<!DOCTYPE html>

<html>

<head>

    <title>Car Simulation Project</title>

    <style>

        /\* Basic styling for the body \*/

        body {

            text-align: center;

            font-family: Arial, sans-serif;

            background-color: #eaf2f8;

            margin: 0;

            padding: 0;

            transition: background-color 0.3s ease;

        }

        /\* Header styling \*/

        h1 {

            background: linear-gradient(to right, #ff7e50, #ff6a00);

            color: white;

            padding: 20px;

            border-radius: 10px;

            box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);

            margin: 20px;

            text-shadow: 1px 1px 2px rgba(0, 0, 0, 0.5);

        }

        /\* Subheading styling \*/

        h2 {

            color: #007bff;

        }

        /\* Main car display styling \*/

        .car {

            display: flex;

            justify-content: center;

            align-items: center;

            flex-direction: column;

            margin-top: 30px;

            animation: fadeIn 1s ease-in-out;

        }

        /\* Car body styling \*/

        .car-body {

            width: 270px;

            height: 130px;

            background: linear-gradient(to right, #d9534f, #c9302c);

            border-radius: 20px;

            position: relative;

            box-shadow: 0 4px 20px rgba(0, 0, 0, 0.3);

        }

        /\* Engine style \*/

        .engine {

            width: 60px;

            height: 40px;

            background: #6c757d;

            position: absolute;

            top: -25px;

            left: 50%;

            transform: translateX(-50%);

            opacity: 0.5;

            transition: opacity 0.5s ease-in-out;

            border-radius: 5px;

        }

        /\* Wheel styling \*/

        .wheel {

            width: 60px;

            height: 60px;

            background: black;

            border-radius: 50%;

            position: absolute;

            bottom: -30px;

            box-shadow: inset 0 0 10px rgba(255, 255, 255, 0.3);

            overflow: hidden;

            display: flex;

            justify-content: center;

            align-items: center;

        }

        .wheel-left {

            left: 20px;

        }

        .wheel-right {

            right: 20px;

        }

        /\* Spokes of the wheels \*/

        .spoke {

            width: 4px;

            height: 22px;

            background: white;

            position: absolute;

        }

        /\* Button styling \*/

        button {

            margin-top: 20px;

            padding: 10px 30px;

            font-size: 16px;

            cursor: pointer;

            border: none;

            background: #007bff;

            color: white;

            border-radius: 5px;

            transition: background 0.3s;

            box-shadow: 0 3px 5px rgba(0, 0, 0, 0.2);

        }

        /\* Button hover effect \*/

        button:hover {

            background: #0056b3;

        }

        /\* Info box styling \*/

        .info {

            margin-top: 40px;

            padding: 20px;

            background: white;

            border-radius: 10px;

            box-shadow: 0 4px 10px rgba(0, 0, 0, 0.2);

            display: none;

        }

        /\* Info container styling \*/

        .info-container {

            display: flex;

            flex-direction: column;

            align-items: center;

            justify-content: center;

            margin-top: 300px;

        }

        /\* Individual info items styling \*/

        .info-item {

            display: flex;

            align-items: center;

            margin: 10px 0;

            max-width: 800px;

            background-color: #f9f9f9;

            border-radius: 8px;

            padding: 10px;

            box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);

        }

        .info-item img {

            width: 100px;

            height: 100px;

            margin-right: 15px;

            border-radius: 8px;

            box-shadow: 0 1px 5px rgba(0, 0, 0, 0.2);

        }

        /\* Sidebar styling \*/

        .sidebar {

            width: 200px;

            position: fixed;

            top: 0;

            left: 0;

            height: 100%;

            background-color: #333;

            color: white;

            padding: 20px;

            display: flex;

            flex-direction: column;

        }

        /\* Sidebar link styling \*/

        .sidebar a {

            color: white;

            text-decoration: none;

            margin: 10px 0;

            font-weight: bold;

        }

        /\* Sections display styling \*/

        .quiz-container,

        .gamification-container,

        .augmented-container,

        .ai-container,

        .feedback-container {

            display: none;

            margin: 20px;

            background: #f1f1f1;

            padding: 20px;

            border-radius: 10px;

            box-shadow: 0 4px 10px rgba(0, 0, 0, 0.2);

            text-align: left;

        }

        /\* Result styling for quiz \*/

        .result {

            margin-top: 20px;

            padding: 15px;

            background: #ffffff;

            border-radius: 10px;

            box-shadow: 0 3px 6px rgba(0, 0, 0, 0.2);

            display: none;

        }

        /\* Dark mode styling \*/

        .dark-mode {

            background-color: #121212;

            color: rgb(234, 73, 29);

        }

        @keyframes fadeIn {

            from {

                opacity: 0;

            }

            to {

                opacity: 1;

            }

        }

        /\* Styles for the 3D Parts Visualization \*/

        .part-3d-container {

            display: flex;

            justify-content: center;

            flex-wrap: wrap;

            margin-top: 300px;

            transform: translateX(40px);

        }

        .part-3d {

            margin: 10px;

            width: 300px;

            height: 200px;

            border: 1px solid #ccc;

            border-radius: 10px;

            box-shadow: 0 3px 6px rgba(0, 0, 0, 0.2);

            background: #fff;

        }

        .part-container {

            text-align: center;

            padding: 10px;

        }

        /\* Styles for Badge \*/

        .badge {

            margin: 5px;

            padding: 10px 20px;

            background-color: #92c9ff;

            border-radius: 5px;

            font-weight: bold;

        }

        /\* Styles for Feedback \*/

        .rating {

            display: flex;

            justify-content: center;

            margin: 10px 0;

        }

        .star {

            font-size: 30px;

            color: gray;

            cursor: pointer;

        }

        .star.checked {

            color: gold;

        }

    </style>

</head>

<body>

    <div class="sidebar" id="sidebar">

        <h2>Car Parts</h2>

        <a href="#homepage" onclick="showSection('homepage')">Homepage</a>

        <a href="#simulation-page" onclick="showSection('simulation-page')">Car Simulation</a>

        <a href="#info-page" onclick="showSection('info-page')">Car Parts Information</a>

        <a href="#quiz-page" onclick="showSection('quiz-page')">MCQ Quiz</a>

        <a href="#gamification-page" onclick="showSection('gamification-page')">Gamification</a>

        <a href="#augmented-vr-page" onclick="showSection('augmented-vr-page')">AR/VR Features</a>

        <a href="#ai-page" onclick="showSection('ai-page')">AI-Powered Features</a>

        <a href="#feedback-page" onclick="showSection('feedback-page')">Feedback & Suggestions</a>

        <button onclick="toggleDarkMode()">Toggle Dark Mode</button>

    </div>

    <!-- Main content area -->

    <div id="main-content" style="margin-left: 220px;">

        <h1 id="homepage">Car Simulation Project</h1>

        <div class="home-content" id="homepage-content" style="display: block;">

            <h2>Welcome to the Car Simulation Project!</h2>

            <p>This project aims to provide an interactive experience to explore and understand various car parts and their functionalities. Engage with 3D models, animations, and quizzes to test your knowledge!</p>

            <img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTPVqB-WRqgfdwnpOqxKEJeVJtzMhDQNJ\_8Hg&s" alt="Car Simulation Image">

            <p>Click on the navigation links on the left to start exploring the simulation, learn about car parts, or test your knowledge with our exciting quiz!</p>

        </div>

        <!-- Car simulation section -->

        <div class="car" id="simulation-page" style="display: none;">

            <div class="car-body">

                <div class="engine" id="engine"></div>

                <div class="wheel wheel-left" id="wheel-left" data-rotation="0">

                    <div class="spoke" style="transform: rotate(0deg);"></div>

                    <div class="spoke" style="transform: rotate(90deg);"></div>

                    <div class="spoke" style="transform: rotate(180deg);"></div>

                    <div class="spoke" style="transform: rotate(270deg);"></div>

                </div>

                <div class="wheel wheel-right" id="wheel-right" data-rotation="0">

                    <div class="spoke" style="transform: rotate(0deg);"></div>

                    <div class="spoke" style="transform: rotate(90deg);"></div>

                    <div class="spoke" style="transform: rotate(180deg);"></div>

                    <div class="spoke" style="transform: rotate(270deg);"></div>

                </div>

            </div>

            <button onclick="startSimulation()">Start Engine</button>

            <button onclick="stopSimulation()">Stop Engine</button>

        </div>

        <!-- Car parts information section -->

        <div class="info" id="info-page" style="display: none;">

            <h2>Understanding How a Car Operates</h2>

            <div class="part-3d">

                <div class="part-container">

                    <h3>Fuel System</h3>

                    <iframe src="https://www.shutterstock.com/shutterstock/photos/2411498777/display\_1500/stock-vector-car-electric-vehicle-technology-digital-circuit-on-blue-background-ev-car-concept-automobile-2411498777.jpg" width="500" height="400"></iframe>

                </div>

            </div>

            <div class="part-3d-container">

                <div class="part-3d">

                    <div class="part-container">

                        <h3>Transmission</h3>

                        <iframe src="https://www.shutterstock.com/shutterstock/photos/554905687/display\_1500/stock-photo-city-car-structure-overview-during-driving-k-554905687.jpg" width="500" height="400"></iframe>

                    </div>

                </div>

            </div>

            <div class="part-3d">

                <div class="part-container">

                    <h3>Wheels and Tires</h3>

                    <iframe src="https://www.shutterstock.com/shutterstock/photos/1903492072/display\_1500/stock-photo-car-mechanic-working-in-garage-and-changing-wheel-alloy-tire-repair-or-maintenance-auto-service-1903492072.jpg" width="500" height="400"></iframe>

                </div>

            </div>

            <div class="part-3d-container">

                <div class="part-3d">

                    <div class="part-container">

                        <h3>Braking System</h3>

                        <iframe src="https://www.shutterstock.com/shutterstock/photos/1063985435/display\_1500/stock-photo-car-brake-disc-without-wheels-closeup-in-a-car-workshop-1063985435.jpg" width="500" height="400"></iframe>

                    </div>

                </div>

            </div>

            <div class="part-3d">

                <div class="part-container">

                    <h3>Steering System</h3>

                    <iframe src="https://www.shutterstock.com/shutterstock/photos/485025688/display\_1500/stock-photo-woman-holding-the-steering-wheel-driving-a-car-on-a-rural-road-through-the-mountains-485025688.jpg" width="500" height="400"></iframe>

                </div>

            </div>

            <div class="part-3d-container">

                <div class="part-3d">

                    <div class="part-container">

                        <h3>Exhaust System</h3>

                        <iframe src="https://www.shutterstock.com/shutterstock/photos/2160550589/display\_1500/stock-photo-sportive-mufflers-oval-or-round-car-exhaust-tailpipe-chromed-made-of-stainless-steel-on-powerful-2160550589.jpg" width="500" height="400"></iframe>

                    </div>

                </div>

            </div>

            <div class="part-3d">

                <div class="part-container">

                    <h3>Cooling System</h3>

                    <iframe src="https://www.shutterstock.com/shutterstock/photos/2029943831/display\_1500/stock-photo-close-up-of-car-radiator-pressure-cap-on-the-engine-2029943831.jpg" width="500" height="400"></iframe>

                </div>

            </div>

            <div class="info-container">

                <div class="info-item">

                    <div>

                        <h3>Engine</h3>

                        <p>The car engine is the heart of a vehicle, converting fuel into mechanical energy to generate motion. It operates on the internal combustion process, where fuel and air mix inside the engine cylinders and ignite through spark plugs (in gasoline engines) or compression (in diesel engines). This controlled explosion forces pistons to move up and down, converting linear motion into rotational motion via the crankshaft. The power is then transmitted to the transmission system, which adjusts speed and torque before delivering it to the wheels. Modern engines optimize fuel efficiency and performance using advanced technologies like \*\*turbochargers, fuel injection systems, and electronic control units (ECUs).</p>

                    </div>

                </div>

                <div class="info-item">

                    <div>

                        <h3>Wheels</h3>

                        <p>The wheels of a car play a crucial role in movement, stability, and overall performance. They provide traction by maintaining contact with the road, allowing the vehicle to accelerate, steer, and brake efficiently. Made up of a rim and a tire, wheels work in coordination with the suspension system to absorb shocks and ensure a smooth ride. The rotation of the wheels is powered by the engine through the transmission and axle, adjusting speed and torque as needed. Different types of wheels and tires are designed for various terrains and driving conditions, influencing grip, handling, and fuel efficiency.</p>

                    </div>

                </div>

                <div class="info-item">

                    <div>

                        <h3>Transmission</h3>

                        <p>The transmission in a car is responsible for transferring power from the engine to the wheels while adjusting speed and torque for smooth operation. It allows the vehicle to shift between different gears, ensuring efficient power delivery based on driving conditions. In manual transmissions, the driver operates a clutch and gear shifter to change gears, while automatic transmissions use sensors and hydraulic systems to shift gears seamlessly. Continuously variable transmissions (CVTs) provide a smooth, gearless experience by adjusting the power ratio dynamically. A well-functioning transmission enhances fuel efficiency, acceleration, and overall driving performance.</p>

                    </div>

                </div>

                <div class="info-item">

                    <div>

                        <h3>Brakes</h3>

                        <p>The brakes in a car are essential for controlling speed and ensuring safety by allowing the vehicle to slow down or stop when needed. Most cars use a hydraulic braking system, where pressing the brake pedal generates pressure that forces brake fluid to apply force on the brake pads or shoes. In disc brakes, the pads clamp onto a rotating disc, creating friction to reduce speed, while drum brakes use brake shoes pressing against the inside of a drum. Modern vehicles often include advanced braking technologies like anti-lock braking systems (ABS) to prevent wheel lockup and improve stability during sudden stops.</p>

                    </div>

                </div>

                <h3>Car Parts Information Video</h3>

                <video width="720" height="480" controls>

                <source src="car\_parts\_information.mp4" type="video/mp4">

                    Your browser does not support the video tag.

                </video>

            </div>

        </div>

        <!-- Quiz section -->

        <div class="quiz-container" id="quiz-page" style="display: none;">

            <h2>MCQ Quiz - Test Your Knowledge!</h2>

            <form id="quiz-form">

                <div class="quiz-question">

                    <p>1. What is the primary function of a car engine?</p>

                    <label><input type="radio" name="q1" value="a"> Convert fuel into motion</label><br>

                    <label><input type="radio" name="q1" value="b"> Create sound</label><br>

                    <label><input type="radio" name="q1" value="c"> Store energy</label><br>

                    <label><input type="radio" name="q1" value="d"> Pump air</label>

                </div>

                <div class="quiz-question">

                    <p>2. What do you call the system that helps slow down or stop a car?</p>

                    <label><input type="radio" name="q2" value="a"> Steering</label><br>

                    <label><input type="radio" name="q2" value="b"> Transmission</label><br>

                    <label><input type="radio" name="q2" value="c"> Brake</label><br>

                    <label><input type="radio" name="q2" value="d"> Suspension</label>

                </div>

                <div class="quiz-question">

                    <p>3. What part of the car provides traction?</p>

                    <label><input type="radio" name="q3" value="a"> Tires</label><br>

                    <label><input type="radio" name="q3" value="b"> Brakes</label><br>

                    <label><input type="radio" name="q3" value="c"> Engine</label><br>

                    <label><input type="radio" name="q3" value="d"> Chassis</label>

                </div>

                <div class="quiz-question">

                    <p>4. What is the purpose of the transmission system?</p>

                    <label><input type="radio" name="q4" value="a"> Steering the car</label><br>

                    <label><input type="radio" name="q4" value="b"> Distributing power to the wheels</label><br>

                    <label><input type="radio" name="q4" value="c"> Stopping the car</label><br>

                    <label><input type="radio" name="q4" value="d"> Providing air-conditioning</label>

                </div>

                <div class="quiz-question">

                    <p>5. Which system controls the car’s direction?</p>

                    <label><input type="radio" name="q5" value="a"> Brake system</label><br>

                    <label><input type="radio" name="q5" value="b"> Steering system</label><br>

                    <label><input type="radio" name="q5" value="c"> Exhaust system</label><br>

                    <label><input type="radio" name="q5" value="d"> Ignition system</label>

                </div>

                <div class="quiz-question">

                    <p>6. What do shocks and struts do?</p>

                    <label><input type="radio" name="q6" value="a"> Provide traction</label><br>

                    <label><input type="radio" name="q6" value="b"> Absorb road bumps</label><br>

                    <label><input type="radio" name="q6" value="c"> Store energy</label><br>

                    <label><input type="radio" name="q6" value="d"> Create propulsion</label>

                </div>

                <div class="quiz-question">

                    <p>7. What does the fuel pump do?</p>

                    <label><input type="radio" name="q7" value="a"> Pumps brake fluid</label><br>

                    <label><input type="radio" name="q7" value="b"> Delivers fuel to the engine</label><br>

                    <label><input type="radio" name="q7" value="c"> Cool the engine</label><br>

                    <label><input type="radio" name="q7" value="d"> Increase speed</label>

                </div>

                <div class="quiz-question">

                    <p>8. Where are the vehicle’s controls normally located?</p>

                    <label><input type="radio" name="q8" value="a"> Dashboard</label><br>

                    <label><input type="radio" name="q8" value="b"> Trunk</label><br>

                    <label><input type="radio" name="q8" value="c"> Engine compartment</label><br>

                    <label><input type="radio" name="q8" value="d"> Spare tire</label>

                </div>

                <div class="quiz-question">

                    <p>9. What is a catalytic converter used for?</p>

                    <label><input type="radio" name="q9" value="a"> Increase fuel economy</label><br>

                    <label><input type="radio" name="q9" value="b"> Reduce harmful emissions</label><br>

                    <label><input type="radio" name="q9" value="c"> Cool the engine</label><br>

                    <label><input type="radio" name="q9" value="d"> Oil filtering</label>

                </div>

                <div class="quiz-question">

                    <p>10. What does the odometer measure?</p>

                    <label><input type="radio" name="q10" value="a"> Battery voltage</label><br>

                    <label><input type="radio" name="q10" value="b"> Fuel level</label><br>

                    <label><input type="radio" name="q10" value="c"> Distance traveled</label><br>

                    <label><input type="radio" name="q10" value="d"> Engine temperature</label>

                </div>

                <div class="quiz-question">

                    <p>11. What is the purpose of engine oil?</p>

                    <label><input type="radio" name="q11" value="a"> Clean the car</label><br>

                    <label><input type="radio" name="q11" value="b"> Lubricate moving parts</label><br>

                    <label><input type="radio" name="q11" value="c"> Power the electric system</label><br>

                    <label><input type="radio" name="q11" value="d"> Absorb vibrations</label>

                </div>

                <div class="quiz-question">

                    <p>12. What is the primary purpose of the air filter?</p>

                    <label><input type="radio" name="q12" value="a"> Improve engine performance</label><br>

                    <label><input type="radio" name="q12" value="b"> Reduce noise</label><br>

                    <label><input type="radio" name="q12" value="c"> Prevent dirt and debris entering the engine</label><br>

                    <label><input type="radio" name="q12" value="d"> Cool the engine</label>

                </div>

                <div class="quiz-question">

                    <p>13. What maintains a consistent temperature in the engine?</p>

                    <label><input type="radio" name="q13" value="a"> Coolant</label><br>

                    <label><input type="radio" name="q13" value="b"> Oil</label><br>

                    <label><input type="radio" name="q13" value="c"> Gasoline</label><br>

                    <label><input type="radio" name="q13" value="d"> Air</label>

                </div>

                <div class="quiz-question">

                    <p>14. What is a benefit of an ABS system?</p>

                    <label><input type="radio" name="q14" value="a"> Better control during braking</label><br>

                    <label><input type="radio" name="q14" value="b"> Improved fuel efficiency</label><br>

                    <label><input type="radio" name="q14" value="c"> Longer tire life</label><br>

                    <label><input type="radio" name="q14" value="d"> Quieter ride</label>

                </div>

                <div class="quiz-question">

                    <p>15. What does it mean if your dashboard has a check engine light?</p>

                    <label><input type="radio" name="q15" value="a"> The engine is working perfectly</label><br>

                    <label><input type="radio" name="q15" value="b"> There is an issue with the engine</label><br>

                    <label><input type="radio" name="q15" value="c"> You need to refill fuel</label><br>

                    <label><input type="radio" name="q15" value="d"> Your brakes need checking</label>

                </div>

                <button type="button" onclick="submitQuiz()">Submit</button>

            </form>

            <div id="result" class="result"></div>

        </div>

        <!-- Gamification section -->

        <div class="gamification-container" id="gamification-page" style="display: none;">

            <h2>Gamification Elements</h2>

            <p>Explore the fun aspects of our car simulation project!</p>

            <h3>Achievements & Badges</h3>

            <div class="badge">🏅 Engine Expert</div>

            <p>View all engine components to earn this badge!</p>

            <h3>Interactive Challenges</h3>

            <p><strong>Find the Fault:</strong> Identify the faulty part in a non-starting car!</p>

            <h3>Time-Based Assembly Game</h3>

            <p>Drag and drop car parts to assemble a working engine or wheel system within a time limit!</p>

            <button onclick="alert('Challenge will be available soon!')">Start Challenge</button>

        </div>

        <!-- Augmented and VR features section -->

        <div class="augmented-container" id="augmented-vr-page" style="display: none;">

            <h2>AR/VR Features</h2>

            <p>Experience our car simulation through augmented and virtual reality!</p>

            <h3>AR View of Car Parts</h3>

            <p>Scan a QR code to see a 3D model of the engine or any other part in your own environment.</p>

            <img src="https://example.com/ar\_sample.jpg" alt="AR Sample" class="ar-vr-image">

            <h3>VR Mode for Car Exploration</h3>

            <p>Explore our 360-degree VR environment to learn about different parts of the car!</p>

            <button onclick="startVRMode()">Enter VR Mode</button>

        </div>

        <!-- AI features section -->

        <div class="ai-container" id="ai-page" style="display: none;">

            <h2>AI-Powered Features</h2>

            <p>Engage with our intelligent assistant and personalized learning paths!</p>

            <h3>AI Assistant for Car Knowledge</h3>

            <p>Type your question in the box below:</p>

            <input type="text" id="ai-question" placeholder="Ask a question like 'How does a turbocharger work?'">

            <button onclick="askAI()">Ask the AI</button>

            <button id="clear-btn" onclick="clearChat()">Clear History</button>

            <div id="chat-history">

                <h3>Chat History</h3>

                <div id="chat-log"></div>

            </div>

            <div id="ai-response" class="result" style="display: none;"></div>

            <h3>Personalized Learning Path</h3>

            <p>Track your exploration and receive recommendations for the next car part to learn about.</p>

        </div>

        <!-- Feedback section -->

        <div class="feedback-container" id="feedback-page" style="display: none;">

            <h2>Feedback & Suggestions</h2>

            <p>Your feedback is valuable to us! Please rate our project out of 5 stars and leave your suggestions below.</p>

            <div class="rating">

                <span class="star" data-value="1">★</span>

                <span class="star" data-value="2">★</span>

                <span class="star" data-value="3">★</span>

                <span class="star" data-value="4">★</span>

                <span class="star" data-value="5">★</span>

            </div>

            <textarea id="feedbackText" rows="4" cols="50" placeholder="Enter your feedback here..."></textarea><br>

            <button onclick="submitFeedback()">Submit Feedback</button>

            <div id="feedbackResult" style="margin-top: 20px;"></div>

        </div>

    </div>

    <script>

        let rotationInterval; // Variable to hold the interval for wheel rotation

        // Function to start the car engine and rotate the wheels

        function startSimulation() {

            let wheels = document.querySelectorAll(".wheel");

            let engine = document.getElementById("engine");

            // Start the engine by increasing its opacity

            engine.style.opacity = "1";

            // Rotate wheels

            rotationInterval = setInterval(() => {

                wheels.forEach(wheel => {

                    let currentRotation = parseInt(wheel.getAttribute('data-rotation') || 0);

                    currentRotation += 10;  // Rotate by 10 degrees

                    wheel.style.transform = `rotate(${currentRotation}deg)`;

                    wheel.setAttribute('data-rotation', currentRotation);

                });

            }, 100); // Adjust the interval to speed up or slow down the rotation

        }

        // Function to stop the car engine and wheels

        function stopSimulation() {

            clearInterval(rotationInterval);

            document.getElementById("engine").style.opacity = "0.5"; // Dim the engine when stopped

        }

        // Function to toggle dark mode

        function toggleDarkMode() {

            document.body.classList.toggle("dark-mode");

            const sidebar = document.getElementById("sidebar");

            sidebar.style.backgroundColor = sidebar.style.backgroundColor === "black" ? "#333" : "black";

        }

        // Function to show the selected section by hiding others

        function showSection(section) {

            const sections = ["homepage", "simulation-page", "info-page", "quiz-page", "gamification-page", "augmented-vr-page", "ai-page", "feedback-page"];

            sections.forEach(id => {

                document.getElementById(id).style.display = (id === section) ? "block" : "none";

            });

            document.getElementById('result').style.display = 'none'; // Reset quiz result display

            document.getElementById('ai-response').style.display = 'none'; // Reset AI response display

            document.getElementById('feedbackResult').innerHTML = ''; // Reset feedback result display

        }

        // Function to submit the quiz and calculate score

        function submitQuiz() {

            const answers = {

                q1: 'a', q2: 'c', q3: 'a', q4: 'b', q5: 'b',

                q6: 'b', q7: 'b', q8: 'a', q9: 'b', q10: 'c',

                q11: 'b', q12: 'c', q13: 'a', q14: 'a', q15: 'b',

            };

            let score = 0;

            let totalQuestions = Object.keys(answers).length;

            let resultsHtml = ""; // Initialize as empty to avoid duplicate results

            Object.keys(answers).forEach((key) => {

                const selectedAnswer = document.querySelector(`input[name="${key}"]:checked`);

                if (selectedAnswer) {

                    if (selectedAnswer.value === answers[key]) {

                        score++;

                    } else {

                        resultsHtml += `<p>Question ${key.replace('q', '')}: Correct answer is "${answers[key]}". Your answer: "${selectedAnswer.value}"</p>`;

                    }

                } else {

                    resultsHtml += `<p>Question ${key.replace('q', '')}: You did not answer. Correct answer is "${answers[key]}".</p>`;

                    }

            });

            // Only add the final result once

            resultsHtml = `<h3>Results:</h3><p>You scored ${score} out of ${totalQuestions}!</p>` + resultsHtml;

            const resultDiv = document.getElementById('result');

            resultDiv.innerHTML = resultsHtml;

            resultDiv.style.display = 'block';

        }

        // Placeholder function to start VR Mode

        function startVRMode() {

            alert('VR Mode is now starting up... (placeholder)'); // Placeholder alert for demonstration

        }

        // Function to ask AI questions

        async function askAI() {

            const question = document.getElementById('ai-question').value;

            const chatLog = document.getElementById('chat-log');

            if (!question) {

                alert("Please enter a question!");

                return;

            }

            // Display user's question in chat history

            chatLog.innerHTML += `<div class="chat-message user-msg"><strong>You:</strong> ${question}</div>`;

            // Clear input field

            document.getElementById('ai-question').value = "";

            // Show loading message

            chatLog.innerHTML += `<div class="chat-message ai-msg">AI: Thinking...</div>`;

            const data = { model: "tinyllama", prompt: question, stream: false };

            try {

                const response = await fetch("http://localhost:11434/api/generate", {

                    method: "POST",

                    headers: { "Content-Type": "application/json" },

                    body: JSON.stringify(data)

                });

                const result = await response.json();

                // Display AI's response

                chatLog.innerHTML += `<div class="chat-message ai-msg"><strong>AI:</strong> ${result.response}</div>`;

            } catch (error) {

                chatLog.innerHTML += `<div class="chat-message ai-msg">AI: Error connecting to Ollama.</div>`;

                console.error(error);

            }

        }

        // Function to clear chat history

        function clearChat() {

            document.getElementById('chat-log').innerHTML = "";

        }

        // Feedback functionality

        let selectedRating = 0; // Variable to hold selected star rating

        // Event listeners for star rating selection

        document.querySelectorAll('.star').forEach(star => {

            star.addEventListener('click', () => {

                selectedRating = star.getAttribute('data-value'); // Get star rating value

                updateStarRating(); // Update visual star rating

            });

        });

        // Function to update the visual representation of the star rating

        function updateStarRating() {

            document.querySelectorAll('.star').forEach(star => {

                star.classList.remove('checked'); // Remove checked class from all stars

                // Add checked class to stars up to the selected rating

                if (star.getAttribute('data-value') <= selectedRating) {

                    star.classList.add('checked');

                }

            });

        }

        // Function to submit feedback

        function submitFeedback() {

            const feedbackText = document.getElementById('feedbackText').value;

            const feedbackResult = document.getElementById('feedbackResult');

            // Show thank you message with rating and feedback

            feedbackResult.innerHTML = `<p>Thank you for your feedback! You rated us ${selectedRating} out of 5 stars.</p>`;

            if (feedbackText) {

                feedbackResult.innerHTML += `<p>Your suggestion: ${feedbackText}</p>`;

            }

            // Clear the feedback form

            document.getElementById('feedbackText').value = ''; // Reset feedback text area

            selectedRating = 0; // Reset the selected rating

            updateStarRating(); // Reset the star rating visuals

        }

    </script>

</body>

</html>