

CSS & TYPOGRAPHY

CSS Text Properties, Fonts, Font Properties



SoftUni Team
Technical Trainers



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Software University

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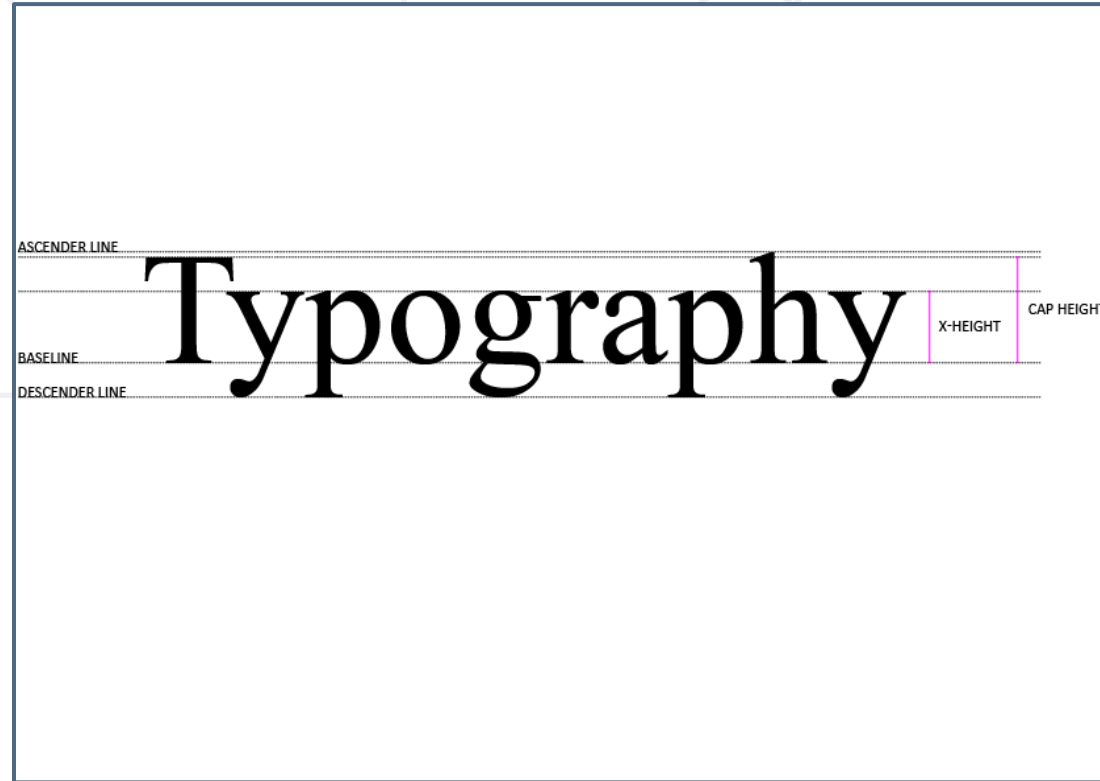
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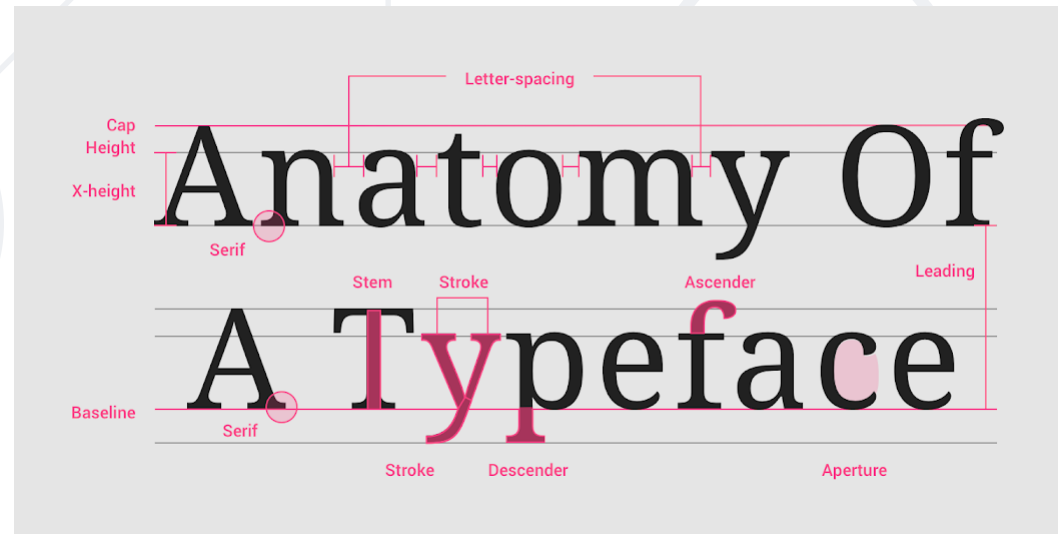
#html-css



CSS Font Properties

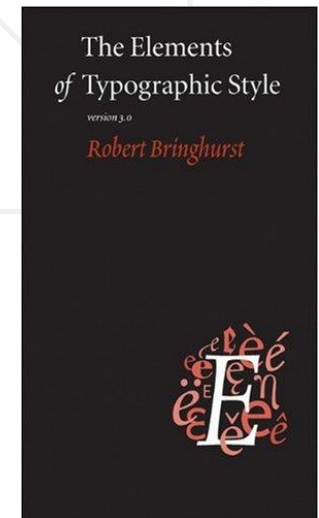
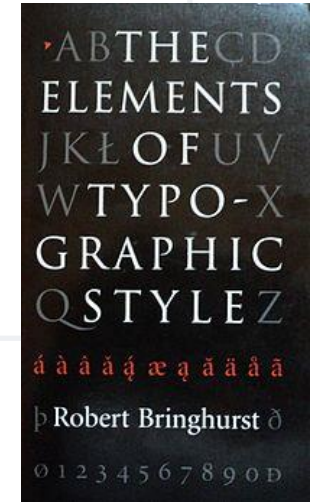
What is Typography?

- 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



- **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

- 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

- 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** 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

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

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

Open Sans Demo

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

- **<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**)
 - $1\text{px} == 0.75\text{pt} == 1/96 \text{ inch}$
 - **em** values – relative to the original size, multiplied by a **scale** factor
- **rem** values – relative to the HTML root size (the **<html>** element)

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

```
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: Thin / Normal / Bold

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

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

Regular 400
Normal

Bold 700
Bold

Light 300
Light

Medium 500
Medium

Black 900
Black

Normal **Bold**

- **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

- **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** – 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>
```

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

Lorem ipsum

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



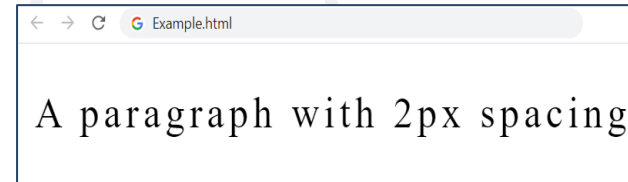
- **letter-spacing** - defines the spacing between the characters of a block of text
 - **normal** - the spacing between the characters is normal

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



- Using **pixels**

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



- **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~~

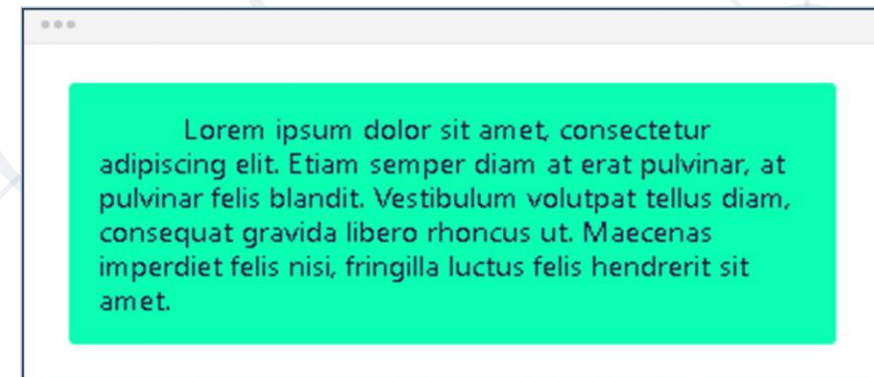
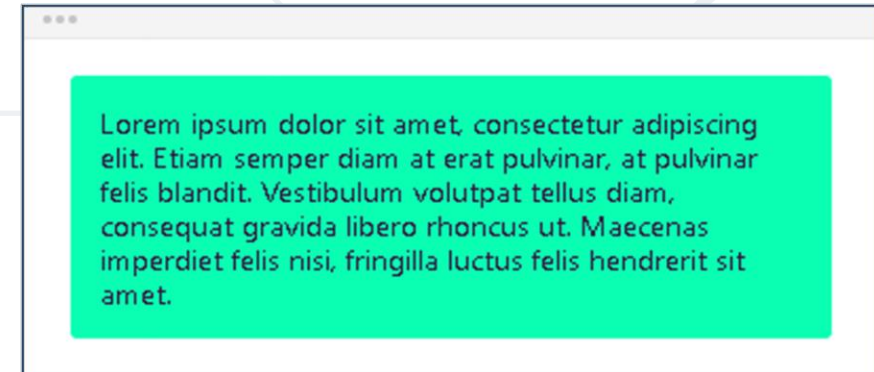
- **text-indent** - defines the indentation of the element's first line of text

- The text is not indented

```
text-indent: 0;
```

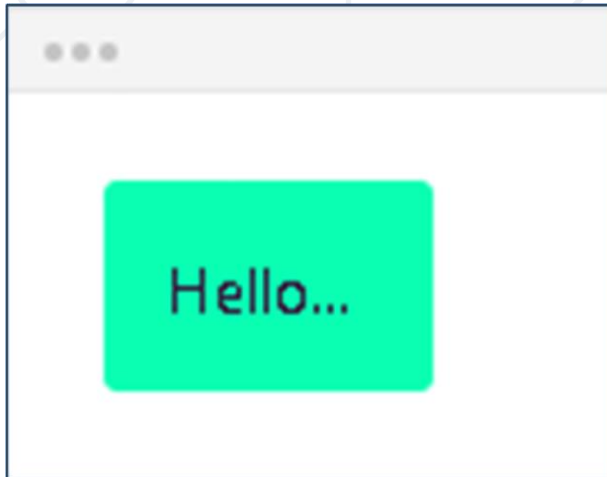
- The text is indented

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



- **text-overflow** - defines how the hidden text content behaves if it's overflowing
 - **ellipsis** - the overflowing content is replaced by . . .

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



- **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** - defines how words should break when reaching the end of line

- **normal** - words with no space will **NOT** break

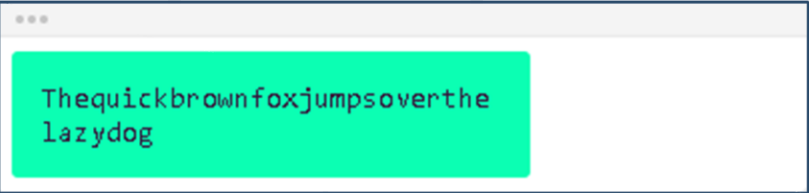
```
word-break: normal;
```



Thequickbrownfoxjumpsoverthelazydog

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

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



Thequickbrownfoxjumpsoverthe
lazydog

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

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

Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Etiam semper diam at erat pulvinar, at pulvinar felis
blandit. Vestibulum volutpat tellus diam, consequat
gravida libero rhoncus ut. Maecenas imperdiet felis nisi,
fringilla luctus felis hendrerit sit amet.

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

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

Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Etiam semper diam at erat pulvinar, at pulvinar felis
blandit. Vestibulum volutpat tellus diam, consequat
gravida libero rhoncus ut. Maecenas imperdiet felis nisi,
fringilla luctus felis hendrerit sit amet.

- 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** - defines the color of the background

- **transparent**

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

- Specify the background color with:


- HEX
- RGB/RGBA
- Named color

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

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

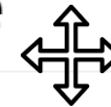
```
cursor: pointer;
```

some text



```
cursor: move;
```

move




```
cursor: none;
```

no cursor

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

	A	B
1		
2		



■ 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

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





Font Awesome Icons

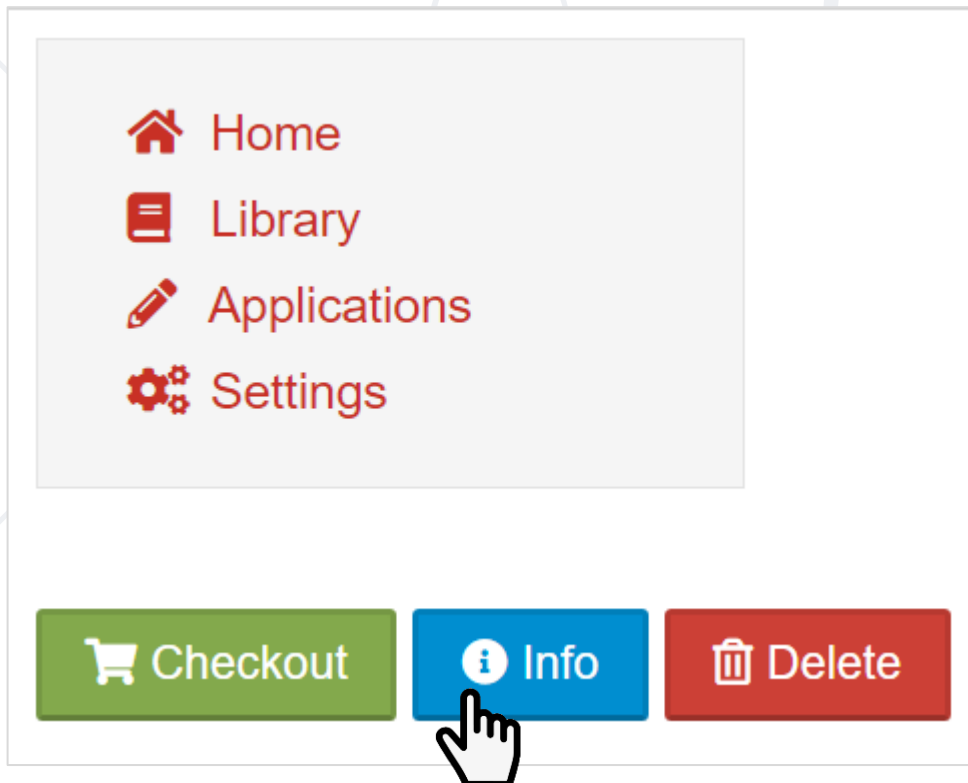
- **Font Awesome** provides vector icons, emojis, etc.
 - Add the following link inside **<head>**
 - Or import Font Awesome in the **CSS** file
 - Choose an icon → copy the **<i>** element → paste it in your HTML file



```
<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';
```

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



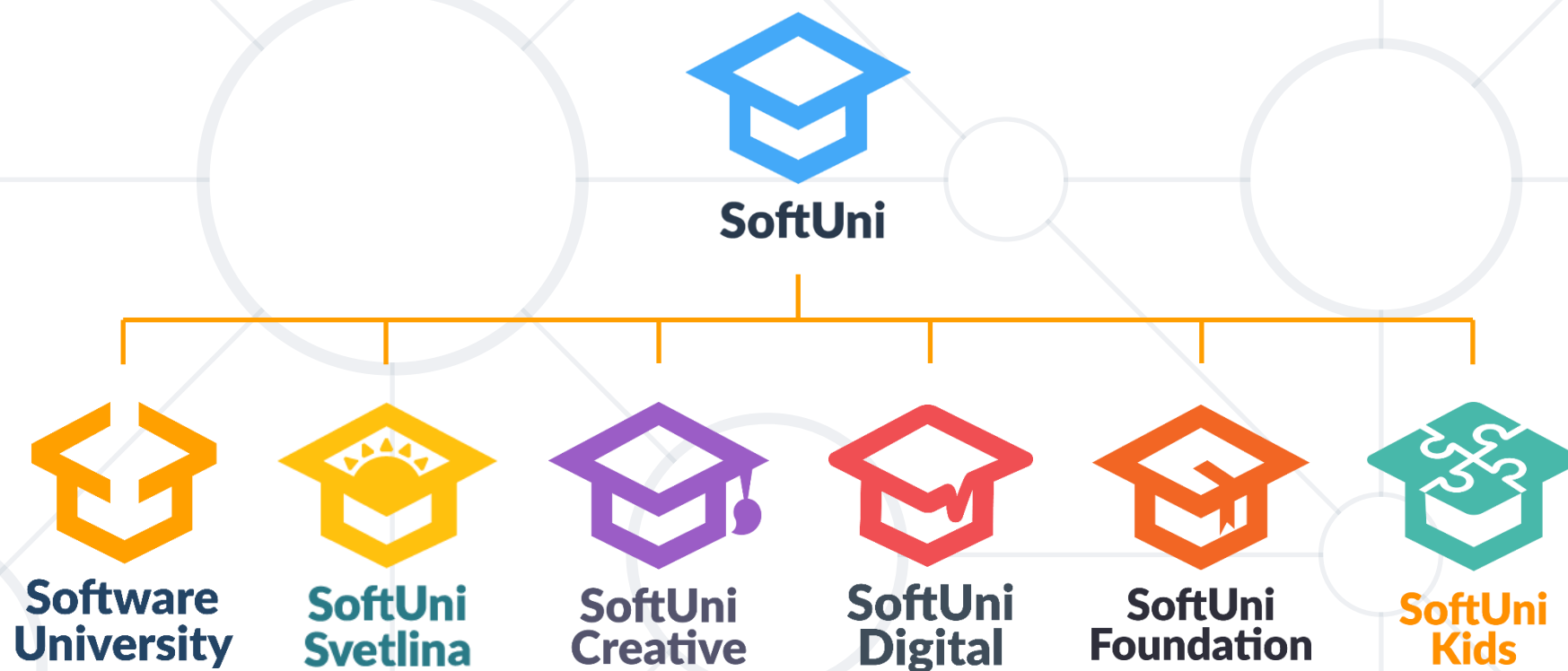
- Hints:

```
<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>
```

- 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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