out of ${questions.length}!`;
114 }
115
116 // Start automatically
117 startQuiz();
118
119 document.getElementById("next-btn").onclick = nextQuestion;
120

```

