COMP6080: Web Front-End Programming

Tutorial 2

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UNSW

Week 2, Term 3 2020

Mozilla Developer Network

One of the most useful resources you'll encounter in web development is the MDN web docs by Mozilla. I *highly* recommend using it as a resource when you can.

Tip: Use mdn.io

When looking for references on something like HTTP methods, you might want to Google that and choose the first MDN result. Instead, you can just type (something like) mdn.io/httpmethods into your browser. It behaves kind of like Google's "I'm feeling lucky" but for MDN.

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I would *discourage* the use of W3Schools, not because it's terrible anymore (see: W3Fools), but because MDN is almost always *better*.

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I honestly use px (over em / rem) most of the time, because I was once told that it's mostly fine, and I haven't run into any terrible issues. It's conceptually very simple, which has a lot of advantages, and after reading these three articles (one, two, three) which propose different viewpoints, I'm relatively certain that primarily using px is mostly fine.

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Also, I know Hayden recommends pt in the lectures for font sizes, but honestly, I just use px (which is used more commonly than pt, according to many sources, e.g. MDN).

Exercise: Sorry, Richard...

Take a look at `http://www.cse.unsw.edu.au/~richardb/email.html` for review. Try to find all the things that could be improved.

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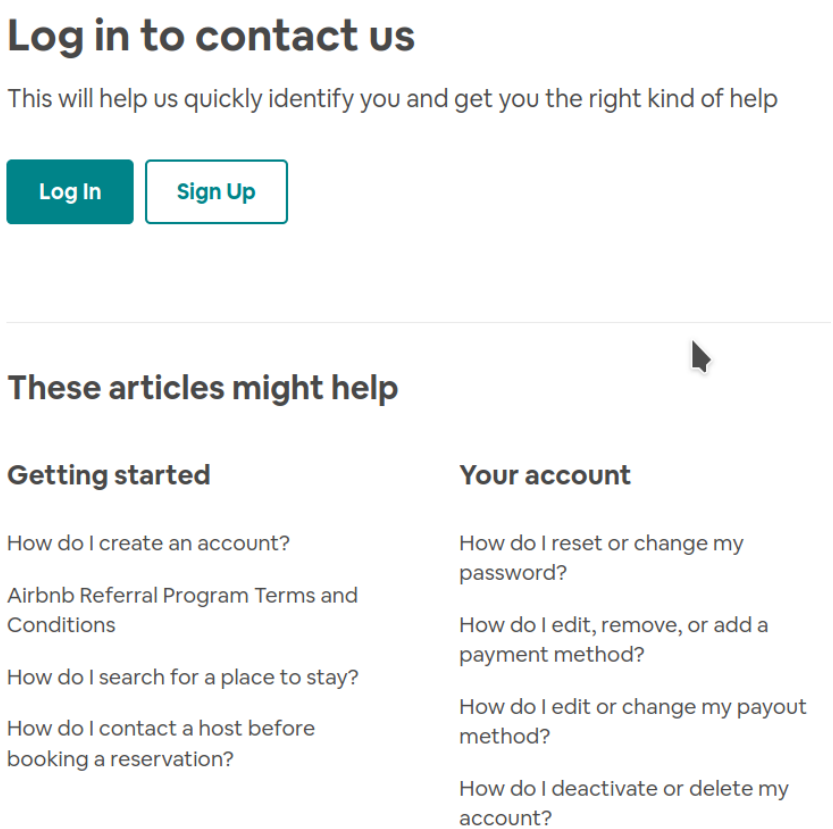
7. Use of HTML attributes (e.g. `bgcolor`) instead of CSS;
8. It's not very semantic.

Exercise: AirBnB

This is a page from the AirBnB website. Create a page that uses HTML and CSS to produce a page that looks as close to the image as possible. Hint: The font-family is Circular, which you don't have to replicate. Focus on structure, spacing, and font-sizes.



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Exercise: A Simple Program

Write a program to read in a text file (one of `data1.txt`, `data2.txt`, or `data3.txt`) which contains integers on some of the lines. The program will determine the lowest and highest valued number, and print out the range (i.e. difference between max and min).

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Now, how can we write this much more nicely? Notice how it takes quite a few lines to express a pretty simple concept?

Improvements

Typically, simple transformations can be done using functional programming, which JavaScript supports (yay!).

```
fs = require('fs');
const data = fs.readFileSync('data.txt', 'utf8');
const lines = data
                .split("\n").filter(l => l !== '')
                .map(l => parseInt(l));

console.log(
  `The range is ${Math.max(...lines) - Math.min(...lines)}`
);
```

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There's even a more advanced form that looks like `` tag`string text ${expression} string text` ``, called tagged template literals. (See: MDN.)