

Quiz Project

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Repository URL: <https://github.com/shubham-pawar-08/QuizApplication>

Date of Submission 16/01/2023

Technologies used:

Html, CSS, JavaScript, JSON

Html

Index.html

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Java Quiz</title>
  <link rel="stylesheet" href="css/app.css">
  <link href="https://fonts.googleapis.com/css2?family=Lato:wght@300;400&display=swap"
rel="stylesheet">
</head>

<body>
  <div class="container">
    <div id="home" class="flex-center flex-column">
      <h1>Java Quiz</h1>
      <a class="btn" href="html/quiz.html">Start</a>

    </div>
  </div>
</body>

</html>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>

</body>
</html>
```

quiz.html

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

<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <meta http-equiv="X-UA-Compatible" content="ie=edge" />
  <title>Java Quiz</title>
  <link href="https://fonts.googleapis.com/css2?family=Lato:wght@300;400&display=swap"
rel="stylesheet">
  <link rel="stylesheet" href="../css/app.css" />
  <link rel="stylesheet" href="../css/quiz.css" />
</head>

<body>
  <div class="container">
    <div id="quiz" class="justify-center flex-column">
      <div id="hud">
        <div id="hud-item">
          <p class="hud-prefix">
            Question
          </p>
          <h1 class="hud-main-text" id="questionCounter"></h1>
        </div>
        <div id="hud-item">
          <p class="hud-prefix">
            Score
          </p>
          <h1 class="hud-main-text" id="score">
            0
          </h1>
        </div>
      </div>

      <h2 id="question">What is the answer to this questions?</h2>

      <div class="choice-container">
        <p class="choice-prefix">A</p>
        <p class="choice-text" data-number="1">Choice 1</p>
      </div>
      <div class="choice-container">
        <p class="choice-prefix">B</p>
        <p class="choice-text" data-number="2">Choice 2</p>
      </div>
      <div class="choice-container">
        <p class="choice-prefix">C</p>
        <p class="choice-text" data-number="3">Choice 3</p>
      </div>
      <div class="choice-container">
        <p class="choice-prefix">D</p>
        <p class="choice-text" data-number="4">Choice 4</p>
      </div>
    </div>
  </div>
</body>
<script src="../script/quiz.js"></script>
```

```
</body>
</html>
```

end.html

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

<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <meta http-equiv="X-UA-Compatible" content="ie=edge" />
  <title>Java Quiz</title>
  <link href="https://fonts.googleapis.com/css2?family=Lato:wght@300;400&display=swap"
rel="stylesheet">
  <link rel="stylesheet" href="../css/app.css" />
</head>

<body>
  <div class="container">
    <div id="end" class="flex-center flex-column">
      <h1 id="finalScore"></h1>

      <a class="btn" href="quiz.html">Start Again</a>
      <a class="btn" href="/">Back to Home</a>
    </div>
  </div>
  <script src="../script/end.js"></script>
</body>

</html>
```

app.css

```
:root{
  background: rgb(97, 103, 15);
background: linear-gradient(90deg, rgb(232, 180, 10) 100%, rgba(0,212,255,1)
100%, rgb(36, 22, 0) 100%);
  font-size: 58%;
}
*{
  box-sizing: border-box;
  font-family: 'Lato', sans-serif;
  margin: 0;
  padding: 0;
  color: #333;
  font-weight: 400;
  color: white;
}

.container{
  max-width: 1140px;
  margin: 0 auto;
}

h1,
h2,
h3,
h4 {
  margin-bottom: 1rem;
}
h1{
  font-size: 6rem;
  color: rgb(94, 2, 2);
  margin-bottom: 5rem;
}

h1 > span{
  font-size: 2.4rem;
  font-weight: 500;
}
h2{
  font-size: 4.2rem;
  margin-bottom: 4rem;
  font-weight: 700;
}
h3{
  font-size: 2.8rem;
  font-weight: 500;
}

.container{
  width: 100vw;
  height: 90vh;
  display: flex;
  justify-content: center;
```

```
align-items: center;
max-width: 80rem;
}
.container > * {
  width: 100%;
}

.flex-column {
  display: flex;
  flex-direction: column;
}

.flex-center {
  justify-content: center;
  align-items: center;
}

.justify-center {
  justify-content: center;
}

.text-center {
  text-align: center;
}

.hidden {
  display: none;
}

.btn {
  font-size: 2rem;
  padding: 1rem 0;
  width: 30rem;
  text-align: center;
  border: 0.1rem solid #bef80e;
  margin-bottom: 2.5rem;
  text-decoration: none;
  color: rgb(34, 16, 228);
  background-color: #22e622;
  border-radius: 15px;
  font-weight: 400;
}

.btn:hover {
  cursor: pointer;
  box-shadow: 0 0.4rem 1.4rem 0 rgba(86, 185, 235, 0.5);
  transform: translateY(-0.1rem);
  transition: transform 150ms;
}

.btn[disabled]:hover {
  cursor: not-allowed;
  box-shadow: none;
  transform: none;
}
```

```

form {
  width: 100%;
  display: flex;
  flex-direction: column;
  align-items: center;
}

input {
  color: #e67e22;
  margin-bottom: 2.5rem;
  width: 30rem;
  padding: 1.2rem;
  font-size: 1.8rem;
  border: none;
  box-shadow: 0 0.1rem 1.4rem 0 rgba(235, 133, 86, 0.5);
}

input::placeholder {
  color: #aaa;
}

```

quiz.css

```

*{
  font-family: 'Lato', sans-serif;
  word-spacing: 2.5px;
  font-weight: 400;
  letter-spacing: 1.5px;
}

h2{
  font-weight: 400;
  color: black;
}

.container{
  max-width: 1140px;
  margin: 0 auto;
}

.choice-container {
  display: flex;
  margin-bottom: 1.5rem;
  width: 100%;
  font-size: 1.8rem;
  border: 0.1rem solid rgb(86, 165, 235, 0.25);
  background-color: black;
  border-radius: 15px;
}

.choice-container:hover {
  cursor: pointer;
  box-shadow: 0 0.4rem 1.4rem 0 rgba(104, 50, 210, 0.5);
  transform: translateY(-0.1rem);
  transition: transform 150ms;
}

```

```
}

.choice-prefix {
  padding: 1.5rem 2.5rem;
  background-color: #e67e22;
  color: rgb(49, 21, 232);
  border-top-left-radius: 15px;
  border-bottom-left-radius: 15px;
}

.choice-text {
  padding: 1.5rem;
  width: 100%;
}

.correct {
  background-color: #4e7e8a;
}

.incorrect {
  background-color: #801336;
}

#hud {
  display: flex;
  justify-content: space-between;
  text-transform: uppercase;
}

.hud-prefix {
  text-align: center;
  font-size: 2rem;
  color: rgb(49, 21, 232);
}

.hud-main-text {
  text-align: center;
  color: black;
}
```

Javascript:

quiz.js

```
const question = document.getElementById("question");
const choices = Array.from(document.getElementsByClassName("choice-text"));
const questionCounterText = document.getElementById("questionCounter");
const scoreText = document.getElementById("score");

let currentQuestion = {};
let acceptingAnswers = false;
let score = 0;
let questionCounter = 0;
let availableQuestions = [];

let questions = [];
fetch("../json/questions.json")
  .then(res => {
    return res.json();
  })
  .then(loadedQuestions => {
    console.log(loadedQuestions);
    questions = loadedQuestions;
    startQuiz();
  });

const CORRECT_BONUS = 10;
const MAX_QUESTIONS = 5;

startQuiz = () => {
  questionCounter = 0;
  score = 0;
  availableQuestions = [...questions];
  getNewQuestion();
};

getNewQuestion = () => {
  if (availableQuestions.length === 0 || questionCounter >= MAX_QUESTIONS) {
    localStorage.setItem('mostRecentScore', score);
    return window.location.assign("../html/end.html");
  }
  questionCounter++;
  questionCounterText.innerText = `${questionCounter}/${MAX_QUESTIONS}`;

  const questionIndex = Math.floor(Math.random() * availableQuestions.length);
  currentQuestion = availableQuestions[questionIndex];
  question.innerText = currentQuestion.question;

  choices.forEach(choice => {
    const number = choice.dataset["number"];
    choice.innerText = currentQuestion["choice" + number];
  });

  availableQuestions.splice(questionIndex, 1);
  acceptingAnswers = true;
};
```



```

choices.forEach(choice => {
  choice.addEventListener("click", e => {
    if (!acceptingAnswers) return;

    acceptingAnswers = false;
    const selectedChoice = e.target;
    const selectedAnswer = selectedChoice.dataset["number"];

    const classToApply =
      selectedAnswer == currentQuestion.answer ? "correct" : "incorrect";

    if (classToApply === "correct") {
      incrementScore(CORRECT_BONUS);
    }

    selectedChoice.parentElement.classList.add(classToApply);

    setTimeout(() => {
      selectedChoice.parentElement.classList.remove(classToApply);
      getNewQuestion();
    }, 400);
  });
});

incrementScore = num => {
  score += num;
  scoreText.innerText = score;
};

```

end.js

```

const username = document.getElementById('username');
const saveScoreBtn = document.getElementById('saveScoreBtn');
const finalScore = document.getElementById('finalScore');
const mostRecentScore = localStorage.getItem('mostRecentScore');
finalScore.innerText = "Total Score is: "+mostRecentScore+ " points!";

username.addEventListener('keyup', () => {
  saveScoreBtn.disabled = !username.value;
});

saveHighScore = (e) => {
  e.preventDefault();
};

```

JSON

questions.json

```
[
  {
    "question": "Which component is used to compile, debug and execute the java programs?",
    "choice1": "JRE",
    "choice2": "JIT",
    "choice3": "JDK",
    "choice4": "JVM",
    "answer": 3
  },
  {
    "question": "Which one of the following is not a Java feature?",
    "choice1": "Object-oriented",
    "choice2": "Use of pointers",
    "choice3": "Portable",
    "choice4": "Dynamic and Extensible",
    "answer": 2
  },
  {
    "question": "Which of these cannot be used for a variable name in Java",
    "choice1": "identifier & keyword",
    "choice2": "identifier",
    "choice3": "keyword",
    "choice4": "none of the mentioned",
    "answer": 3
  },
  {
    "question": "Which of the following is not an OOPS concept in Java?",
    "choice1": "Polymorphism",
    "choice2": "Inheritance",
    "choice3": "Compilation",
    "choice4": "Encapsulation",
    "answer": 3
  },
  {
    "question": "What is not the use of “this” keyword in Java?",
    "choice1": "Referring to the instance variable when a local variable has the same name",
    "choice2": "Passing itself to the method of the same class",
    "choice3": "Passing itself to another method",
    "choice4": "Calling another constructor in constructor chaining",
    "answer": 2
  }
]
```

