CSS & TYPOGRAPHY

CSS Text Properties, Fonts, Font Properties

SoftUni Team

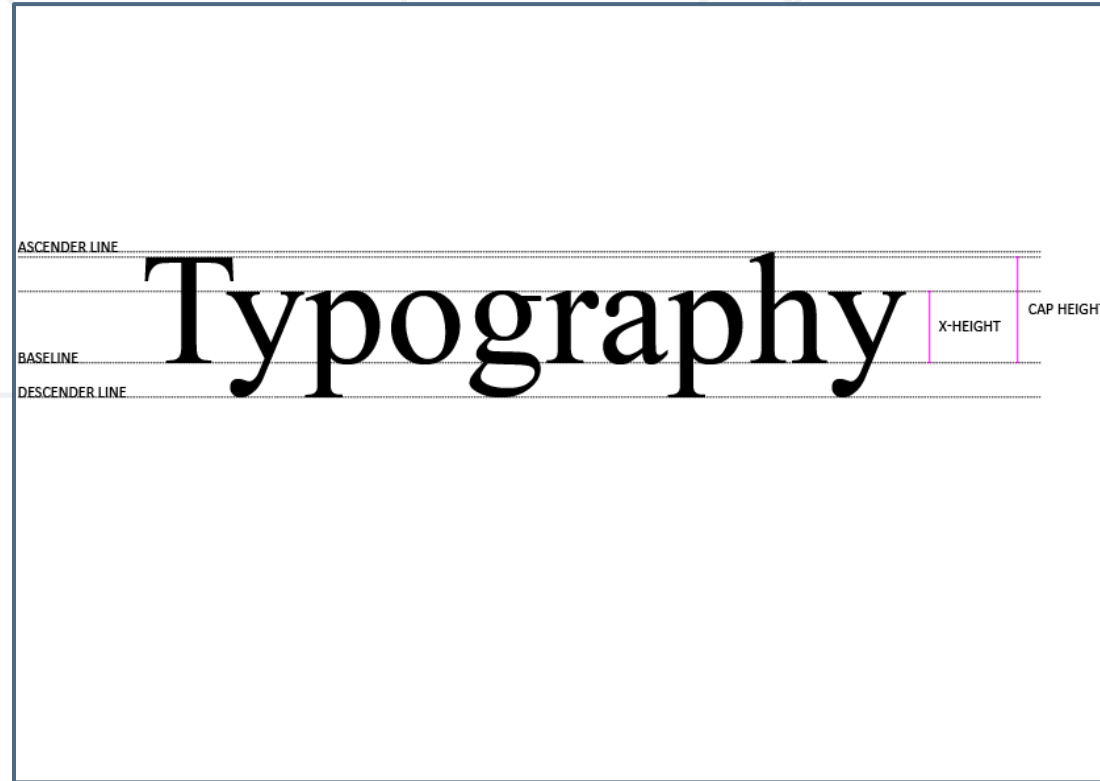**Technical Trainers**

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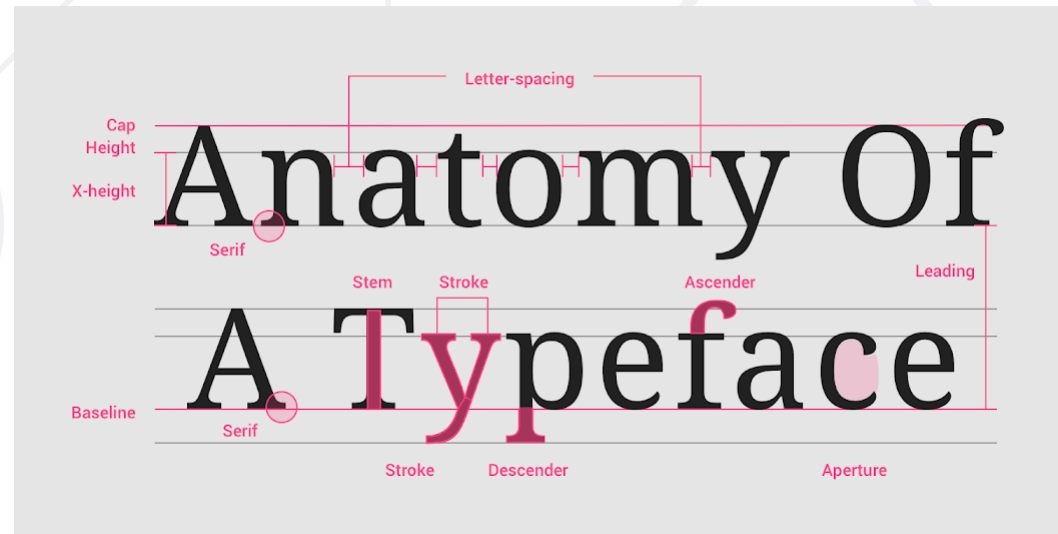
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sli.do

#html-css

CSS Font Properties

What is Typography?

- Typography is the art and technique of arranging type to make written language
  - **Legible**, **readable** and **appealing**
- Typography is the visual component of the written word

Books

- ***The Elements of Typographic Style*** - the authoritative book on typography and style

- ***The Elements of Typographic Style Applied to the Web*** - a practical guide to web typography

Principles of Readability
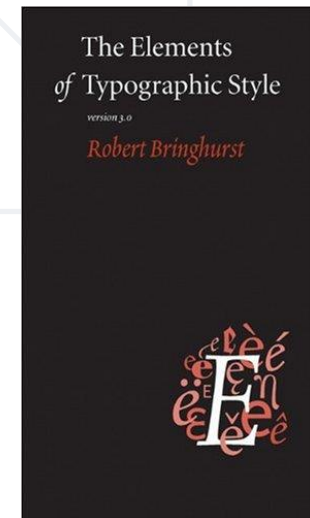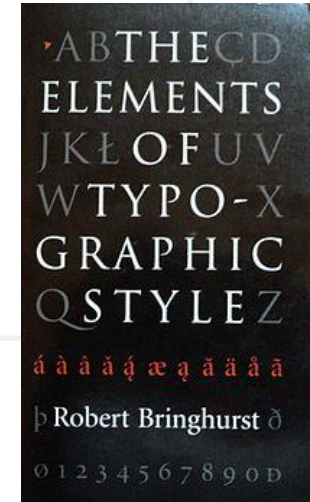
- **Readability** is one of the most important aspects of Web design usability

- Website readability is a measure of how easy it is for visitors to **read** and **understand** online text

- Readability depends on both a text's presentation and its context

- Poor readability scares readers away from the content

Keys to Readable Typography

- User-Friendly Headers

- White Space - scannable and consistent text

- Emphasis of Important Elements

- Good Margins to avoid walls of text

- Scannable Text

- Consistency

- Organization of Information

Web Safe Fonts

- Maximum **compatibility** between browsers/operating systems
- Generic family fonts:

Font Name	
Arial	Times New Roman
Courier New	Trebuchet MS
Georgia	Verdana

Font Files

- Font files contain one or more fonts that can be accessed by the **OS** and **applications**

- Most modern fonts are stored in the following formats:

  - OpenType (**.OTF**)

  - TrueType (**.TTF**)

  - Web Open Font Format (**.WOFF**)

  - Web Open Font Format 2 (**.WOFF2**)

Font Properties

Font Properties

- The **CSS font** properties **styles** the font of the text:

  - font-family / font-face (e. g. **sans-serif**, **Arial**)

  - font-size / line-height (e. g. **18pt**)

  - font-weight (e. g. **bold**)

  - font-style (e. g. *italic*)

  - font-variant (e. g. **SMALLCAPS**)

Georgia   Underlined

Bold italic   SMALL CAPS

~~Comic Sans~~ LETTER SPACING

overline   Arial

Font Family Name

- **Font family name** specifies one or several system font names

  - For example, "**Arial**" and "**Helvetica**" are font families

```
<p class=ar>Arial</p>
<p class=tim>Times</p>
```

Arial   Times

```
p.ar {
    font-family: Arial, Helvetica;
}

p.tim {
    font-family: "Times New Roman";
}
```

- **White-space** in the font name must be surrounded by **quotes**

- When the first font is **missing**, the **next** is loaded

Using External Fonts: @Font-face

- Specifies a **custom font** from external file / URL

```css
@font-face {
    font-family: "Open Sans";
    src: url("/fonts/opensans.woff") format("woff");
}
```

```html
<p style="font-family: Open Sans">Open Sans Demo</p>
```

Open Sans Demo

- See **fonts.google.com** for free open Web fonts

Generic Name

- `<generic-name>` - a broad class of similar fonts used in a prioritized list of fonts
  - **serif** - all characters have stroke endings
  - **sans-serif** - no character has stroke endings
  - **monospace** - all characters have the same width
  - **cursive** - handwritten fonts
  - **fantasy** - decorative fonts

Serif
Sans-serif
Monospace
Cursive
Fantasy

Font Size

- **font-size** – defines the text size
  - **px** / **pt** values (e. g. **18px** / **24pt**)
    - 1px == 0.75pt == 1/96 inch
  - **em** values – relative to the original size, multiplied by a **scale** factor

    ```
    font-size: 1.2em;
    ```

  - **rem** values – relative to the HTML root size (the **<html>** element)

    ```
    font-size: 1.5rem;
    ```

Parent container: **18px**

Font-size: 1.2em = **21.6px**

Font-size: 1.2em = **25.92px**

Font-size: 1.2em = **31.104px**

font-size: 16px
font-size: 1.5rem == 24px

- **font-weight** defines how weight is the font
  - Thin, normal, **bold**, or value [100 … 900]

Normal **Bold**

Value	Name
100	thin
300	light
400	normal
700	bold

```
font-weight: thin;
```

```
font-weight: 300;
```

```
font-weight: 400;
```

```
font-weight: bold;
```

Thin 100
Thin

Light 300
Light

Regular 400
Normal

Medium 500
Medium

Bold 700
Bold

Black 900
Black

- **font-style** – defines how much the text is *slanted*
  - **normal** – the text is not slanted

    `font-style: normal;`

    Normal font style

  - **italic** – the letters are slightly slanted

    `font-style: italic;`

    Italic font style

  - **oblique** – the letters are more slanted than italic

    `font-style: oblique;`

    Oblique font style

Text Align: Left / Right / Center / Justify

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- **`text-align`**
  - Defines the **horizontal alignment**

`text-align`: `left`;

Lorem ipsum

Lorem ipsum is meaningless text used to demonstrate the graphic elements of a document.

`text-align`: `right`;

Lorem ipsum

Lorem ipsum is meaningless text used to demonstrate the graphic elements of a document.

`text-align`: `center`;

Lorem ipsum

Lorem ipsum is meaningless text used to demonstrate the graphic elements of a document.

`text-align`: `justify`;

Lorem ipsum

Lorem ipsum is meaningless text used to demonstrate the graphic elements of a document.

Line Height

- **`line-height`** – defines the **height** of a single line of text

  - Measures: **unitless** / **pt** / **px** / **em** / **rem**

```
<article>
  <h1>Lorem ipsum</h1>
    <p> Lorem ipsum is
meaningless text used to
demonstrate the graphic
elements of a document.</p>
</article>
```

Lorem ipsum

Lorem ipsum is meaningless text

used to demonstrate the graphic

elements of a document

```
p { line-height: 2.1; }
```

Letter Spacing

- **letter-spacing** - defines the spacing between the characters of a block of text
  - **normal** - the spacing between the characters is normal

```
letter-spacing: normal;
```

A paragraph with normal spacing

  - Using **pixels**

```
letter-spacing: 2px;
```

A paragraph with 2px spacing
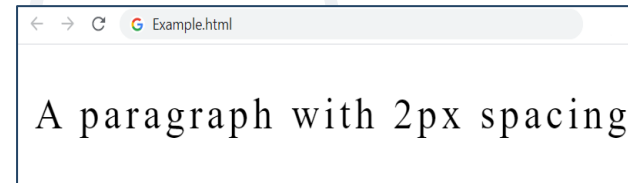
Text Decoration

- **text-decoration** - defines how the text content of the element is decorated: **overline**, **underline**, **line-through**

  - **none** - removes any text decoration

    ```
    text-decoration: none;
    ```

  - **line-through** - draws a line across the text

    ```
    text-decoration: line-through;
    ```
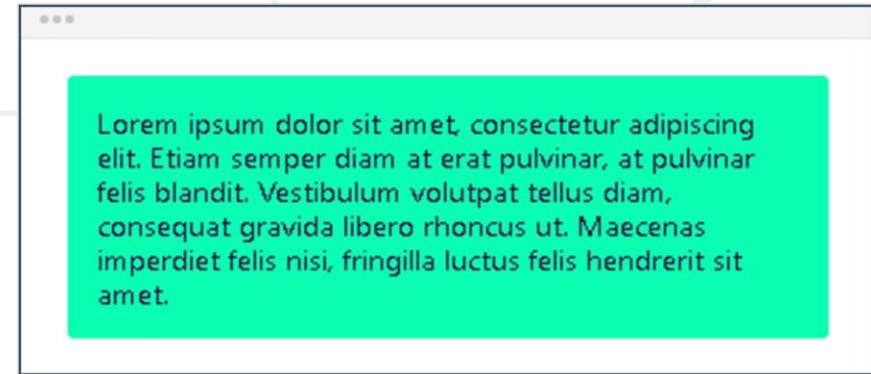   ~~text~~

Text Indent

- **text-indent** - defines the indentation of the element's first line of text

  - The text is not indented

    ```
    text-indent: 0;
    ```
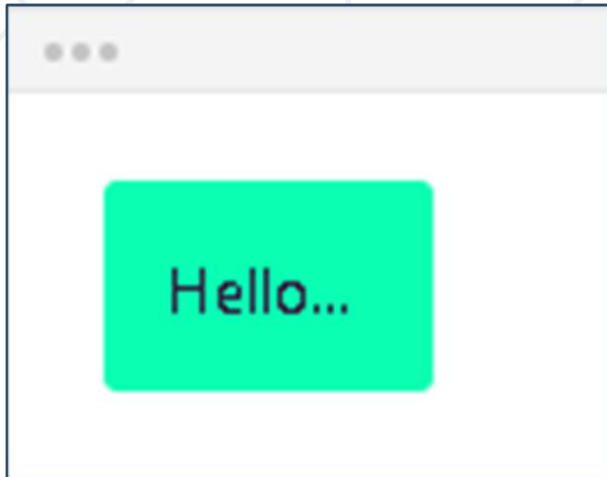
  - The text is indented

    ```
    text-indent: 40px;
    ```
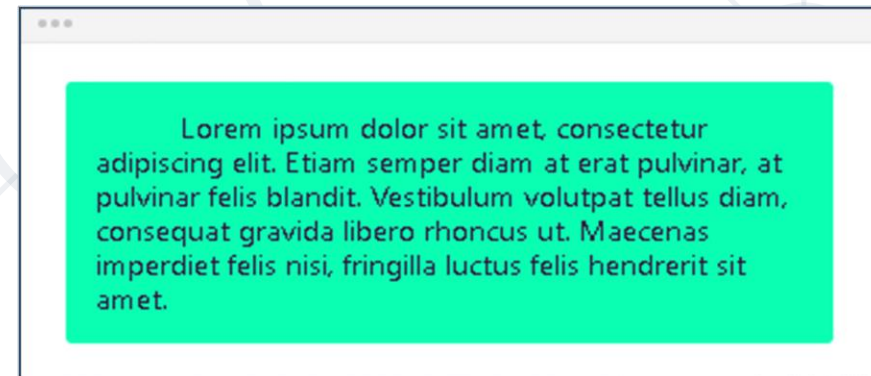
Text Overflow

- **text-overflow** - defines how the hidden text content behaves if it's overflowing

  - **ellipsis** - the overflowing content is replaced by **. . .**

```
text-overflow: clip;
```

Text Transform

- **text-transform** - specifies how to capitalize text

  - **capitalize** - turns the **first letter** of each word into a capital letter

    ```
    text-transform: capitalize;
    ```

    It Is A Long Established Fact That A Reader Will Be Distracted.

  - **uppercase** - turns all characters to uppercase

    ```
    text-transform: uppercase;
    ```

    IT IS A LONG ESTABLISHED FACT THAT A READER WILL BE DISTRACTED.

  - **lowercase** - turns all characters to lowercase

    ```
    text-transform: lowercase;
    ```

    it is a long established fact that a reader will be distracted.

Word Break

- **word-break** - defines how words should break when reaching the end of line
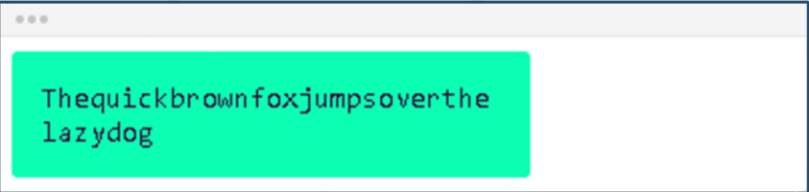
  - **normal** - words with no space will **NOT** break

    ```
    word-break: normal;
    ```


  - **break-all** - words with no space will **break** as soon as they reach the end of a line

    ```
    word-break: break-all;
    ```

Text Shadow

- **Text-shadow** - defines the shadow of the text content
  - None - the text content has **no shadow**

```
p {
    text-shadow: none;
}
```

- Text-shadow: **<horizontal> <vertical> <blur> <color>**

```
p {
    text-shadow: 2px 4px 10px red;
}
```

Text Color

- 140+ **predefined color names** (e. g. **green**, **red**, **blue**, **coral**, ...)

```
color: red;
```

Lorem ipsum

- **Hexadecimal** color code in format **#RGB** or **#RRGGBB**:

```
color: #05ffb0;
```

Lorem ipsum

- Decimal **rgb()** color codes (red, green, blue values):

```
color: rgb(125, 125, 255);
```

Lorem ipsum

- Decimal **rgba()** color codes (red, green, blue, alpha opacity):

```
color: rgba(255, 0, 0, 0.5);
```

Lorem ipsum

Background Color

- **background-color** - defines the color of the background
    - **transparent**

    ```
    background-color: transparent;
    ```

    - Specify the background color with:
        - HEX
        - RGB/RGBA
        - Named color

    ```
    background-color: navy;
    ```

Mouse Cursor

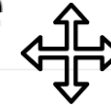- Sets the **mouse cursor** when hovering the element:

```
cursor: pointer;
```
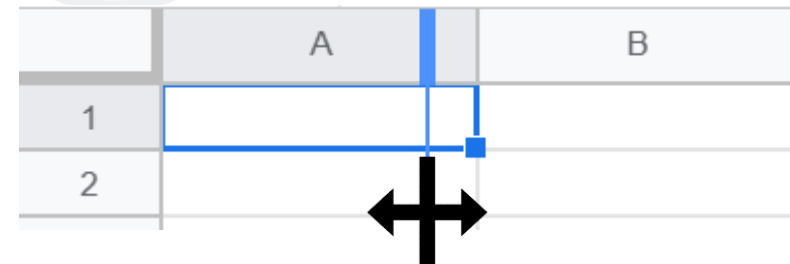
some text

```
cursor: move;
```
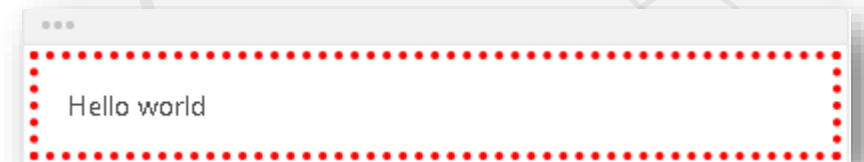
move

```
cursor: none;
```

no cursor

```
cursor: col-resize;
```

Outline

- **Outline**
  - Outline-width - defines the **width** of the element's outlines
  - Outline-style - defines the **style** of the element's outlines
  - Outline-color - defines the **color** of the element's outlines

```css
p {
    outline: 4px dotted red;
}
```

Hello world

Font Awesome Icons
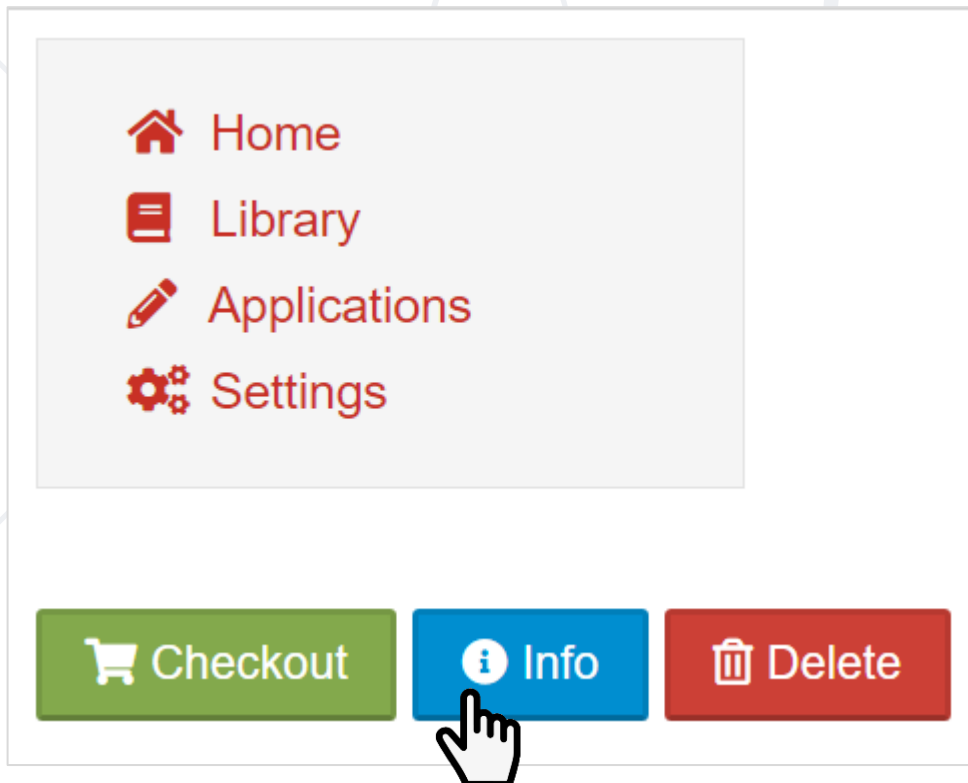
Font Awesome

- **Font Awesome** provides vector icons, emojis, etc.
  - Add the following link inside **<head>**
  - Or import Font Awesome in the **CSS** file
  - Choose an icon → copy the **<i>** element → paste it in your HTML file

```
<head>
  <link rel="stylesheet"
href="https://use.fontawesome.com/releases/v5.10.2/css/all.css">
</head>
<body>
  <a href="#"><i class="fa fa-home fa-fw"></i>Home</a>
</body>
```

```
@import 'https://use.fontawesome.com/releases/v5.10.2/css/all.css';
```

Font Awesome Icons – Exercise

- Using **HTML**, **CSS** and **Font Awesome icons** create a **navigation menu** and **buttons** like the following:

- Hints:

```
<i class="fas fa-home"></i>
<i class="fas fa-book"></i>
<i class="fas fa-pencil-alt"></i>
<i class="fas fa-cogs"></i>
<i class="fas fa-shopping-cart"></i>
<i class="fas fa-info-circle"></i>
<i class="far fa-trash-alt"></i>
```

Summary

- What is **Typography**?

- The principles of **readability**

- **CSS properties**: font-family, font-size, font-style, color, background

- **Font Awesome** Icons

Questions?

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