THE PERFORMANCE AND USABILITY OF FONT LOADING

ZACH LEATHERMAN
@ FONT-FACE
THE DEFAULT BROWSER BEHAVIOR FOR IS HARMFUL TO BOTH THE AND OF CONTENT ON THE WEB.
THE DEFAULT BROWSER BEHAVIOR FOR FONT-LOADING IS HARMFUL TO BOTH THE PERCEIVED PERFORMANCE AND INTEGRITY OF CONTENT ON THE WEB.
zachleat.com
@zachleat

[Image of Nebraska State]
47%
OF THE TOP 1000

http://httparchive.org/trends.php?s=Top1000
97KB AVERAGE PAYLOAD

http://httparchive.org/trends.php?s=Top1000
Worried about JavaScript size? Remove an image!
NOT ALL REQUESTS ARE CREATED EQUAL
PERCEIVED PERFORMANCE
1. TRIGGER A FONT DOWNLOAD
2. BEHAVIOR WHILE DOWNLOADING
@font-face {

  font-family: The Font that Could;
  src: url('icanfont.woff2')
       format('woff2'),
  url('icanfont.woff')
       format('woff'),
  url('icanfont.otf')
       format('opentype');
}

WOFF2 is 30% smaller than WOFF

On average across all of Google Fonts:
https://groups.google.com/a/chromium.org/forum/#topic/chromium-dev/J27Ou4RhvQI/discussion
<!doctype html>

<style>
  @font-face {

    font-family: My Web Font;
    src: url('icanfont.woff2') format('woff2'),
         url('icanfont.woff') format('woff'),
         url('icanfont.otf') format('opentype');
  }
</style>
0 / 1 requests
<table>
<thead>
<tr>
<th>Name</th>
<th>Method</th>
<th>Status</th>
<th>Type</th>
<th>Init</th>
<th>Size</th>
<th>Time</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200 ms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>300 ms</td>
</tr>
</tbody>
</table>

0 / 1 requests | 0 B / 526 B transferred | Finish: 309 ms | DOMContentLoaded: 328 ms | Load: 327 ms
1 DAY
SINCE LAST PLURALIZATION ERROR
0 DAY SINCE LAST PLURALIZATION ERROR
IF NOT USED, NOT DOWNLOADED
<p style="font-family: My Web Font">Needs Content.</p>
Downloads with non-empty attached element:
- 36–42
- 23–28
- 6.1–8
- 7–8
- 2.3, 4.1

Downloads with empty attached element:
- 28–37
- 9–11

Downloads every time:
- 8
<table>
<thead>
<tr>
<th>Downloads with Non-Empty Attached Element</th>
<th>Downloads with Empty Attached Element</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Icon" /> 36–42</td>
<td><img src="image2" alt="Icon" /> 28–37</td>
</tr>
<tr>
<td><img src="image3" alt="Icon" /> 23–28</td>
<td><img src="image4" alt="Icon" /> 9–11</td>
</tr>
<tr>
<td><img src="image5" alt="Icon" /> 6.1–8</td>
<td></td>
</tr>
<tr>
<td><img src="image6" alt="Icon" /> 7–8</td>
<td>Download Every Time</td>
</tr>
<tr>
<td><img src="image7" alt="Icon" /> 2.3, 4.1</td>
<td></td>
</tr>
</tbody>
</table>
RESTRICT TO SPECIFIC CHARACTERS
UNICODE-RANGE
## Basic Latin

<table>
<thead>
<tr>
<th>Code Points</th>
<th>Arial</th>
<th>Chunk Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>x26</td>
<td>&amp;</td>
<td>&amp;</td>
</tr>
<tr>
<td>x41</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>x42</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>x43</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>x2B</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>x3F</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
@font-face {
    font-family: Ampersand;
    src: url('sands.woff2') format('woff2'),
        url('sands.woff') format('woff'),
        url('sands.ttf') format('truetype');
    unicode-range: U+26;
}
<div style="font-family: Ampersand">Needs Content.</div>
No requests captured.
<div style="font-family: Ampersand">Needs an &</div>
Needs an &

FALLBACK

WEB FONT
UNICODE-RANGE

ALWAYSDOWNLOADS  SMARTDOWNLOAD

<table>
<thead>
<tr>
<th>Browser</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Explorer</td>
<td>9, 10, 11</td>
</tr>
<tr>
<td>Safari</td>
<td>8</td>
</tr>
<tr>
<td>Safari</td>
<td>8</td>
</tr>
<tr>
<td>Android</td>
<td>4.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Browser</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome</td>
<td>36</td>
</tr>
<tr>
<td>Firefox</td>
<td>23</td>
</tr>
</tbody>
</table>

NOT SUPPORTED
UNICODE-RANGE

ALWAYS DOWNLOADS

SMART DOWNLOAD

Browser | Version | Platform | Version

Internet Explorer | 9, 10, 11 | | |

Chrome | 8 | | |

Safari | 8 | | |

Android | 4.1 | | |

Google Chrome | 36 | | |

Firefox | 23 | | |

NOT SUPPORTED
USED IN DOCUMENT CONTENT
FONT-WEIGHT
FONT-STYLE

Images courtesy of http://www.w3.org/TR/css3-fonts/
<!doctype html>
<style>
@font-face {
  font-family: My Web Font;
  src: url('icanfont.woff2') format('woff2'),
      url('icanfont.woff') format('woff'),
      url('icanfont.otf') format('opentype');

  font-weight: 400;
  font-style: normal;
}
</style>
<style>
  p {
    font-family: My Web Font;
    font-weight: 400;
    font-style: normal;
  }
</style>

<p>Roman Text</p>
@font-face {
  font-family: My Web Font;
  font-weight: 400;
  font-style: normal;
}

p {
  font-family: My Web Font;
  font-weight: 400;
  font-style: normal;
}
@font-face {
  font-family: My Web Font;
  font-weight: 400;
  font-style: normal;
}

p {
  font-family: My Web Font;
  font-weight: 400;
  font-style: normal;
}
FONT-WEIGHT

DEFAULT CSS
font-weight: normal;

DEFAULT CSS
font-weight: bold;

100 200 300 400 500

600 700 800 900

Lighter weights

Bolder weights
p {
  font-weight: 500;
  font-style: normal;
}

/* REPEAT THE SAME, WITH font-style: italic; */
We will be hosting invitational interview events in Seattle on April 18th, 24th and 25th. We are looking to hire Top-notch Engineers who will help us design and develop the systems that power our service and take this business to the next level. You should be passionate about writing high quality, well tested, maintainable code using Ruby, Rails, Java, MySQL, OR any other open source technologies. We use Scrum, test-driven development, and pair programming to meet business objectives, building our software incrementally, ship code continuously, and refactoring systems as needed. If our business and culture sound like they might be a fit, I’d love to hear from you.

Here’s what to do first: Complete a 3-part coding challenge within the next few days, if you need more time, let me know!

Please click here for the coding challenge and include your full name and email address when entering the tool. The application works best in Firefox or IE. Expect the challenge to take anywhere between 20 and 90 minutes, though there is no time limit. Be sure to read the question carefully before diving into an answer. Feel free to use another editor to work on your code. We want to set you up for success and should you be selected for face to face interviews you will be coding (a lot) with our interviewers.
We will be hosting invitational interview events in Seattle on April 18th, 24th and 25th. We are looking to hire top-notch Engineers who will help us design and develop the systems that power our service and take this business to the next level. You should be passionate about writing high quality, well-tested, maintainable code using Ruby, Rails, Java, MySQL, or any other open source technologies. We use Scrum, test-driven development, and pair programming to meet business objectives, building our software incrementally, ship code continuously, and refactoring systems as needed. If our business and culture sound like they might be a fit, I’d love to hear from you.

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p {
  font-weight: 600;
  font-style: normal;
}

/* FAUX BOLD */
@font-face { font-weight: 500; font-style: normal; }
@font-face { font-weight: 400; font-style: normal; }
@font-face { font-weight: 300; font-style: normal; }
@font-face { font-weight: 200; font-style: normal; }
@font-face { font-weight: 100; font-style: normal; }
/* END FAUX BOLD */

/* REPEAT THE SAME, WITH font-style: italic; */
FONT-WEIGHT

100 200 300 400 500

Normal/Roman @font-face

Faux Bold

600 700 800 900

Bold @font-face
We will be hosting invitational interview events in Seattle on April 18th, 24th and 25th. We are looking to hire Top-notch Engineers who will help us design and develop the systems that power our service and take this business to the next level. You should be passionate about writing high quality, well tested, maintainable code using Ruby, Rails, Java, MySQL or any other open source technologies. We use Scrum, test-driven development, and pair programming to meet business objectives, build our software incrementally, ship code continuously, and refactoring systems as needed. If our business and culture sound like they might fit, I'd love to hear from you.

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if selected for face to face interviews you will be coding (a lot) with our interviewers.
We will be hosting invitational interview events in Seattle on April 18th and 25th. We are looking to hire Top-notch Engineers who will help us design and develop the systems that power our service and take this business to the next level. You should be passionate about writing high quality, well testable, maintainable code using Ruby, Rails, Java, MySQL, OR any other open source technologies. We use Scrum, test-driven development, and pair programming to meet business objectives, building our software incrementally, ship continuously, and refactoring systems as needed. If our business and culture sound like they might be a fit, I’d love to hear from you.

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DISABLE FAUX FONTS WITH 
FONT-SYNTHESIS
## font-synthesis [spec]

The `font-synthesis` property controls rendering of faux styles when the used font family does not have all the required styles. Setting `font-synthesis` to `weight` or `style` (or both) enables faux bold and faux italic. Setting `font-synthesis` to `none` disables all faux styles.

<table>
<thead>
<tr>
<th>Browser</th>
<th>Version</th>
<th>Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome</td>
<td>4 – 41</td>
<td>No</td>
</tr>
<tr>
<td>Firefox</td>
<td>3.6 – 33</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>34 – 36</td>
<td>Yes</td>
</tr>
<tr>
<td>Internet Explorer</td>
<td>6 – 11</td>
<td>No</td>
</tr>
<tr>
<td>Safari</td>
<td>3.2 – 8</td>
<td>No</td>
</tr>
<tr>
<td>Opera</td>
<td>10.1 – 28</td>
<td>No</td>
</tr>
<tr>
<td>Safari on iOS</td>
<td>3 – 8.1</td>
<td>No</td>
</tr>
<tr>
<td>Android WebKit</td>
<td>2.2 – 5.1</td>
<td>No</td>
</tr>
</tbody>
</table>
# The State of Web Type

## font-synthesis [spec]

The font-synthesis property controls rendering of faux styles when the used font family does not have all the required styles. Setting font-synthesis to weight or style (or both) enables faux bold and faux italic. Setting font-synthesis to none disables all faux styles.

<table>
<thead>
<tr>
<th>Browser</th>
<th>Version</th>
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</thead>
<tbody>
<tr>
<td>Chrome</td>
<td>4 – 41</td>
<td>No</td>
</tr>
<tr>
<td>Firefox</td>
<td>3.6 – 33</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>34 – 36</td>
<td>Yes</td>
</tr>
<tr>
<td>Internet Explorer</td>
<td>6 – 11</td>
<td>No</td>
</tr>
<tr>
<td>Safari</td>
<td>3.2 – 8</td>
<td>No</td>
</tr>
<tr>
<td>Opera</td>
<td>10.1 – 28</td>
<td>No</td>
</tr>
<tr>
<td>Safari on iOS</td>
<td>3 – 8.1</td>
<td>No</td>
</tr>
<tr>
<td>Android WebKit</td>
<td>2.2 – 5.1</td>
<td>No</td>
</tr>
</tbody>
</table>
STATE OF WEB TYPE

http://stateofwebtype.com/
<style>
@font-face {
    font-weight: 400;
    font-style: normal;
}
</style>

<p>
    Roman Text
    <strong>Bold Text</strong>
    <b>Bold Text</b>
    <em>Italic Text</em>
    <i>Italic Text</i>
</p>
BE FRUGAL
BUT NOT TOO FRUGAL
Capture and Share the World's Moments

Instagram is a fast, beautiful and fun way to share your life with friends and family.

Take a picture or video, choose a filter to transform its look and feel, then post to Instagram — It's that easy. You can even share to Facebook, Twitter, Tumblr and more. It's a new way to see the world.

Oh yeah, did we mention it's free?

Download on the App Store  GET IT ON Google play
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<table>
<thead>
<tr>
<th>Name</th>
<th>Method</th>
<th>Status</th>
<th>Type</th>
<th>Initiator</th>
<th>Size</th>
<th>Time</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>proximanova-reg-webfont.woff</td>
<td>CET</td>
<td>200</td>
<td>application</td>
<td>en US</td>
<td>13.3 KB</td>
<td>212 ms</td>
<td>400 ms</td>
</tr>
<tr>
<td>proximanova-bold-webfont.woff</td>
<td>CET</td>
<td>200</td>
<td>application</td>
<td>en US</td>
<td>13.0 KB</td>
<td>242 ms</td>
<td>600 ms</td>
</tr>
<tr>
<td>proximanova-regit-webfont.woff</td>
<td>CET</td>
<td>200</td>
<td>application</td>
<td>en US</td>
<td>13.4 KB</td>
<td>242 ms</td>
<td>800 ms</td>
</tr>
</tbody>
</table>

3 / 26 requests | 39.7 KB / 525 KB transferred
Capture and Share the World's Moments

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Take a picture or video, choose a filter to transform its look and feel, then post to Instagram — it's that easy. You can even share to Facebook, Twitter, Tumblr and more. It's a new way to see the world.

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Oh yeah, did we mention it's free?

Download on the
App Store

GET IT ON
Google Play
.page-home .content .home-login i {
    font-style: normal;
}

Saves 13.4KB for each empty-cache page load to Instagram.com.
i, cite, em, var, address, dfn, strong, b, h1, h2, h3, h4, h5, h6, th
USED IN DOCUMENT CONTENT

✓ FONT-WEIGHT

✓ FONT-STYLE

Images courtesy of http://www.w3.org/TR/css3-fonts/
1. TRIGGER A FONT DOWNLOAD
2. BEHAVIOR WHILE DOWNLOADING
AGENDA

1. TRIGGER A FONT DOWNLOAD
2. BEHAVIOR WHILE DOWNLOADING
@font-face is parsed
font starts loading
font finishes loading
@font-face is parsed
Font starts loading
Font finishes loading
I recently found your resume in our database, and your profile fits the kind of technical talent that we are looking for here at REDACTED. Within REDACTED, our group (REDACTED) is a highly visible & critical product team. We are building brand new projects that will be disruptive to the industry in more ways than one. These roles are located in Seattle. We do provide a robust relocation package and immigration support provided upon offer accept.
I recently found your resume in our database, and your profile fits the kind of technical talent that we are looking for here at REDATED. Within REDATED, our group (REDATED) is a highly visible & critical product team. We are building brand new projects that will be disruptive to the industry in more ways than one. These roles are located in Seattle. We do provide a robust relocation package and immigration support provided upon offer accept.
FLASH OF INVISIBLE TEXT
FOIT
“People will visit a Web site less often if it is slower than a close competitor by more than 250 milliseconds.”

http://www.nytimes.com/2012/03/01/technology/impatient-web-users-flee-slow-loading-sites.html
Instagram is a fun and easy way to share your life with friends and family.

Take a picture or video, choose a filter to transform its look and feel, then post to Instagram — it’s that easy. You can even share to Facebook, Twitter, Tumblr and more. It’s a new way to see the world.

Oh, yeah, did we mention it’s free?

Download on the
App Store

Get it on
Google Play
Capture and Share
the World’s Moments

Instagram is a fast, beautiful and fun way to share your life with friends and family.

Take a picture or video, choose a filter to transform its look and feel, then post to Instagram — it’s that easy. You can even share to Facebook, Twitter, Tumblr and more. It’s a new way to see the world.

Oh yeah, did we mention it’s free?

Download on the
App Store

Get it on
Google play
"...if a page hasn't loaded within 3 seconds, up to 40% of the users will abandon the site..." - @TheMattShull #perfmatters #wpo
From one gift come many.
I recently found your resume in our database, and your profile fits the kind of technical talent that we are looking for here at REDACTED. Within REDACTED, our group (REDACTED) is a highly visible & critical product team. We are building brand new projects that will be disruptive to the industry in more ways than one. These roles are located in Seattle. We do provide a robust relocation package and immigration support provided upon offer accept.
I recently found your resume in our database, and your profile fits the kind of technical talent that we are looking for here at REDACTED. Within REDACTED, our group (REDACTED) is a highly visible & critical product team. We are building brand new projects that will be disruptive to the industry in more ways than one. These roles are located in Seattle. We do provide a robust relocation package and immigration support provided upon offer accept.
FLASH OF UNSTYLED TEXT
FOUT
IS 3 SECONDS
A GOOD TIMEOUT?
"...if a page hasn't loaded within 3 seconds, up to 40% of the users will abandon the site..." - @TheMattShull #perfmatters #wpo
NOT JUST A PERFORMANCE PROBLEM
Mitt Romney is Officially Running for President

By Betsy Woodruff
Mitt Romney Is Officially Running for President

By Betsy Woodruff
Mitt Romney Is Officially Not Running for President

By Betsy Woodruff
OF THE TOP 1000
47% of the top 1000

http://httparchive.org/trends.php?s=Top1000
Good
I recently found your resume in our database, and your profile fits the kind of technical talent that we are looking for here at REDACTED. Within REDACTED, our group (REDACTED) is a highly visible & critical product team. We are building brand new projects that will be disruptive to the industry in more ways than one. These roles are located in Seattle. We do provide a robust relocation package and immigration support provided upon offer accept.

We will be hosting invitational interview events in Seattle on April 18th, 24th and 25th. We are looking to hire Top-notch Engineers who will help us design and develop the systems that power our service and take this business to the next level. You should be passionate about writing high quality, well tested, maintainable code using Ruby, Rails, Java, MySQL, or any other open source technologies. We use Scrum, test-driven development, and pair programming to meet business objectives, building our software incrementally, ship code continuously, and refactoring systems as needed. If our business and culture sound like they might be a fit, I’d love to hear from you.

Looking forward to the first of April! —another
I recently found your resume in our database, and your profile fits the kind of technical talent that we are looking for here at REDACTED. Within REDACTED, our group (REDACTED) is a highly visible & critical product team. We are building brand new projects that will be disruptive to the industry in more ways than one. These roles are located in Seattle. We do provide a robust relocation package and immigration support provided upon offer accept.

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You're invited to the first of several interviews...
FOIT
FOIT TO FOUT, 3 SECONDS
FOIT TO FOUT, 3 SECONDS

ABCD

3 S
FOIT TO FOUT, 3 SECONDS

ABCDEFGH

3 S
FOUT, 0 SECONDS

ABCDEFGH
“But FOUT is ugly.”
DO NOTHING
EMBRACE BROWSER DEFAULTS

FOIT INFINITE TIMEOUT

FOIT N SECOND TIMEOUT
N > 0

O SECOND TIMEOUT FOUT
DO NOTHING

EMBRACE BROWSER DEFAULTS

FOIT INFINITE TIMEOUT

FOIT N SECOND TIMEOUT

0 SECOND TIMEOUT

FOUT

FOUT

N > 0
DO NOTHING
EBRACE BROWSER DEFAULTS

FOIT
INFINITE TIMEOUT

FOIT
N SECOND TIMEOUT
N > 0

FOIT
0 SECOND TIMEOUT
FOUT
DO NOTHING
EMBRACE BROWSER DEFAULTS

FOIT INFINITE TIMEOUT

FONT REQUESTS ARE A SINGLE POINT OF FAILURE
STOP BUTTON HAS NO EFFECT
ANTI-PATTERNS
CSS
ONLOAD
<style>
  h1 { font-family: serif; }
  .loaded h1 { font-family: My Web Font; }
</style>

<link href="fonts.css" onload="document.body.className+=' loaded';" rel="stylesheet">
@font-face {
    font-family: My Web Font;
    src: url('icanfont.woff') format('woff');
}

@font-face {
    font-family: My Web Font;
    src: url('icanfontbold.woff') format('woff');
    font-weight: 700;
}
Blocking Fonts.css

Blocking Font Requests
BLOCKING Fonts.css

BLOCKING Font Requests

Fonts start loading
Blocking Fonts on load

Fonts start loading

Blocking Font Requests

Fonts finish loading
ASYNC-CSS
<style>
  h1 { font-family: serif; }
  .loaded h1 { font-family: My Web Font; }
</style>

<link href="fonts.css" media="none"
  onload="document.body.className+='loaded'; this.media='all'
  rel="stylesheet">
ASYNC
FONTS.CSS

BLOCKING
FONT REQUESTS

Fonts start loading
ASYNC FONTS.CSS

onload

BLOCKING FONT REQUESTS

Fonts start loading
ASYNC FONTS.CSS

onload

ASYNC FONTS.CSS

onload

Fonts start loading

BLOCKING FONT REQUESTS

Fonts finish loading

A

B
FILAMENTGROUP / LOADCSS

https://github.com/filamentgroup/loadCSS

filament group
@font-face {
    font-family: My Web Font;
    src: url('data:application/x-font-woff; charset=utf-8;base64,...') format('woff');
}

@font-face {
    font-family: My Web Font;
    src: url('data:application/x-font-woff; charset=utf-8;base64,...') format('woff');
    font-weight: 700;
}

ONE 50KB CSS REQUEST
NO FONT REQUESTS
@font-face {
  font-family: Roboto;
  src: url('data:application/x-font-woff; charset=utf-8;base64,...') format('woff');
}

@font-face {
  font-family: Roboto;
  src: url('data:application/x-font-woff; charset=utf-8;base64,...') format('woff');
  font-weight: 700;
}
FONT-RENDERING CSS PROPERTY

https://github.com/KenjiBaheux/css-font-rendering
from Kenji Baheux, Ilya Grigorik, David Kuettel, Tab Atkins
CSS FONT LOADING

http://dev.w3.org/csswg/css-font-loading/
FONTFACEONLOAD

github.com/zachleat/fontfaceonload

USES THE CSS FONT LOADING API WHEN AVAILABLE.

FONTFACEOBSERVER

github.com/bramstein/fontfaceobserver/

INCLUDES A NICE PROMISES POLYFILL
```javascript
var doc = document,
    docEl = doc.documentElement;

doc.fonts.load("1em Raleway")
  .then(function() {
    // The font has loaded.
    docEl.className += " raleway-loaded";
  });
```
body {
  font-family: sans-serif;
}
.
.raleway-loaded body {
  font-family: Raleway, sans-serif;
}
A
Font starts loading

FONT REQUEST
FONT REQUEST

A Font starts loading

B Font finishes loading
RALEWAY
FOUT

N SECOND

TIMEOUT

N > 0

FOIT

FOUT
```javascript
var docEl = document.documentElement;
docEl.className += " raleway-loading";

window.setTimeout(function() {
    docEl.className += " raleway-fallback";
}, 1000);

document.fonts.load("1em Raleway").then(function() {
    docEl.className += " raleway-loaded";
});
```
.raleway-loading body {
  color: transparent;
}
.raleway-fallback body,
.raleway-loaded body {
  color: inherit;
}
.raleway-fallback body {
  font-family: serif;
}
.raleway-loaded body {
  font-family: Raleway, serif;
}
FOIT TO FOUT, 1 SECOND

font-rendering: block 1s
swap infinite;
FOIT TO FOUT, 1 SECOND

font-rendering: block 1s swap infinite;

RALEWAY

1 S
FOIT TO FOUT, 1 SECOND

font-rendering: block 1s swap infinite;

RALEWAY

1 S

@FONT-FACE LOAD
Mitt Romney Is Officially Running for President

By Betsy Woodruff
ONE REPAIN
TO RULE THEM ALL
document.fonts.load("1em Raleway").then(function() {
    docEl.className += " raleway-loaded";
});

BECOMES

Promise.all([
    document.fonts.load("400 1em Raleway"),
    document.fonts.load("700 1em Raleway")
]).then(function () {
    docEl.className += " raleway-loaded";
});
FONT REQUESTS
TWO REPAINTS
TO RULE THEM ALL
MOST JARRING
REPAINT FOR ROMAN

ROMAN
MOST JARRING
REPAINT FOR ROMAN

ROMAN

BOLD ITALIC
BOLD ITALIC
MOST JARRING REPAINT FOR ROMAN

ROMAN

BOLD ITALIC BOLD ITALIC

FAUX VERSIONS
MOST JARRING REPAIN FOR ROMAN

FINAL REPAIN

ROMAN

BOLD ITALIC BOLD ITALIC

FAUX VERSIONS
We will be hosting invitational interview events in Seattle on April 18th, 24th and 25th. We are looking to hire Top-notch Engineers who will help us design and develop the systems that power our service and take this business to the next level. You should be passionate about writing high quality, well tested, maintainable code using Ruby, Rails, Java, MySQL, OR any other open source technologies. We use Scrum, test-driven development, and pair programming to meet business objectives, building our software incrementally, ship code continuously, and refactoring systems as needed. If our business and culture sound like they might be a fit, I’d love to hear from you.

Here’s what to do first: Complete a 3-part coding challenge within the next few days, If you need more time, let me know!
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FLASH OF FAUX TEXT
zachleat.com/web/foft/
MINIMIZE THE FALBACK TO WEBFONT REFLOW
FALLBACK STYLE

font-family
# Font Family Reunion

Compatibility tables for default local fonts.

<table>
<thead>
<tr>
<th>OS</th>
<th>Font Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snow Leopard 10.6.8</td>
<td>Pippins</td>
</tr>
<tr>
<td>Lion 10.7.5</td>
<td>Pippins</td>
</tr>
<tr>
<td>Mountain Lion 10.8.4</td>
<td>Pippins</td>
</tr>
<tr>
<td>Mavericks 10.9.0</td>
<td>Pippins</td>
</tr>
<tr>
<td>XP (NT 5.1 SP3)</td>
<td>(None available)</td>
</tr>
<tr>
<td>XP (NT 5.2)</td>
<td>(None available)</td>
</tr>
<tr>
<td>7 (NT 6.1)</td>
<td>Droid Sans</td>
</tr>
<tr>
<td>8 (NT 6.2)</td>
<td>Droid Sans</td>
</tr>
<tr>
<td>8.1 (NT 6.3)</td>
<td>Droid Sans</td>
</tr>
<tr>
<td>6.0</td>
<td>Pippins</td>
</tr>
<tr>
<td>6.1</td>
<td>Pippins</td>
</tr>
<tr>
<td>7.0.3</td>
<td>Pippins</td>
</tr>
<tr>
<td>7.1</td>
<td>Pippins</td>
</tr>
<tr>
<td>Jelly Bean 4.2.2</td>
<td>Droid Sans</td>
</tr>
<tr>
<td>KitKat 4.4.2</td>
<td>Droid Sans</td>
</tr>
<tr>
<td>Phone 7.5</td>
<td>Ubuntu Sans</td>
</tr>
<tr>
<td>Phone 8.0</td>
<td>Ubuntu Sans</td>
</tr>
<tr>
<td>Ubuntu 14.04</td>
<td>Ubuntu Sans</td>
</tr>
<tr>
<td>Fedora 20</td>
<td>Ubuntu Sans</td>
</tr>
</tbody>
</table>
FALLBACK STYLE

font-family
FALLBACK STYLE

font-family
font-size
font-size-adjust
line-height
WEB FONT TUNE-UP TIME:  
A FUN FONT FALLBACK EVENT


Jason Pamental  
@jpamental
There are a lot of tools at our disposal to ease the transition from fallback to webfont.
THE DEFAULT BROWSER BEHAVIOR FOR IS HARMFUL TO BOTH THE AND OF CONTENT ON THE WEB.
THE DEFAULT BROWSER BEHAVIOR FOR FONT-LOADING IS HARMFUL TO BOTH THE PERCEIVED PERFORMANCE AND INTEGRITY OF CONTENT ON THE WEB.
USE A FONT LOADING STRATEGY.
DON’T ACCEPT THE DEFAULTS.