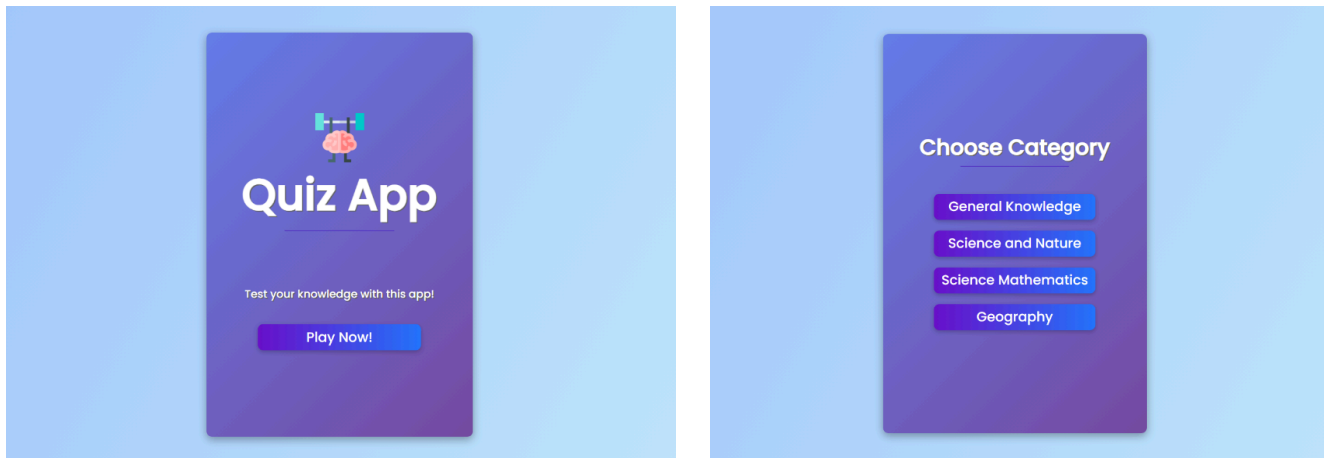# QUIZ GAME

Design 1

Note: These designs are for insight. You can use/modify any if you want or find another.

Description: This **Quiz Game** is an interactive application designed to test and enhance users' knowledge in *HTML, CSS,* and *JS*.

INSTRUCTION

1. Create a repo called "**quiz-game**" in your GitHub account
2. Clone the repo to your machine
3. Create the following files in the cloned repo: **index.html**, **style.css**, & **script.js** and link them
4. Create a file called **questions.json** in the root directory to store all questions

5. Create a function called **readJSONFile** that takes one parameter "**url**" which will be the path to the **questions.json** file. This function should return a JSON object
6. Create a function called **getRandomQuestions** that takes two parameters "**type**" eg: *html, css, js, or all* and "**num**" which is the total number of questions that should be returned. This function when called, should call **readJSONFile** and manipulate the response to get the **type (html, css, js, or all)** and the **number of questions** and return the randomly selected questions as an object
7. Set questions limit to 5 minimum and 25 maximum
8. A **time limit** should be set for each quiz based on the number of questions. Each question should be **1 minute** max. Eg: if there are 10 questions, the quiz time should be 10 minutes
9. Create a function called **displayQuestions** that takes one parameter "**questions**". The questions object generated from **getRandomQuestions** should be passed as an argument when calling **displayQuestions**
10. Display the user's score at the end of the game showing all the correct and wrong answers. For the incorrect answers, show what the correct answer is
11. Users should be able to select the type of questions they want (only HTML, CSS, JS, or All) and the number of questions between 5 and 25
12. Divide 100 by the total number of questions to determine the weight of each question
13. Design your project
14. Test and make sure it's working
15. **Push** the project to GitHub, create a **GitHub page**, and share the link in the group

OUTCOME
This project will help you achieve the following:
- Understand how to read data from JSON files
- Do more practice with fetch (Getting data from a file using JS)
  - https://www.freecodecamp.org/news/how-to-read-json-file-in-javascript/
  - https://medium.com/@akshaykrdas001/how-to-fetch-data-from-local-json-file-and-render-it-to-html-document-with-using-vanilla-javascript-a0191a894f25
- Do more practice with JSON Objects
- Get more familiar with Object manipulation
- Get more familiar with DOM manipulation
- Do more practice with EventListeners
- Do more practice with conditionals
- Do more practice with function parameters

EXAMPLE OF question.json FILE
NOTE: You should add at least 10 questions for each topic (html, css, and js)

```json
{
  "html": {
    "q1": {
      "question": "What does HTML stand for?",
      "choices": {
        "a": "Hyper Text Markup Language",
        "b": "Home Tool Markup Language",
        "c": "Hyperlinks and Text Markup Language",
        "d": "Hyper Tool Markup Language"
      },
      "correctAnswer": "a"
    },
    "q2": {
      "question": "Which HTML tag is used to define an internal style sheet?",
      "choices": {
        "a": "<script>",
        "b": "<style>",
        "c": "<css>",
        "d": "<link>"
      },
      "correctAnswer": "b"
    }
  },
  "css": {
    "q1": {
      "question": "Which property is used to change the background color?",
      "choices": {
        "a": "color",
        "b": "background-color",
        "c": "bgcolor",
        "d": "background"
      },
      "correctAnswer": "b"
    },
    "q2": {
      "question": "Which CSS property controls the text size?",
      "choices": {
        "a": "font-style",
        "b": "text-size",
```

```json
      "c": "font-size",
      "d": "text-style"
    },
    "correctAnswer": "c"
  }
},
"js": {
  "q1": {
    "question": "Which company developed JavaScript?",
    "choices": {
      "a": "Mozilla",
      "b": "Netscape",
      "c": "Sun Microsystems",
      "d": "Oracle"
    },
    "correctAnswer": "b"
  },
  "q2": {
    "question": "How do you write 'Hello World' in an alert box?",
    "choices": {
      "a": "alertBox('Hello World');",
      "b": "msg('Hello World');",
      "c": "alert('Hello World');",
      "d": "msgBox('Hello World');"
    },
    "correctAnswer": "c"
  }
}
}
```