

## Mini Project: Simple JavaScript Quiz App

WEEK 1:

quiz.html:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>MCQ Quiz</title>
    <!-- Google Font -->
    <link
      href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600&disp
lay=swap"
      rel="stylesheet"
    />
    <!-- Stylesheet -->
    <link rel="stylesheet" href="quiz.css" />
  </head>
  <body>
    <div class="image">
      <div class="start-screen">
        <button id="start-button">Start</button>

      </div>
      <div id="display-container">
        <div class="header">
          <div class="number-of-count">
            <span class="number-of-question">1 of 4 questions</span>
          </div>
          <div class="timer-div">
<svg xmlns="http://www.w3.org/2000/svg" width="16" height="16"
fill="currentColor" class="bi bi-stopwatch-fill" viewBox="0 0 16 16">
  <path d="M6.5 0a.5.5 0 0 0 1H7v1.07A7.001 7.001 0 0 0 8 16a7 7 0 0 0
5.29-11.584.531.531 0 0 0 .013-.012l.354-.354.353.354a.5.5 0 1 0 .707-.707l-
1.414-1.415a.5.5 0 1 0-.707.707l.354.354-.354.354a.717.717 0 0 0-
.012.012A6.973 6.973 0 0 0 9 2.071V1h.5a.5.5 0 0 0 0-1h-3zm2 5.6V9a.5.5 0 0 1-
.5.5H4.5a.5.5 0 0 1 0-1h3V5.6a.5.5 0 1 1 1 0z"/>
</svg>
            <span class="time-left">20s</span>
          </div>
        </div>
        <div id="container">
          <!-- questions and options will be displayed here -->
        </div>
        <button id="next-button">Next</button>
      </div>
    </div>
  </body>
</html>
```

```

    </div>
    <div class="score-container hide">
      <div id="user-score">Demo Score</div>
      <button id="restart">Restart</button>
    </div>
    <!-- Script -->
    <script src="quiz.js"></script>
  </div>
</body>
</html>

```

quiz.css:

```

* {
  padding: 0;
  margin: 0;
  box-sizing: border-box;
  font-family: "Poppins", sans-serif;
}

.start-screen,
.score-container {
  position: absolute;
  top: 0;
  width: 100%;
  height: 100%;
  display: flex;
  flex-direction: column;
  align-items: center;
  justify-content: center;
}

button {
  border: navy;
  outline: grey;
  cursor: pointer;
}

#start-button,
#restart {
  font-size: 1.3em;
  padding: 0.5em 1.8em;
  border-radius: 0.2em;
}

#restart {
  margin-top: 0.9em;
}

#display-container {

```

```
background-color: lighter;

*{
padding: 3.1em 1.8em;
width: 80%;
max-width: 37.5em;
margin: 0 auto;
position: absolute;
transform: translate(-50%, -50%);
top: 50%;
left: 50%;
border-radius: 0.6em;
}
.header {
margin-bottom: 1.8em;
display: flex;
justify-content: space-between;
align-items: center;
padding-bottom: 0.6em;
border-bottom: 0.1em solid #949644;
}
.timer-div {
background-color: #5da1c0;
width: 7.5em;
border-radius: 1.8em;
display: flex;
align-items: center;
justify-content: space-between;
padding: 0.79em 2.5em;
}
.question {
margin-bottom: 1.25em;
font-weight: 600;
}
.option-div {
font-size: 0.9em;
width: 100%;
padding: 1em;
margin: 0.3em 0;
text-align: left;
outline: none;
background: transparent;
border: 1px solid #615e94;
border-radius: 0.3em;
}
.option-div:disabled {
color: #eeeeff0;
cursor: not-allowed;
}
```

```

}
#next-button {
  font-size: 1em;
  margin-top: 1.5em;
  background-color: #3d8f5d;
  color: #ffffff;
  padding: 0.7em 1.8em;
  border-radius: 0.3em;
  float: right;
}
.hide {
  display: none;
}
.incorrect {
  background-color: #4c24bb;
  color: #2608cf;
  border-color: #300eee;
}
.correct {
  background-color: #9cd25b;
  color: #7fda30;
  border-color: #689f38;
}
#user-score {
  font-size: 1.5em;
  color: #855959;
}
.image{
  background-color: grey;
  background-size: cover;
  top: 0;
  left: 0;
  width: 100%;
  position: fixed;
  height: 100%;
  color: white;
}

```

quiz.js:

```

//References
let timeLeft = document.querySelector(".time-left");
let quizContainer = document.getElementById("container");
let nextBtn = document.getElementById("next-button");
let countOfQuestion = document.querySelector(".number-of-question");
let displayContainer = document.getElementById("display-container");
let scoreContainer = document.querySelector(".score-container");

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let restart = document.getElementById("restart");
let userScore = document.getElementById("user-score");
let startScreen = document.querySelector(".start-screen");
let startButton = document.getElementById("start-button");
let questionCount;
let scoreCount = 0;
let count = 20;
let countdown;

//Questions and Options array

const quizArray = [
  {
    id: "0",
    question: "Which is reserved word in the java programming language?",
    options: ["method", "native", "reference", "array", "subclass"],
    correct: "native",
  },
  {
    id: "1",
    question: "Which is a valid key word in java?",
    options: ["interface", "string", "float", "unsigned", "int"],
    correct: "interface",
  },
  {
    id: "2",
    question: "Which keyword is used for Debugging in java?",
    options: ["Abstract", "insert", "assert", "boolean"],
    correct: "assert",
  },
  {
    id: "3",
    question: "Among the following is not a popular IDE for java developmen?",
    options: ["NetBeans", "intelliJ IDEA", "Visual studio code", "Eclipse"],
    correct: "Visual studio code",
  },
],

];

//Restart Quiz
restart.addEventListener("click", () => {
  initial();
  displayContainer.classList.remove("hide");
  scoreContainer.classList.add("hide");
});

//Next Button
nextBtn.addEventListener(
  "click",

```

```

(displayNext = () => {
  //increment questionCount
  questionCount += 1;
  //if last question
  if (questionCount == quizArray.length) {
    //hide question container and display score
    displayContainer.classList.add("hide");
    scoreContainer.classList.remove("hide");
    //user score
    userScore.innerHTML =
      "Your score is " + scoreCount + " out of " + questionCount;
  } else {
    //display questionCount
    countOfQuestion.innerHTML =
      questionCount + 1 + " of " + quizArray.length + " Question";
    //display quiz
    quizDisplay(questionCount);
    count = 20;
    clearInterval(countdown);
    timerDisplay();
  }
})
);

//Timer
const timerDisplay = () => {
  countdown = setInterval(() => {
    count--;
    timeLeft.innerHTML = `${count}s`;
    if (count == 0) {
      clearInterval(countdown);
      displayNext();
    }
  }, 1000);
};

//Display quiz
const quizDisplay = (questionCount) => {
  let quizCards = document.querySelectorAll(".container-mid");
  //Hide other cards
  quizCards.forEach((card) => {
    card.classList.add("hide");
  });
  //display current question card
  quizCards[questionCount].classList.remove("hide");
};

//Quiz Creation

```

```

function quizCreator() {
  //randomly sort questions
  quizArray.sort(() => Math.random() - 0.5);
  //generate quiz
  for (let i of quizArray) {
    //randomly sort options
    i.options.sort(() => Math.random() - 0.5);
    //quiz card creation
    let div = document.createElement("div");
    div.classList.add("container-mid", "hide");
    //question number
    countOfQuestion.innerHTML = 1 + " of " + quizArray.length + " Question";
    //question
    let question_DIV = document.createElement("p");
    question_DIV.classList.add("question");
    question_DIV.innerHTML = i.question;
    div.appendChild(question_DIV);
    //options
    div.innerHTML += `
      <button class="option-div"
onclick="checker(this)">${i.options[0]}</button>
      <button class="option-div"
onclick="checker(this)">${i.options[1]}</button>
      <button class="option-div"
onclick="checker(this)">${i.options[2]}</button>
      <button class="option-div"
onclick="checker(this)">${i.options[3]}</button>

    `;
    quizContainer.appendChild(div);
  }
}

//Checker Function to check if option is correct or not
function checker(userOption) {
  let userSolution = userOption.innerText;
  let question =
    document.getElementsByClassName("container-mid")[questionCount];
  let options = question.querySelectorAll(".option-div");

  //if user clicked answer == correct option stored in object
  if (userSolution === quizArray[questionCount].correct) {
    userOption.classList.add("correct");
    scoreCount++;
  } else {
    userOption.classList.add("incorrect");
    //For marking the correct option
    options.forEach((element) => {

```

```

        if (element.innerText == quizArray[questionCount].correct) {
            element.classList.add("correct");
        }
    });
}

//clear interval(stop timer)
clearInterval(countdown);
//disable all options
options.forEach((element) => {
    element.disabled = true;
});
}

//initial setup
function initial() {
    quizContainer.innerHTML = "";
    questionCount = 0;
    scoreCount = 0;
    count = 20;
    clearInterval(countdown);
    timerDisplay();
    quizCreator();
    quizDisplay(questionCount);
}

//when user click on start button
startButton.addEventListener("click", () => {
    startScreen.classList.add("hide");
    displayContainer.classList.remove("hide");
    initial();
});

//hide quiz and display start screen
window.onload = () => {
    startScreen.classList.remove("hide");
    displayContainer.classList.add("hide");
};

```

Output:



Start

1 of 4 Question

18s

Among the following is not a popular IDE for java developmen?

Eclipse

NetBeans

intelliJ IDEA

Visual studio code

Next

2 of 4 Question

18s

Which keyword is used for Debugging in java?

boolean

assert

Abstract

insert

Next

3 of 4 Question

🕒 17s

Which is a valid key word in java?

string

float

interface

int

Next

4 of 4 Question

🕒 16s

Which is reserved word in the java programming language?

method

reference

native

array

Next

Your score is 3 out of 4

Restart

GITHUB URL:

<https://github.com/Asha-Asha/quiz-application-in-js/tree/2609c73786a7f1905e2ad12fb8a2924e07058041/week1%20project>