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Website Reflection

The first step I took for this website is the first step I take in the development of any website: I identified the website's necessary elements and wrote an HTML skeleton. This means unformatted HTML elements with temporary placeholder text. These elements did not include the quiz, as all of the JavaScript I would write would be for the quiz.

After this skeleton was created, I wrote the CSS. I experimented with different fonts and color schemes until the site looked aesthetically pleasing, and I frequently visited W3Schools when I moved on to the positioning of the elements.

It was time to write the quiz. I took the same steps for this: I created a skeleton which I then wrapped in CSS. I chose to write a short multiple-choice quiz that would give the user a message specific to his/her score. This was very difficult to write, because it required lots of radio input elements within forms within dividers, each with certain names, ids, and values. The problem was not writing them in HTML; it was manipulating them in JS. I eventually figured out how I wanted to approach evaluating answers, so I quickly wrote the methods for checking correctness and displaying results. The hardest part of the JS code was checking that all the questions were answered. This was because there were 24 radio buttons, but only 6 needed to be filled. I went through at least three different possible solutions before I realized that all I needed to do was check to see if the number of checked buttons was equal to the number of questions.

The last step was to actually fill my site with content. I did some research and found

enough data to write at least two paragraphs and 6 questions. Once this was all complete, I just had to write some comments, and my website was finished.

I wrote an abstraction to check if every question in the quiz has been attempted.

//check if all questions have been attempted

```
function allFieldsChecked(){
    numQuestions =
document.getElementById('divQuiz').getElementsByTagName('FORM').length
;

    var radios = document.getElementsByTagName('INPUT');
    var checkedRadios = 0;

    //every time a radio is checked, increment 'checkedRadios'
    for(i = 0; i < radios.length; i++){
        if(radios[i].checked){
            checkedRadios++;
        }
    }

    //if the number of checked radios is equal to the number of
questions in the quiz, allFieldsChecked returns true
    return checkedRadios == numQuestions;
}
```

My submitQuiz() method needed to execute certain code based on the result returned by allFieldsChecked(). By putting the code to check inside another method, submitQuiz() can simply call the method instead of executing all of allFieldsChecked() inside itself, which would cause the code to be disorganized and hard to follow.