Interactive Learning Website For Young People

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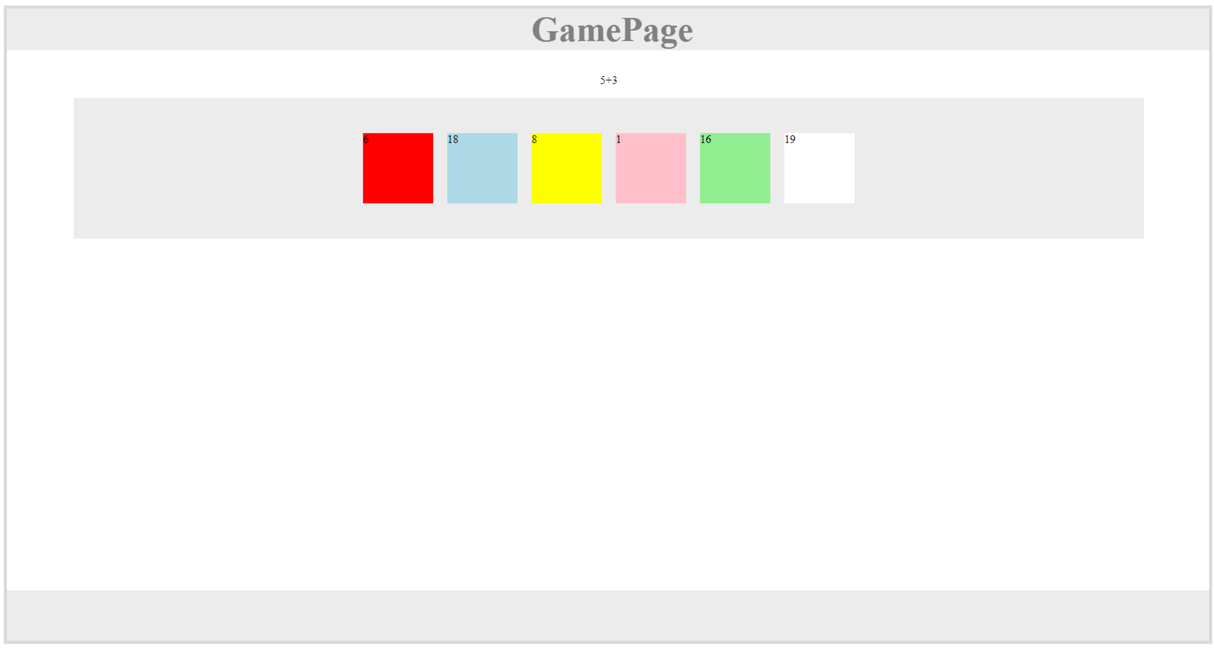
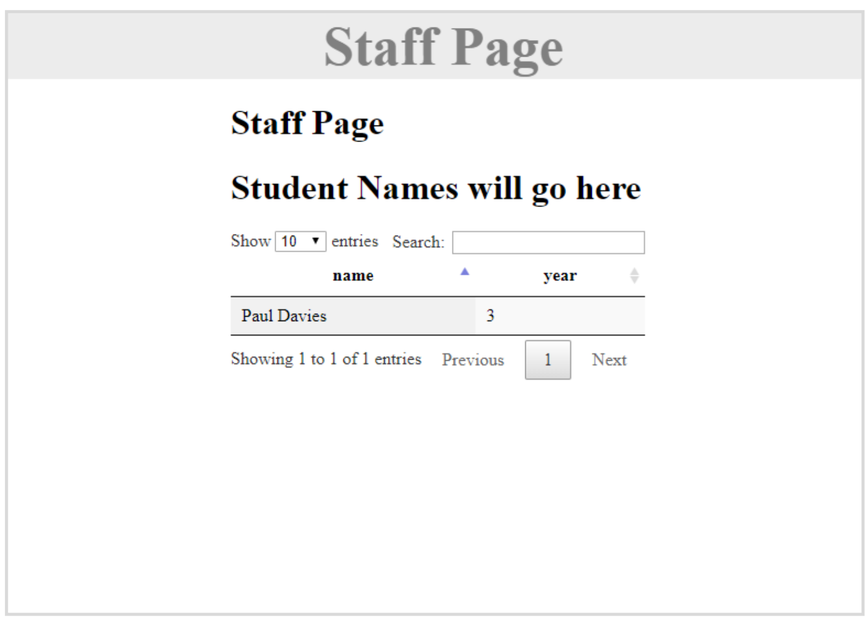
Project Description

The website is an interactive site that gives a user the enjoyment of playing games, while also learning. The website is designed for primary school students to help learn and to test their knowledge. The website gives basic questions to the student in a more enjoyable way than just a quiz alone. The games will be basic and easy games, allowing the users to focus mainly on the questions at hand.

Score tracking allows the teachers or parents to be able to see how their students or children are getting on with the game. By seeing the students score, they will be able to see if a student needs more help in an area, or if they are doing well. The site will allow a teacher or parent to do this with ease





Technical Information

The website is build using HTML and JavaScript, which allows most browsers to run the website correctly. The website also uses FlexBox to orientate the website correctly. Most of the game part of the website will be generated with JavaScript and not hardcoded into the HTML itself. A database will also be used as the website will have login system and a system to store users scores. The website also uses DataTables to show the students in a table format

```
function DivMaker(){
  //for loop that runs for every object in the rects array
  for (var rect in rects) {
    //creates a div object out of the rects array
    var newDiv = document.createElement(rect);
    newDiv.style.width = "100px";
    newDiv.style.height = "100px";
    newDiv.style.background = rects[rect].fillStyle;
    newDiv.style.margin = "10px";
    newDiv.id = rect;
    newDiv.style.left = rects[rect].x+'px';
    newDiv.style.top = rects[rect].y+'px';
    newDiv.style.aling = "center";

    var newContent = document.createTextNode("");
    newDiv.appendChild(newContent);

    var currentDiv = document.getElementById("JavaGame");
    document.body.insertBefore(newDiv, currentDiv);
    document.getElementById('JavaGame').appendChild(newDiv);
  };
}
```

Further Reading

Atom. (2020). A hackable text editor for the 21st Century. [online] Available at: https://atom.io/ [Accessed Feb. 2020].

Atom is the software that will be used to write the website

W3Schools Online Web Tutorials. 2020. W3Schools Online Web Tutorials. [ONLINE] Available at: https://www.w3schools.com/. [Accessed 08 March 2020].

W3Schools contains a large amount of data on how to use HTML, CSS and JavaScript correctly

MDN Web Docs. 2020. MDN Web Docs. [ONLINE] Available at: https://developer.mozilla.org/en-US/. [Accessed 08 March 2020].

Another website that contains a large amount of data on how to use JavaScript correctly and efficiently

Implement features

- A Login System
- Simple and Maths games
- Table of student for teachers to view their students scores
- JavaScript that generates a game from arrays and no hard code

```
function RandomQuestion(){
  first = Math.floor(Math.random() * 11);
  second = Math.floor(Math.random() * 11);
  answerSquareFinder = Math.floor(Math.random() * 5);
  console.log(answerSquareFinder);
}
```

Future Plans

- More interactive game for the student to play and enjoy
- A way for schools to automatically sign up for the website
- Create games that are more complex for the user to complete
- Difficulty Changer for teacher to make it harder for student that are doing well