THE CONSEQUENCES OF
WEB FONTS

@bram_stein
In olden times when wishing still helped one, there lived a king whose daughters were all beautiful, but the youngest was so beautiful that the sun itself, which has seen so much, was astonished whenever it shone in her face. Close by the king’s castle lay a great dark forest, and under an old lime-tree in the forest was a well, and when the day was very warm, the king’s child went out into the forest and sat down by the side of the cool fountain, and when she was bored she took a golden ball, and threw it up on high and caught it, and this ball was her favourite plaything.

Now it so happened that on one occasion the princess’s golden ball did not fall into the little hand which she was holding up for it, but on to the ground beyond, and rolled straight into the water.
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The Brothers Grimm, Grimm's Household Tales

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Grimm's Household Tales
<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>Safari</th>
<th>Opera</th>
<th>IE9</th>
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## FOUT vs FOIT

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<th>Chrome</th>
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</tbody>
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50% use web fonts
font size ~70kB
1-4 fonts per site
FOUT is PROGRESSIVE ENHANCEMENT
CSS font-rendering

swap · block · optional
@font-face {
  font-family: MyFont;
  src: url(myfont.woff);
  font-rendering: swap infinite;
}

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The Brothers Grimm

Grimm's Household Tales
@font-face {
    font-family: MyFont;
    src: url(myfont.woff);
    font-rendering: block 3s;
}

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  font-family: MyFont;
  src: url(myfont.woff);
  font-rendering: optional;
}

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hand which she was holding up for it, but on to
the ground beyond, and rolled straight into the
forest.
@font-face {
  font-family: MyIcons;
  src: url(myicons.woff);
  font-rendering: block infinite;
}

.icon {
  font-family: MyIcons;
}
Browser support for font-rendering

<table>
<thead>
<tr>
<th></th>
<th>IE9</th>
<th>IE10</th>
<th>IE11</th>
<th>Chrome</th>
<th>Firefox</th>
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<th>Opera</th>
<th>Android</th>
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</thead>
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<td>No</td>
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<td>No</td>
</tr>
</tbody>
</table>
use javascript
```javascript
var font = new FontFace('MyFont',
   'url(myfont.woff)',
   { weight: 400 }
);

font.load().then(function () {
   // font has loaded
});
```
## Browser support for CSS font loading

<table>
<thead>
<tr>
<th></th>
<th>IE9</th>
<th>IE10</th>
<th>IE11</th>
<th>Chrome</th>
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</thead>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
var observer = new FontFaceObserver('MyFont',
  { weight: 400 }
);

observer.check().then(function () {
  // font has loaded
});
... 

```javascript
var html = document.documentElement;

observer.check().then(function () {
    html.classList.add("myfont-active");
}, function () {
    html.classList.add("myfont-inactive");
});
```
<html class="myfont-active">
  ...
</html>

<html class="myfont-inactive">
  ...
</html>
html {
  font-family: Verdana, sans-serif;
}

html {
    font-family: Arial, sans-serif;
}

.myfont-active {
    font-family: MyFont, Arial, sans-serif;
}
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well.
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caching
30% cache hit rate
@font-face {
  font-family: My Family;
  src: url(font.woff2) format('woff2'),
      url(font.woff) format('woff');
}
## Browser support for web font formats

<table>
<thead>
<tr>
<th></th>
<th>IE9</th>
<th>IE10</th>
<th>IE11</th>
<th>Chrome</th>
<th>Firefox</th>
<th>Safari</th>
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</thead>
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<tr>
<td>WOFF2</td>
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<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
@font-face {
  font-family: My Family;
  src: url(font.woff2) format('woff2'),
      url(font.woff) format('woff'),
      url(font.otf) format('opentype');
}
subset
I ❤ München
I ❤ München
subset with care
fallback fonts
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```css
body {
    font-family: MyFont, Arial, sans-serif;
    font-size: 22px;
    font-size-adjust: 0.5;
}
```
## Browser support for `font-size-adjust`:

<table>
<thead>
<tr>
<th></th>
<th>IE9</th>
<th>IE10</th>
<th>IE11</th>
<th>Chrome</th>
<th>Firefox</th>
<th>Safari</th>
<th>Opera</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
body {
  font-family: Arial, sans-serif;
  font-size: 21px;
}

.myfont-active {
  font-family: MyFont, Arial, sans-serif;
  font-size: 22px;
}
FOUT
subset
fallback fonts
before
THE FROG KING, OR IRON HENRY

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FOUT is a *feature*
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@bram_stein
Geogrotesque by Emtype
Source Code Pro by Paul D. Hunt