Working With Fonts

Fonts (more properly known as *type faces*) can add greatly to the appeal and clarity of a web page or application. In this Guide, you'll learn how to use fonts.

FONT-FAMILIES

When no font is specified, the browser uses a default font. This is often Times Roman or some variant. If you want a different font, you can specify a base font that all elements will use (unless overridden) with this bit of CSS:

```
:root {
  font-family: Cambria, Cochin, Georgia, "Times New Roman", serif;
}
```

This selector is a "pseudo-selector". For more, see the Guide, "Intro to CSS Selectors".

The order of font names matters: the browser will use the first font family it finds on the user's computer.

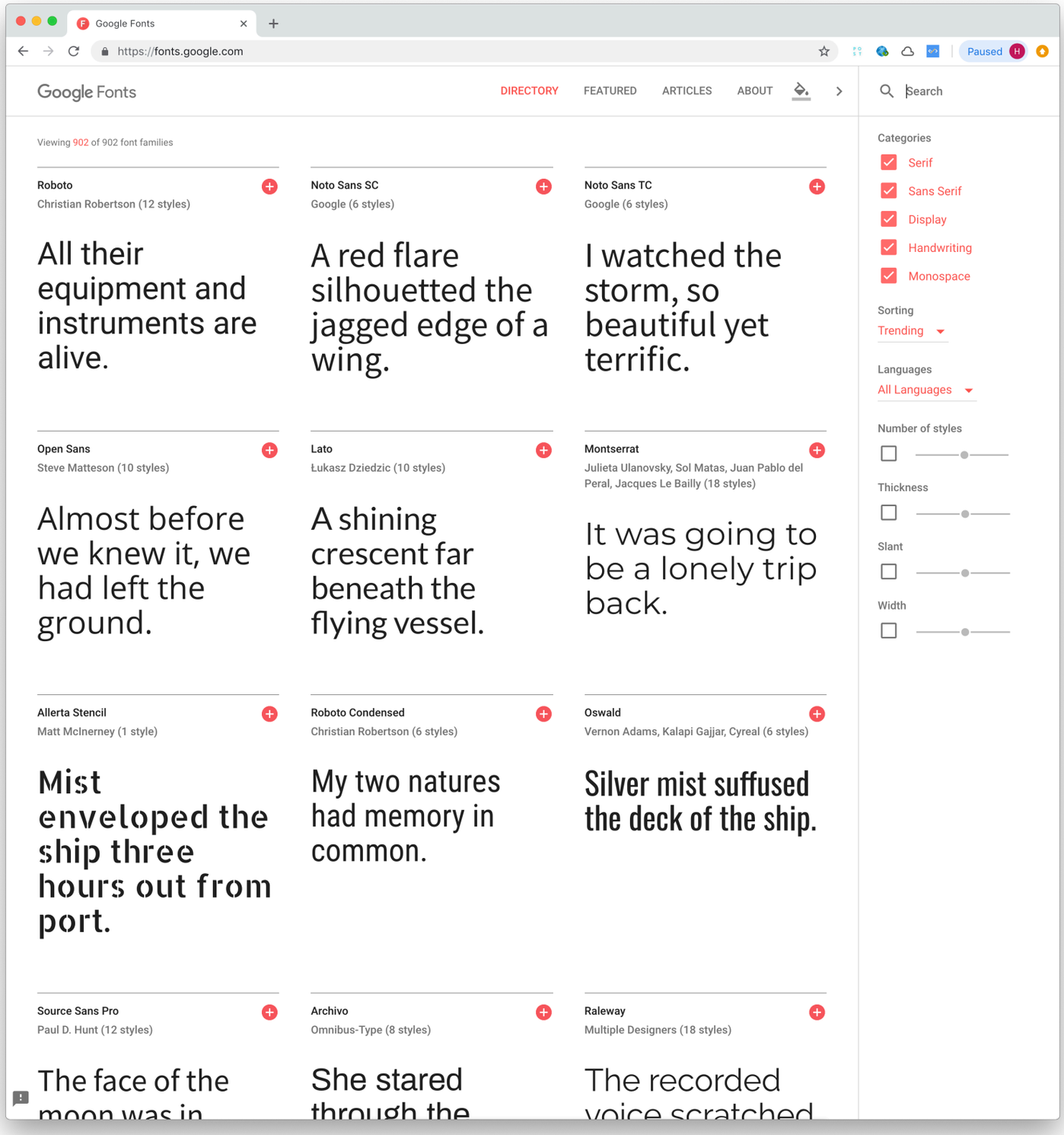
If the font name has a space in it, you need to put the entire font name in quotes.

A good practice is to specify a generic font style (such as serif on sans-serif) as the last font named. This tells the browser to find a font that matches the style (if no named font can be found)

GOOGLE FONTS

In the bad, old days of web design, developers were restricted to the fonts found on the user's computer. Google changed all this with their large, free, downloadable selection of fonts.

Available at
fonts.google.com



Serif fonts have "feet" on the ends of letters.

AaBbCc

Sans Serif fonts do not.

AaBbCc

On the site, you'll find hundreds of fonts, some in languages other than English, sorted into five categories: *Serif*, *Sans Serif*, *Display*, *Handwriting*, and *Monospace*. You can filter fonts by these categories — or just browse the entire collection.

Proportional fonts have different widths for different letters. (For example, the letter "m" takes more horizontal space than does the letter "i".)

Monospaced fonts occupy the same account of horizontal space regardless of the character.

Monospaced fonts are used primarily to show code, since code editors typically do not use proportional fonts.

When you find a font that you want to use on a web page, click the red "plus" sign to add it to the fonts you want to download. You can select as many fonts as you'd like, but each font takes some small amount of time to download onto the user's computer, so you'll rarely want to select more than 2 or 3.

As you select them, you'll see an overlaid box at the bottom of Google's page, indicating how many font families you've selected. Clicking the dash on the right expands the box to reveal details about your selected fonts as well as instructions on how to use them.

Selected fonts

2 Families Selected

Your Selection Clear All

Shadows Into Light Lobster

EMBED CUSTOMIZE Load Time: Fast

Embed Font

To embed your selected fonts into a webpage, copy this code into the <head> of your HTML document.

STANDARD @IMPORT

Place this code in the <head> section of your HTML page.

```
<link href="https://fonts.googleapis.com/css?family=Lobster|Shadows+Into+Light" rel="stylesheet">
```

Specify in CSS

Use the following CSS rules to specify these families:

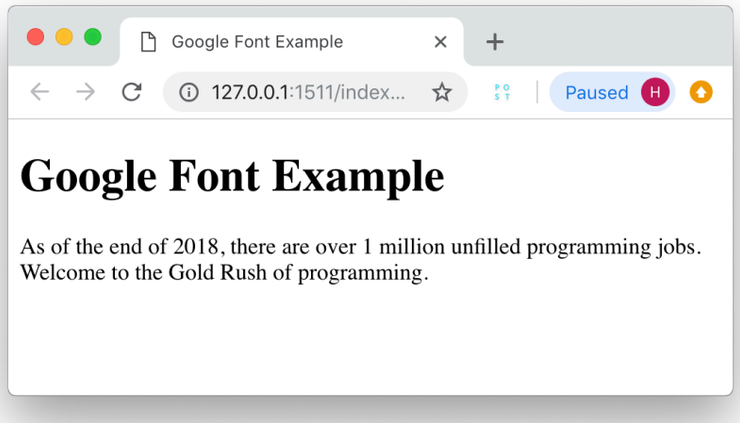
Use this code in your CSS

```
font-family: 'Lobster', cursive;
font-family: 'Shadows Into Light', cursive;
```

For examples of how fonts can be added to webpages, see the getting started guide.

AN EXAMPLE USING GOOGLE FONTS

Unstyled web page



- In your `dev/scratch` folder, add a new file, `google-fonts.html`.

Monospaced font

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Google Font Example</title>
</head>
<body>
  <header><h1>Google Font Example</h1></header>
  <main>
    <div class="handwritten">
      As of the end of 2018, there are over 1 million unfilled programming jobs.
      Welcome to the Gold Rush of programming.
    </div>
  </main>
</body>
</html>
```

Monospaced font

- Add the link to download the selected Google fonts:

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <link href="https://fonts.googleapis.com/css?family=Lobster|Shadows+Into+Light"
   rel="stylesheet">
  <title>Google Font Example</title>
</head>
```

- Also in `dev/scratch`, create an empty `google-fonts.css` file and link to it in your HTML page.

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <link href="https://fonts.googleapis.com/css?family=Lobster|Shadows+Into+Light"
   rel="stylesheet">
  <link href="./google-fonts.css">
  <title>Google Font Example</title>
</head>
```

- Add the styling to your CSS file.

```
header h1 {
  font-family: Lobster, cursive;
}

.handwritten {
  font-family: 'Shadows Into Light', cursive;
}
```

The results:

FONT SIZING

You can override the browser's default font-sizing for any or all HTML elements using the `font-size` property. This property allows a wide variety of values:

- `em`: a scalable unit. One em is equal to the current font-size *of their current element*. If you wanted an element to be 1-1/2 larger than the current size, you would use this: font-size: `1.5em`
- `rem`: a scalable unit. Similar to an em, but relative to the root element (`<html>`).
- `px`: a fixed-sized unit. One pixel (`px`) is equal to a "dot". Although use of pixels is commonplace, there is a trend towards using ems or rems, as these scale better for different-sized displays.
- `pt`: a fixed-sized unit. One point (`pt`) is equal to 1/72 of an inch. They suffer from the same lack of scalability as pixels.
- `%`: a scalable unit. Prior to ems and rems, percents (`%`) were widely-used. They have mostly been displaced by ems and rems.

Additionally, there are named size values such as `xx-small`, `x-small`, `small`, `medium`, `large`, `x-large`, `xx-large`, `smaller`, and `larger`. You will get greater control over your document if you eschew these in favor of ems, rems, etc.

OTHER FONT CONSIDERATIONS

Another useful font property is `font-variant`. Among its possible values is `small-caps`. This replaces all lower-cased characters with an upper-cased version, smaller than a specified upper-cased character.

Using font-variant: small-caps

If you want to set the color of text, use the `color` property of that element. You can use named values such as "blue" or "red", but for greater control, use the hexadecimal values such as `#FF5733`. What! You don't have all the hex values memorized? Grrr...well, then you might find this page helpful: `https://htmlcolorcodes.com/color-chart/flat-design-color-chart/`.

The CSS property, `text-decoration`, is used to decorate text with values like `overline`, `line-through`, and `underline`. It can also be set to `none` when you want to override browser defaults such as underlining and coloring of links.

The text-transform property allows you to turn affected selections to `uppercase`, `lowercase`, or `capitalize` (where the first word of each sentence is upper-cased).

SUMMARY

In this Guide, we've provided you with the information you'll need often. In addition, there are a number of things you can do with text. Feel free to use Google to explore.