MERN STACK

WEEK 1_MINI PROJECT

QUIZ APPLICATION USING HTML , CSS & JS

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Html code :

```html
<!DOCTYPE html>
<html>
<head>
  <title>JavaScript Quiz App</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <div class="container">
    <h1>Quiz App</h1>
    <div id="quiz"></div>
    <div id="result" class="result"></div>
    <button id="submit" class="button">Submit</button>
    <button id="retry" class="button hide">Retry</button>
    <button id="showAnswer" class="button hide">Show Answer</button>
  </div>
  <script src="script.js"></script>
</body>
</html>
```

CSS Code :

```css
@import url('https://fonts.googleapis.com/css2?family=Poppins:wght@400;500;700&display=swap');

body {
  font-family: 'Poppins', sans-serif;
  background: #b9b3a9;
  display: flex;
  justify-content: center;
}

.container {
  width: 450px;
  padding: 20px;
  margin-top: 80px;
  background-color: #fff;
  box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
  border-radius: 20px;
}

h1 {
  text-align: center;
}.

question {
  font-weight: bold;
  margin-bottom: 10px;
}

.options {
  margin-bottom: 20px;
}

.option {
  display: block;
```

```css
    margin-bottom: 10px;
  }
.button {
  display: inline-block;
  padding: 10px 20px;
  background-color: #428bca;
  color: #fff;
  border: none;
  cursor: pointer;
  font-size: 16px;
  border-radius: 4px;
  transition: background-color 0.3s;
  margin-right: 10px;
}
.button:hover {
  background-color: #3071a9;
}
.result {
  text-align: center;
  margin-top: 20px;
  font-weight: bold;
}
.hide{
  display: none;
}
```

```js
const quizData = [
  {
  question: 'JAVA  is object oriented language?',
  options: ['True', 'False'],
  answer: 'True',
  },
  {
  question: 'Is the JAVA  is platform independent?',
  options: ['Yes', 'No"],
  answer: 'Yes',
  },
  {
  question: 'Which team won the IPL  Cup in 2023?',
  options: ['MI', 'SRH', 'CSK', 'RCB'],
  answer: 'CSK',
  },
  {
  question: 'What is the tallest mountain in the world?',
  options: ['Mount Everest', 'K2', 'Kangchenjunga', 'Makalu'],
  answer: 'Mount Everest',
  },
  {
  question: 'Which is the longest river in  India?',
  options: [
    'The Nile',
    'The Narmada',
    'The Ganga',
```

```
    'The Cauvery',
  ],
  answer: 'The Nile',
},
{
  question: 'What is the chemical symbol for gold?',
  options: ['Au', 'Ag', 'Cu', 'Fe'],
  answer: 'Au',
},
{
  question: 'Who painted the Mona Lisa?',
  options: [
    'Pablo Picasso',
    'Vincent van Gogh',
    'Leonardo da Vinci',
    'Michelangelo',
  ],
  answer: 'Leonardo da Vinci',
},
{
  question: 'How many moons rotates around the jupiter?',
  options: ['1', '63', '24', '45'],
  answer: '63',
},
{
  question: 'What is the largest species of shark?',
  options: [
    'Great White Shark',
```

```
        'Whale Shark',

        'Tiger Shark',

        'Hammerhead Shark',

    ],

    answer: 'Whale Shark',

},

{

    question: 'Define inheritance in JAVA?'',

    options: ['code finder', 'code reusability', 'complier', 'code accepter'],

    answer: 'code reusability',

},

];


const quizContainer = document.getElementById('quiz');

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

const submitButton = document.getElementById('submit');

const retryButton = document.getElementById('retry');

const showAnswerButton = document.getElementById('showAnswer');


let currentQuestion = 0;

let score = 0;

let incorrectAnswers = [];


function shuffleArray(array) {

  for (let i = array.length - 1; i > 0; i--) {

    const j = Math.floor(Math.random() * (i + 1));

    [array[i], array[j]] = [array[j], array[i]];

  }
```

```
  }

  function displayQuestion() {
    const questionData = quizData[currentQuestion];

    const questionElement = document.createElement('div');
    questionElement.className = 'question';
    questionElement.innerHTML = questionData.question;

    const optionsElement = document.createElement('div');
    optionsElement.className = 'options';

    const shuffledOptions = [...questionData.options];
    shuffleArray(shuffledOptions);

    for (let i = 0; i < shuffledOptions.length; i++) {
      const option = document.createElement('label');
      option.className = 'option';

      const radio = document.createElement('input');
      radio.type = 'radio';
      radio.name = 'quiz';
      radio.value = shuffledOptions[i];

      const optionText = document.createTextNode(shuffledOptions[i]);

      option.appendChild(radio);
      option.appendChild(optionText);
```

```javascript
    optionsElement.appendChild(option);

  }


  quizContainer.innerHTML = '';

  quizContainer.appendChild(questionElement);

  quizContainer.appendChild(optionsElement);

}


function checkAnswer() {

  const selectedOption = document.querySelector('input[name="quiz"]:checked');

  if (selectedOption) {

    const answer = selectedOption.value;

    if (answer === quizData[currentQuestion].answer) {

      score++;

    } else {

      incorrectAnswers.push({

        question: quizData[currentQuestion].question,

        incorrectAnswer: answer,

        correctAnswer: quizData[currentQuestion].answer,

      });

    }

    currentQuestion++;

    selectedOption.checked = false;

    if (currentQuestion < quizData.length) {

      displayQuestion();

    } else {

      displayResult();

    }
```

```
  }
}

function displayResult() {
  quizContainer.style.display = 'none';

  submitButton.style.display = 'none';

  retryButton.style.display = 'inline-block';

  showAnswerButton.style.display = 'inline-block';

  resultContainer.innerHTML = `You scored ${score} out of ${quizData.length}!`;
}

function retryQuiz() {
  currentQuestion = 0;

  score = 0;

  incorrectAnswers = [];

  quizContainer.style.display = 'block';

  submitButton.style.display = 'inline-block';

  retryButton.style.display = 'none';

  showAnswerButton.style.display = 'none';

  resultContainer.innerHTML = '';

  displayQuestion();
}

function showAnswer() {
  quizContainer.style.display = 'none';

  submitButton.style.display = 'none';

  retryButton.style.display = 'inline-block';

  showAnswerButton.style.display = 'none';
```

```javascript
    let incorrectAnswersHtml = '';

   for (let i = 0; i < incorrectAnswers.length; i++) {

    incorrectAnswersHtml += `

     <p>

       <strong>Question:</strong> ${incorrectAnswers[i].question}<br>

       <strong>Your Answer:</strong> ${incorrectAnswers[i].incorrectAnswer}<br>

       <strong>Correct Answer:</strong> ${incorrectAnswers[i].correctAnswer}

     </p>

    `;

   }


   resultContainer.innerHTML = `

    <p>You scored ${score} out of ${quizData.length}!</p>

    <p>Incorrect Answers:</p>

    ${incorrectAnswersHtml}

   `;

  }


  submitButton.addEventListener('click', checkAnswer);

  retryButton.addEventListener('click', retryQuiz);

  showAnswerButton.addEventListener('click', showAnswer);


  displayQuestion();
```
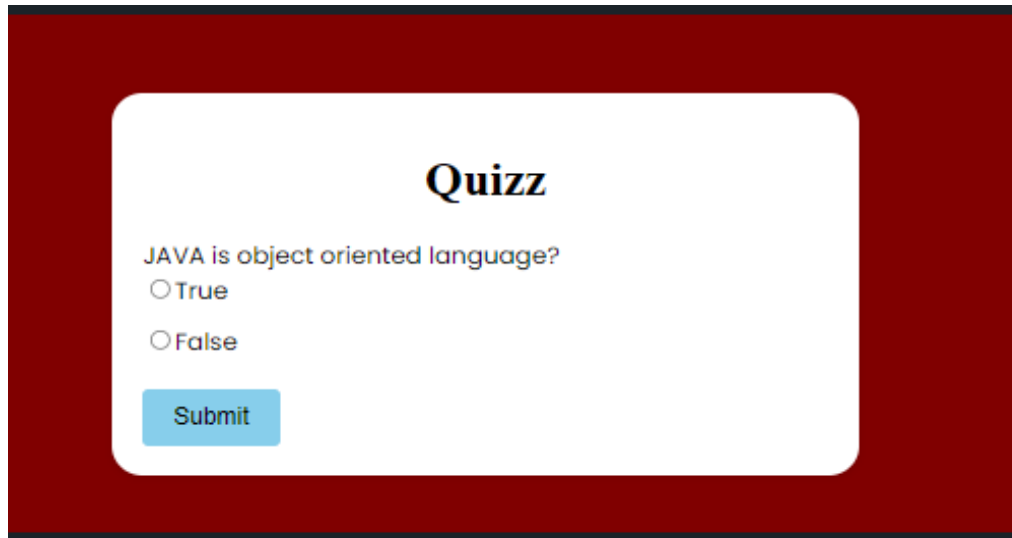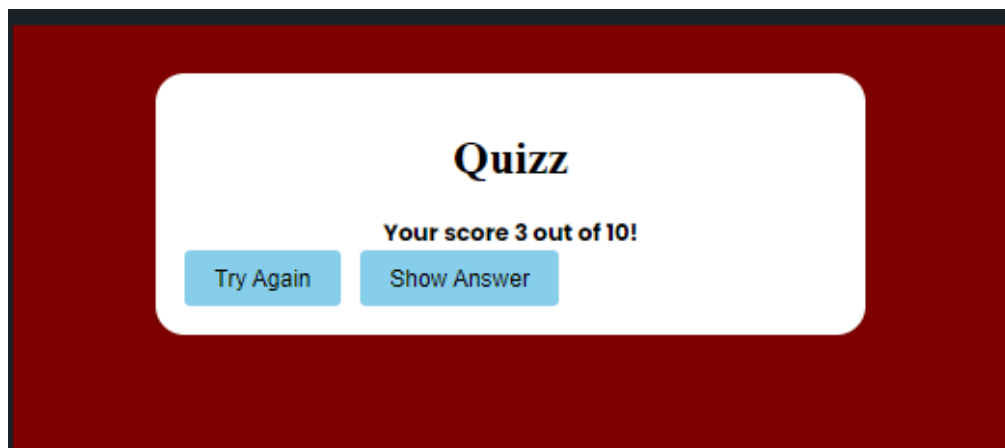
THANKYOU