FACULTY OF COMPUTER SCIENCE AND MATHEMATICS

CSF3133 - Web Design

SEMESTER I SESSION 25/26

BACHELOR OF COMPUTER SCIENCE (SOFTWARE

ENGINEERING) WITH HONOURS
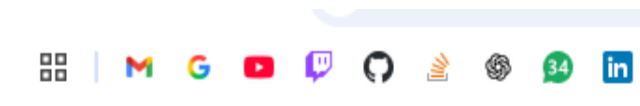
Lab Module 5

Submitted To:

Assoc. Prof. Ts. Dr. Wan Nural Jawahir

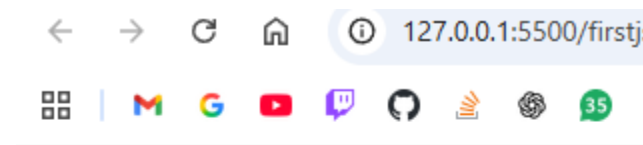| NAME	MATRIC NO.
AFIQ FAHMI BIN AZMY	S76555

Activity

What can JavaScript do ?

JavaScript can change content
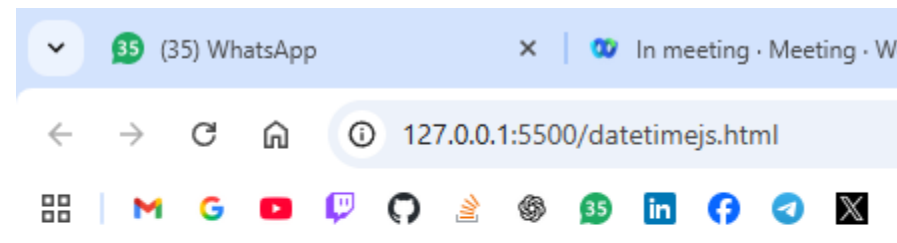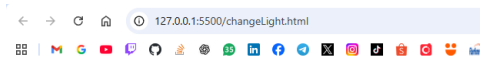
click me!

What can JavaScript do ?

Hello JavaScript

click me!

Click me to display date and time

Wed Dec 03 2025 14:04:14 GMT+0800 (Malaysia Time)

What can JavaScript Do?

JavaScript can change HTML attribute values.

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

Turn On the Light · Turn Off

Click the button to see the messages

Click me

127.0.0.1:5500 says

Hello UMT students

OK

Right click disbale

Try right-clicking anywhere on this page

127.0.0.1:5500 says

Right Click is disbale on this page

OK

127.0.0.1:5500/multiTable.html
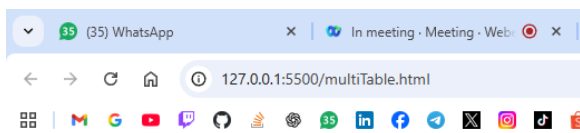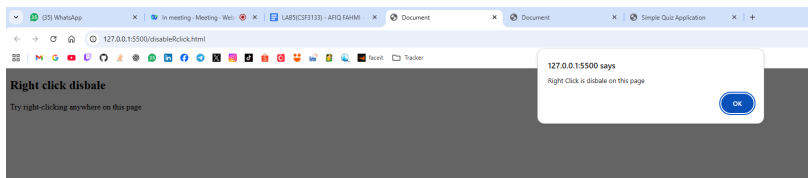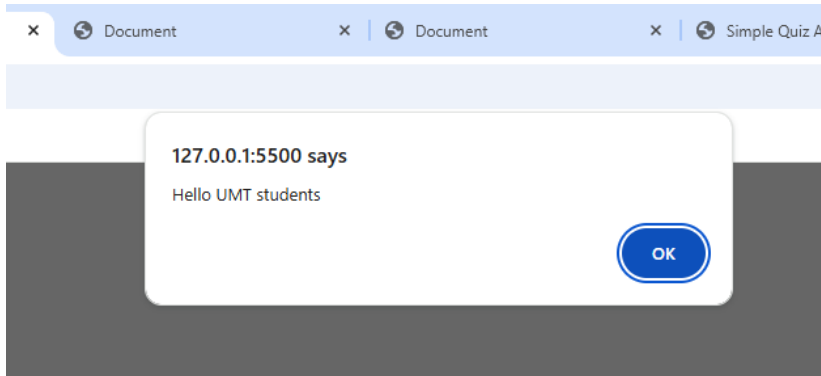
Multiplication table generator

Enter a number : 5

Enter number for columns : 5

Generate 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

Form Validation Example

First Name:

This page says

First Name must be filled out.

OK

Numer

Enter You

Enter a nu

Submit

This page says

Age field cannot be empty.

OK

Numer

Enter You

a

Submit

This page says

Please enter a valid numeric value.

OK

Numer

Enter You

-2

Submit

This page says

Please enter a number between 1 and 120.

OK

Guess

Try to gues

Start Gar

This page says

Wrong guess. The correct number was 3.

OK

Lab Exercise 6
index.html

```html
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Quiz Application</title>
    <link rel="stylesheet" href="style.css">
</head>

<body>
    <header>
        <h1>JavaScript Quiz Application</h1>
        <p>Test your knowledge with this quick quiz!</p>
    </header>

    <section id="quiz-container">

        <div id="timer">Time Left: <span id="time">10</span>s</div>

        <div id="question-section">
            <h2 id="question-text">Question will appear here</h2>

            <div id="options">
                <!-- -->
            </div>
        </div>

        <div id="feedback"></div>

        <button id="next-btn">Next Question</button>
    </section>

    <footer>
        <p>Your Score: <span id="score">0</span></p>
        <p>Quiz Completed</p>
    </footer>

    <script src="script.js"></script>
```

```html
</body>

</html>
```

style.css

```css
body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 0;
    background: #f4f4f4;
    color: #333;
}

header {
    background: #0077cc;
    color: white;
    padding: 20px;
    text-align: center;
}

header h1 {
    margin: 0 0 5px 0;
}

#quiz-container {
    max-width: 600px;
    margin: 30px auto;
    background: white;
    padding: 20px;
    border-radius: 10px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}

#timer {
    text-align: right;
    font-size: 18px;
    font-weight: bold;
    margin-bottom: 20px;
}
```

```css
#question-text {
    font-size: 22px;
    margin-bottom: 20px;
}

#options {
    display: flex;
    flex-direction: column;
    gap: 10px;
}

.option-btn {
    padding: 12px;
    background: #e9e9e9;
    border: none;
    border-radius: 8px;
    font-size: 16px;
    cursor: pointer;
    transition: 0.2s;
}

.option-btn:hover {
    background: #d3d3d3;
}

#feedback {
    margin-top: 15px;
    font-weight: bold;
    min-height: 20px;
}

#next-btn {
    margin-top: 20px;
    padding: 12px 20px;
    width: 100%;
    font-size: 18px;
    background: #0077cc;
    color: white;
    border: none;
    cursor: pointer;
    border-radius: 8px;
```

```css
    transition: 0.2s;
}

#next-btn:hover {
    background: #005fa3;
}

footer {
    text-align: center;
    margin: 40px 0;
    color: #555;
}
```

script.js

```js
const questions = [
    {
        question: "What does HTML stand for?",
        options: ["Hyperlinks Text Markup Language", "Hyper Text Markup Language",
"High Tech Modern Language"],
        answer: 1
    },
    {
        question: "Which language is used for styling web pages?",
        options: ["JavaScript", "CSS", "Python"],
        answer: 1
    },
    {
        question: "Which tag is used to display JavaScript?",
        options: ["<javascript>", "<js>", "<script>"],
        answer: 2
    },
    {
        question: "What does CSS stand for?",
        options: ["Cascading Style Sheets", "Creative Style System", "Computer
Styling Syntax"],
        answer: 0
    },
    {
        question: "Which part of a website handles interactivity?",
        options: ["HTML", "CSS", "JavaScript"],
        answer: 2
```

```javascript
    }
];

let shuffledQuestions;
let currentIndex = 0;
let score = 0;
let timer;
let timeLeft = 10;

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

function startTimer() {
    timeLeft = 10;
    document.getElementById("time").textContent = timeLeft;

    timer = setInterval(() => {
        timeLeft--;
        document.getElementById("time").textContent = timeLeft;

        if (timeLeft <= 0) {
            clearInterval(timer);
            feedback("Time's up!", "red");
        }
    }, 1000);
}

function displayQuestion() {
    const q = shuffledQuestions[currentIndex];

    document.getElementById("question-text").textContent = q.question;
    const optionsDiv = document.getElementById("options");
    optionsDiv.innerHTML = "";

    q.options.forEach((opt, i) => {
        const btn = document.createElement("button");
        btn.className = "option-btn";
        btn.textContent = opt;
        btn.onclick = () => checkAnswer(i);
        optionsDiv.appendChild(btn);
```

```javascript
    });
}

function checkAnswer(selected) {
    clearInterval(timer);

    const correct = shuffledQuestions[currentIndex].answer;

    if (selected === correct) {
        score++;
        feedback("Correct!", "green");
    } else {
        feedback("Incorrect!", "red");
    }

    document.getElementById("score").textContent = score;
}

function feedback(msg, color) {
    const fb = document.getElementById("feedback");
    fb.textContent = msg;
    fb.style.color = color;
}

function nextQuestion() {
    currentIndex++;

    if (currentIndex >= shuffledQuestions.length) {
        endQuiz();
        return;
    }

    feedback("");
    displayQuestion();
    startTimer();
}

function endQuiz() {
    document.getElementById("question-section").innerHTML =
        `<h2>Quiz Completed!</h2><p>Your final score: ${score}</p>`;
    document.getElementById("feedback").textContent = "";
```

```javascript
    document.getElementById("timer").style.display = "none";
    document.getElementById("next-btn").style.display = "none";
}


function startQuiz() {
    shuffleQuestions();
    displayQuestion();
    startTimer();
}


startQuiz();

document.getElementById("next-btn").addEventListener("click", nextQuestion);
```