

## Embedded fonts

In the mid-1990s, there were concerted efforts made by Microsoft and Bitstream (partnered with Netscape) to develop embedded font technologies. With embedded fonts, a separate file containing the necessary character set for the document is provided with the HTML document via the `link` element.

Not surprisingly, at the height of the Browser Wars, there was no spirit of cooperation in the embedded font field, so the result was two competing and incompatible embedded font technologies. Microsoft's Embedded Open Type worked only on Internet Explorer on Windows. Bitstream (a font design company) created TrueDoc Dynamic fonts that were initially supported by Netscape 4, but then dropped in Gecko-based Netscape 6. Bitstream has since thrown in the towel on TrueDoc technology for the Web due to lack of browser support. For now, embedded fonts are largely an ignored technology.

For information on Embedded Open Type, see [www.microsoft.com/typography/web/embedding/default.aspx](http://www.microsoft.com/typography/web/embedding/default.aspx). For information on Bitstream's TrueDoc technology, see [www.truedoc.com](http://www.truedoc.com).

## Font Family

The CSS specification provides the `font-family` property for specifying the font face for text elements.

### font-family

---

**Values:** `[[<family-name> | <generic-family> ] [,<family-name> | <generic-family> ]*] | inherit`

**Initial value:** Depends on user agent (the default font in the browsing device)

**Applies to:** All elements

**Inherited:** Yes

Use the `font-family` property to specify any font (or list of fonts, separated by commas), as shown in these examples:

```
h1 {font-family: Arial; }
tt {font-family: Courier, monospace; }
p {font-family: "Trebuchet MS", Verdana, sans-serif; }
```

The value of the property is one or more font names, separated by commas. This allows authors to provide a list of fonts, starting with a first choice, followed by a list of alternates. The user agent (typically a browser) looks for the first font on the user's machine and, if it is not found, it continues looking for the next font in the list until a match is made.

Note that in the third example, the "Trebuchet MS" is enclosed in quotation marks. Font names that contain character spaces must be enclosed in quotation marks (single or double). If the font name appears in an inline style, be sure to use single quotes if the `style` attribute uses double (or vice versa).

---

## Generic Font Families

You should include a generic font family as the last option in your list so that if the specified fonts are not found, a font that matches their general style will be substituted. Generic family names must never be enclosed in quotation marks.

The five possible generic font family values are:

**serif** (e.g., *Times New Roman*)

Serif typefaces have decorative serifs, or slab-like appendages, on the ends of certain letter strokes (Figure 18-1, left).

**sans-serif** (e.g., *Helvetica* or *Arial*)

San-serif typefaces have straight letter strokes that do not end in serifs (Figure 18-1, right).

**monospace** (e.g., *Courier* or *New Courier*)

In monospaced typefaces, all characters take up the same amount of horizontal space on a line (Figure 18-2). For example, a capital W will be no wider than a lowercase i. Compare this to normal typefaces that allot different widths to different characters.

**cursive** (e.g., *Zapf-Chancery* or *Comic Sans*)

Cursive fonts emulate a script or handwritten appearance.

**fantasy** (e.g., *Western*, *Impact*, or some display-oriented font)

Fantasy fonts are purely decorative and would be appropriate for headlines and other display type. Fantasy is not commonly used for web sites, because it is difficult to anticipate which font will be used and whether it will be legible online.



Figure 18-1. Serif and sans-serif font characters

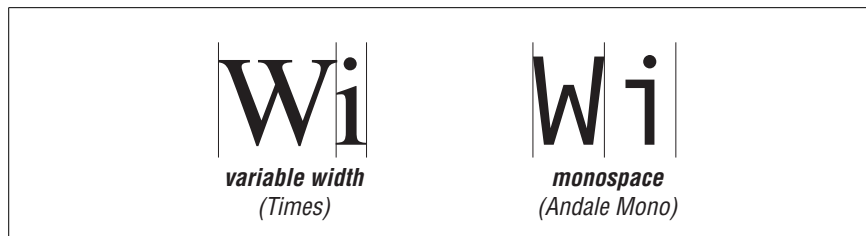


Figure 18-2. Monospace and normal font characters