

Coding + Designing a Music Website

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Overview

Ever since I was four years old, I have played the piano. While I initially jumped in excited to learn a new skill and play various pieces, I always felt as if my piano practice was a burden rather than an exciting opportunity. Thus, my goal with this Capstone Project, was to create an interactive app that teaches students how to play the piano.

Research

To start off my research, I made sure to gather a wide variety of information from the audience my website would target. I first interviewed my piano teacher and her students to see how beneficial this game would be to them. After this, I then moved towards parents of piano players to understand what their main concerns were with teaching methods.

Many people believe that Piano is all about creativity, while code is all Binary (either a 'yes' or 'no' answer). Thus, another goal that I had for my project was to combine both aspects of technology and music into one, productive app.



Piano is heavily thought of as a creative idea

CSS Usage

For my website, I had to learn the language of HTML (the primary language of websites). To finalize my website I concluded that I would need to implement CSS and JavaScript.

```
background-color: #424854;
the first header to a certain color with a font, font size and alignment*/
on: #06F8D6;
t-family: "Vardana";
t-size: 70px;
t-align:center;

on: #06F8D6;
t-family: "Vardana";
t-size: 50px;
t-align:center;
der-bottom: 10px solid #50737E;

on: #06F8D6;
t-family: "Vardana";
t-size: 25px;
t-indent:45px;
```

The code at the right outlines the CSS format that is used for changing the style of the website. The CSS code allows for the coder to give a complete layout change to all aspects of the website. Instead of having to manually change the font style each time, using CSS allows for the coder to change the style one and apply it to all text.

CSS is key in easier and faster implementation

JavaScript + HTML Usage

Next, I created a class through Javascript. This allowed for me to create certain methods that eventually aided the HTML or "driver" class in functioning. The goal of using JavaScript was to create an interactive quiz that the user can take after they finish reading the website and learning about piano.

Comments are also extremely helpful for other users. When coding my project, I made sure to include comments so that anyone viewing the code would understand what was happening in each line.

```
//Starting to start the program
var start = true;

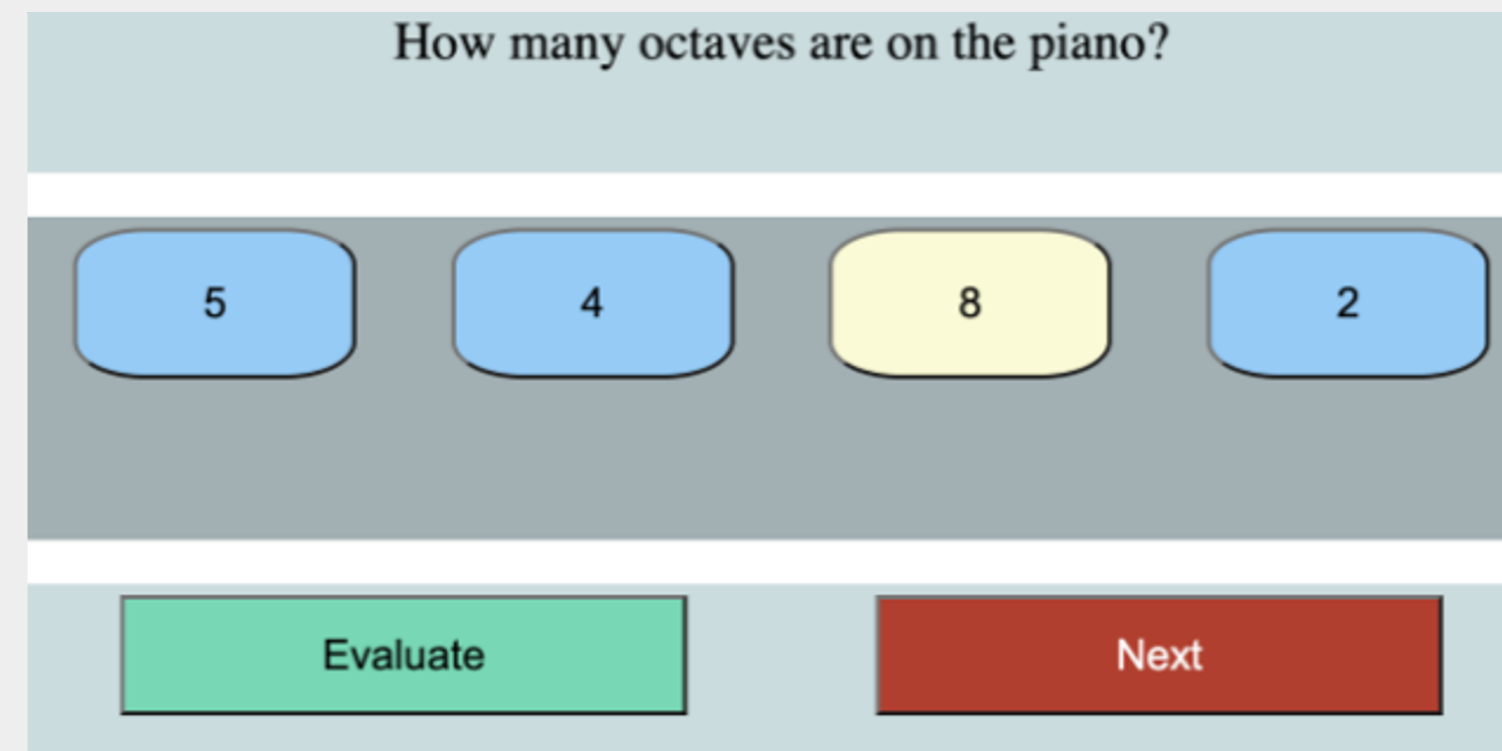
function runningThrough(id) { //running through program to get results

    var result = document.getElementsByClassName( className: "result");
    result[0].innerText = "";

    //Getting the question from the computer
    const question = document.getElementById( elementId: "question");

    question.innerText = qs[id].q;
```

Creating a class in JavaScript



The final outcome of the quiz

Ultimately, I was able to transport code to my initial website that contained the various information. This allowed me set up a link that, when clicked, will direct the user to the quiz in a new tab on Google. This ultimately completed what I set out to do at the beginning of the year for my Capstone project.

Conclusion

Throughout this process, I learned that using Google as a resource was very helpful as I was able to learn new functions. I was also happy with my final product as it ultimately reflected the goals that I set for myself in the beginning of the project. In the future, I can see myself adding a portion that allows for students to upload videos of them playing the piano to share with others.