FONTS AND JAVASCRIPT.

// TODO.

Quick Recap

Web Fonts

External Fonts

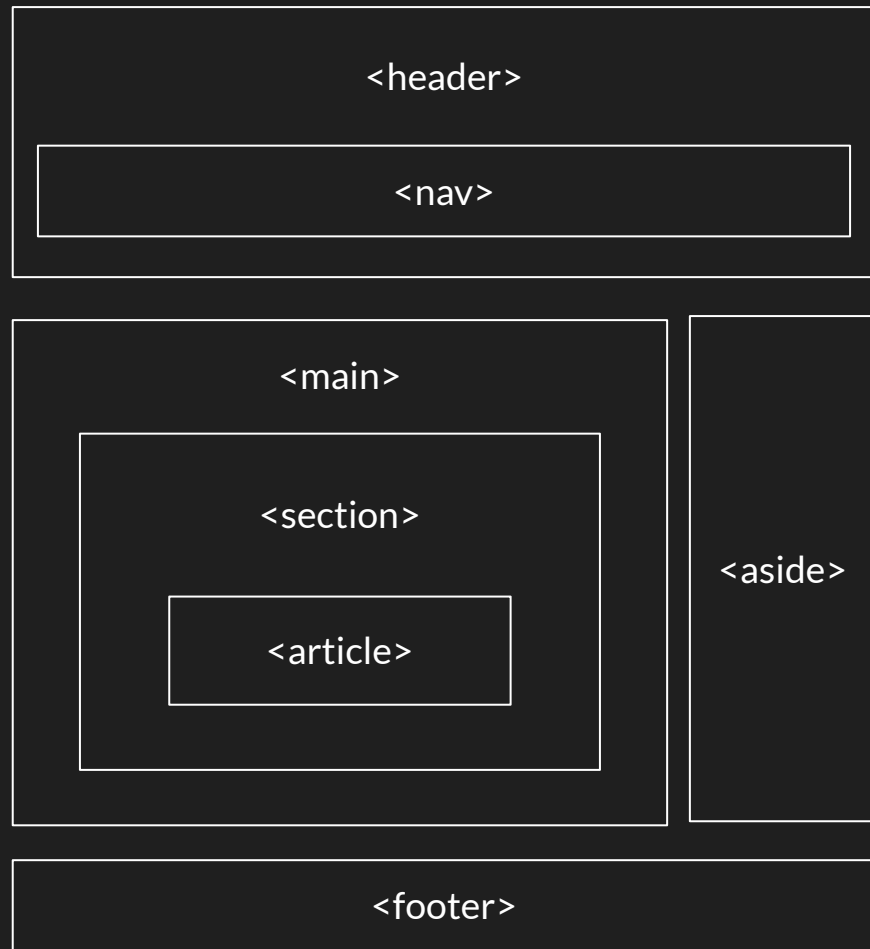Intro to JavaScript

Recap.

HTML semantic elements

Planning a simple website

<header>

<nav>

<main>

<section>

<article>

<aside>

<footer>

TYPEFACES VS FONTS.

Font families.

In CSS, fonts are organized into groups of Font Families.

The font family concept (also known as typeface) extends beyond CSS to typography in general.

> Each typeface (or font family) has its own distinct appearance and is often used to convey a certain mood, tone, or message in written communication.

> It is important to distinguish typeface from font; a font refers to a specific variation or style (e.g. bold, italic) within a typeface family (e.g. Times New Roman)

Generic family	Font family
Serif	Times New Roman, etc...
Sans-serif	Arial, Verduna, etc...
Monospace	Courier New, Consolas, etc...

Serif.

Small extra strokes are at the ends of the letter's defining strokes.

These letters are narrow and take less horizontal space. In other words, these fonts are proportional.

WOW

Sans-Serif.

Letters are drawn without serifs, however like serif fonts, these letters are also proportional and take less horizontal space.

WOW

Monospace.

Fonts in the monospace family force all letters to take the same amount of horizontal space, independent of the width of the strokes defining the letter.

These are NOT proportional.

CHANGING FONTS.

CSS Web Safe Fonts

Best Web Safe Fonts for HTML and CSS

The following fonts are the best web safe fonts for HTML and CSS:

- Arial (sans-serif)
- Verdana (sans-serif)
- Tahoma (sans-serif)
- Trebuchet MS (sans-serif)
- Times New Roman (serif)
- Georgia (serif)
- Garamond (serif)
- Courier New (monospace)
- Brush Script MT (cursive)

Web-safe font-stacks.

The fonts available to the browser depend largely on the fonts installed in the operating system.

When we define a font in CSS, we need to make sure to include a series of fallback fonts, from most specific to least specific.

Web-safe font-stacks.

When selecting a font, make sure to include a series of fallback fonts, from most specific to least specific. This is what is known as a "font stack".

Font names composed of more than one word need to be written between quotations.

```css
p {
    font-family: "Times New Roman", Times, serif;
}
```

Inheritance.

Typographic properties (color, font-size, font-family, etc.) are inherited by descendent elements.

This means we do not need to apply these styles to every single element in the HTML markup.

```css
body {
    font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
}
```
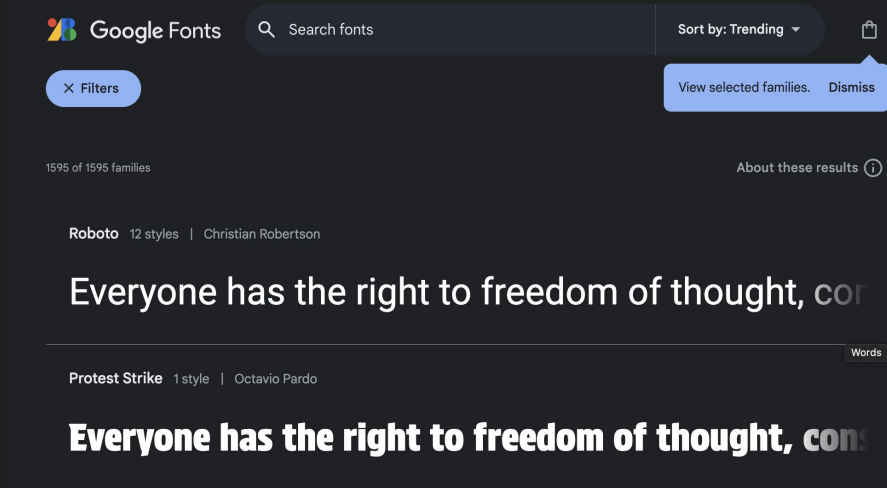
Simple web-safe font demo.

EXTERNAL FONTS.

External font faces.

So far, all of the fonts that we have seen (Verdana, Times New Roman, etc.) are Web Safe – fonts that are commonly available on most operating systems.

However if all websites used the same few dozen fonts, the web would be a lot more boring.

Linking external fonts.

Include the link in the head section of your HTML file, just like you would link a CSS Style sheet.

```
<link
    href="https://fonts.googleapis.com/css?family=Roboto&display=swap"
    rel="stylesheet"
/>
```

External "Roboto" font demo.

CUSTOM FONTS.

Custom fonts.

Using this CSS rule, we can specify a custom font with which to display text.

The font can be loaded from either a remote server or a locally-installed font on the user's own computer.

```css
@font-face {
    font-family: "Bitstream Vera Serif Bold";
    src: url("https://mdn.github.io/css-examples/web-fonts/VeraSeBd.ttf");
}
```

```css
@font-face {
  font-family: "Bitstream Vera Serif Bold";
  src: url("https://mdn.github.io/css-examples/web-fonts/VeraSeBd.ttf");
}
```

TYPOGRAPHIC PROPERTIES.

Font size.

Font size can be set with the font-size property. For this property, you can use absolute or relative units.

absolute	relative
Sets the text to a fixed size.	Size relative to another element in the page
Users cannot adjust it	Users can adjust it.

Recommended sizing approaches.

For font-size it is recommended that you use relative CSS units over fixed units.

For this approach, you need to be aware of where your HTML element is inheriting these units from.

em	rem
1 em is equal to the font size set on the **parent element** of the current element we are styling.	1 rem is equal to the font size set on the root element of the **document**

"rem" vs "px" demo.

Font weight.

The font-weight property sets how bold the text is, depending on the values supported by the font family.

Text decoration.

The text-decoration sets the decorations on fonts (mainly used to change default underline on links).

Text alignment.

The text-align property is used to control how text is aligned within its containing content box.

"text-align" && "font-weight" demo.

Text layout.

You can also control the line height, letter spacing, and word spacing of text in CSS. However for these concepts i recommend looking at the MDN web docs for the following:

> line-height
> letter-spacing
> word-spacing

```
line-height: normal;
letter-spacing: normal;
word-spacing: normal;
```

… and soooooo much more

Shorthand declaration.

You can set multiple font values in one shot by using the shorthand <font> property !!

For the (efficient) web programmer

```css
body {
    font: italic small-caps bold 16px/2 cursive;
}
```

INTRO TO JAVASCRIPT.

```
<body>
  <button onclick="showAlert()">Click me!</button>

  <script>
    function showAlert() {
      alert('AHHHHHHHHHHHHH');
    }
  </script>
</body>
```

```
<body>
  <button onclick="swapcss();">swap the CSS</button>
  <script>
    function swapcss() {
      document.querySelector("body").style.backgroundColor = "green"
    }
  </script>
</body>
```

EXERCISES.