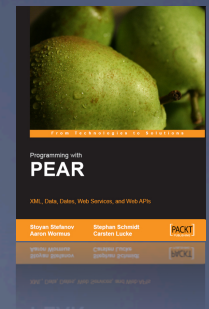
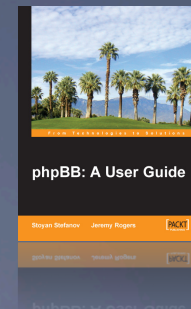
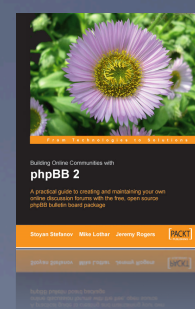
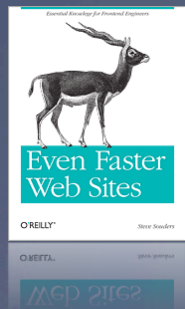
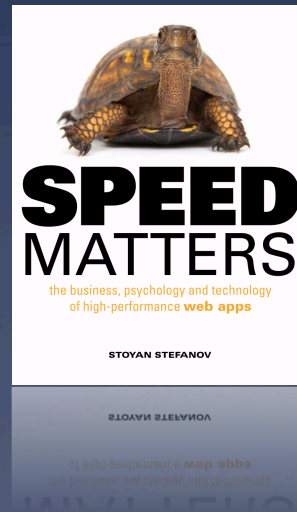


Progressive downloads and rendering

Stoyan Stefanov, Yahoo!
Fronteers, Amsterdam, 2010
<http://slideshare.net/stoyan/>

About me



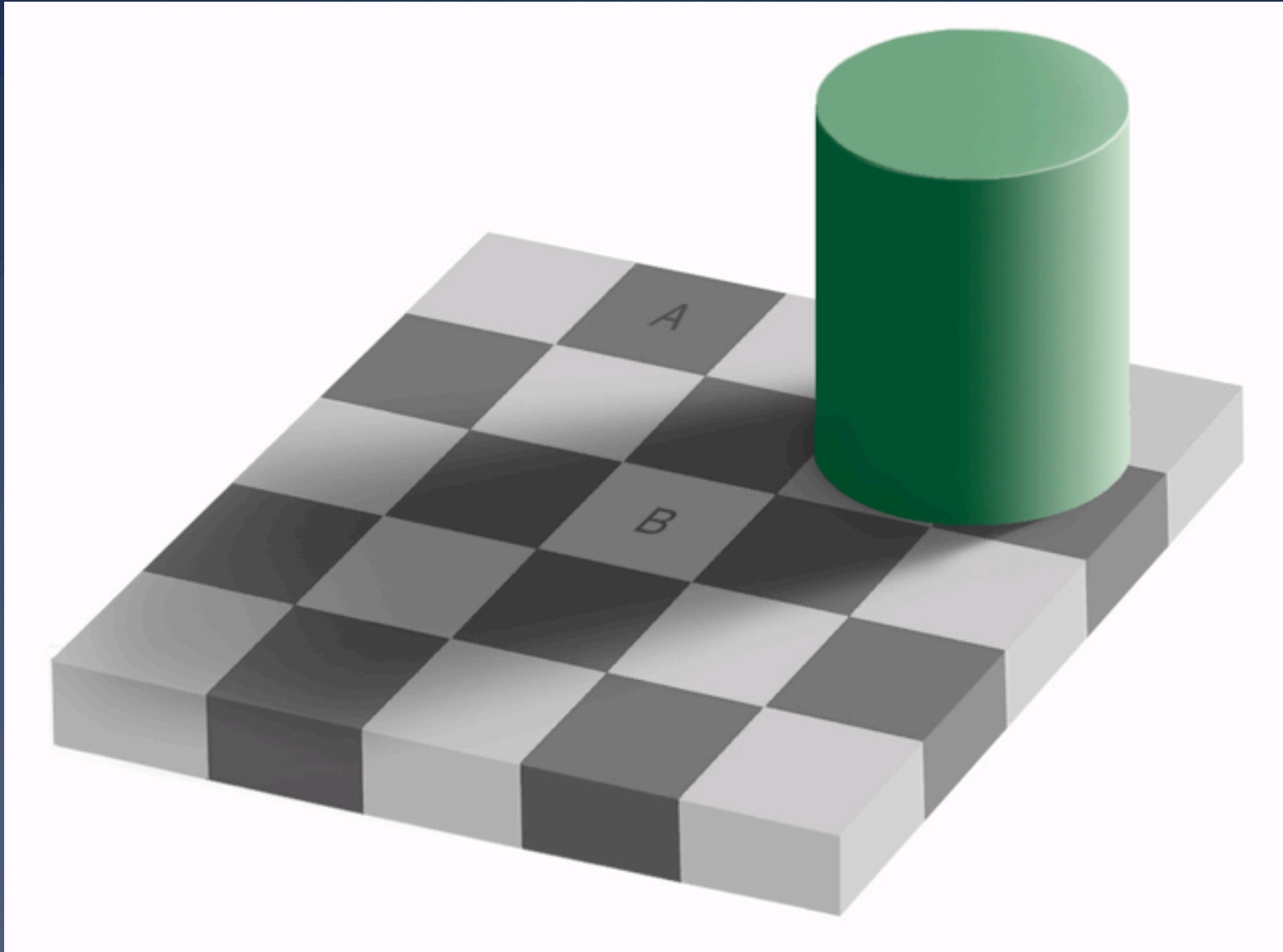
Why progressive?

μηλ βιοδραση;

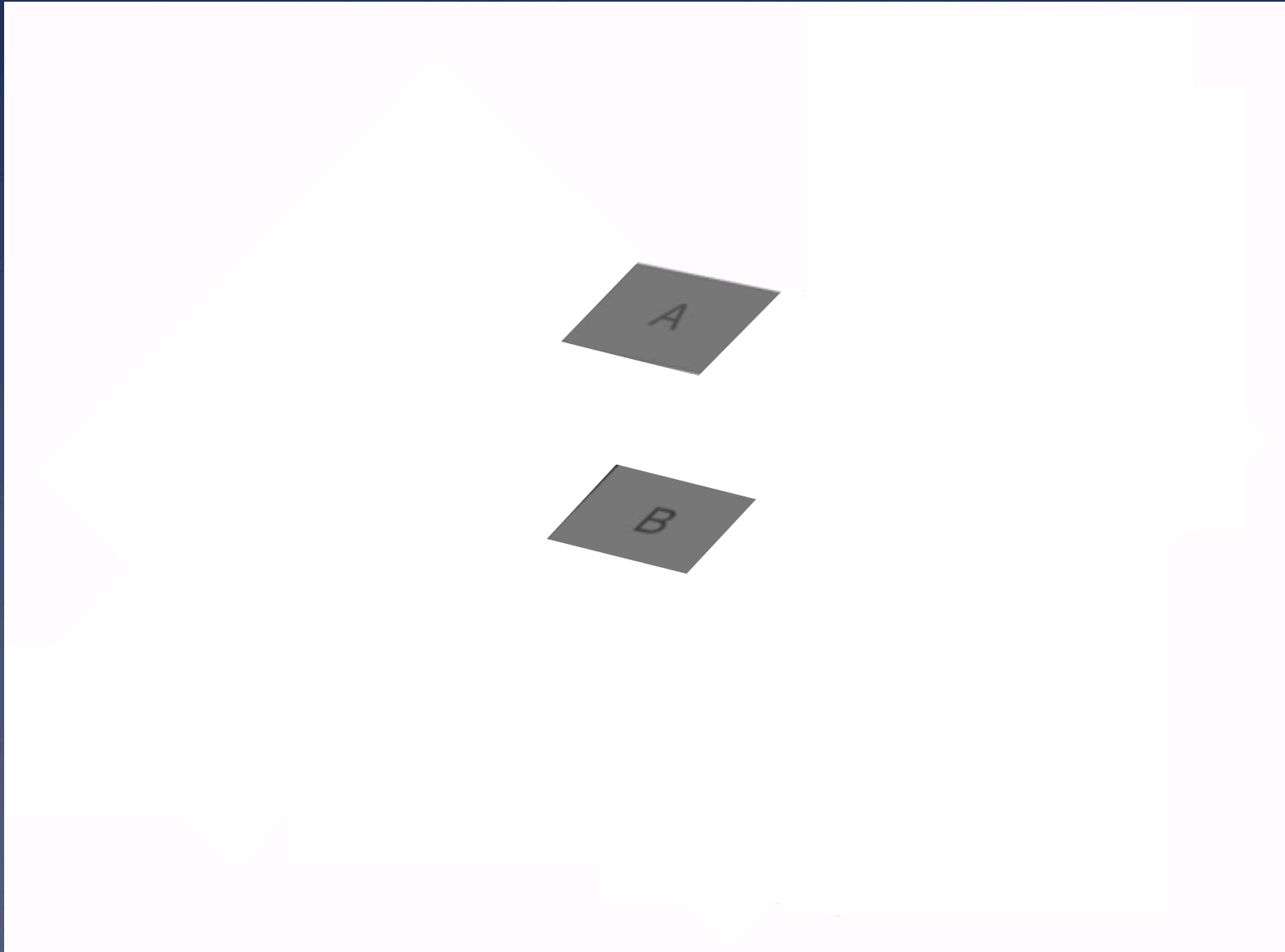
Importance of performance

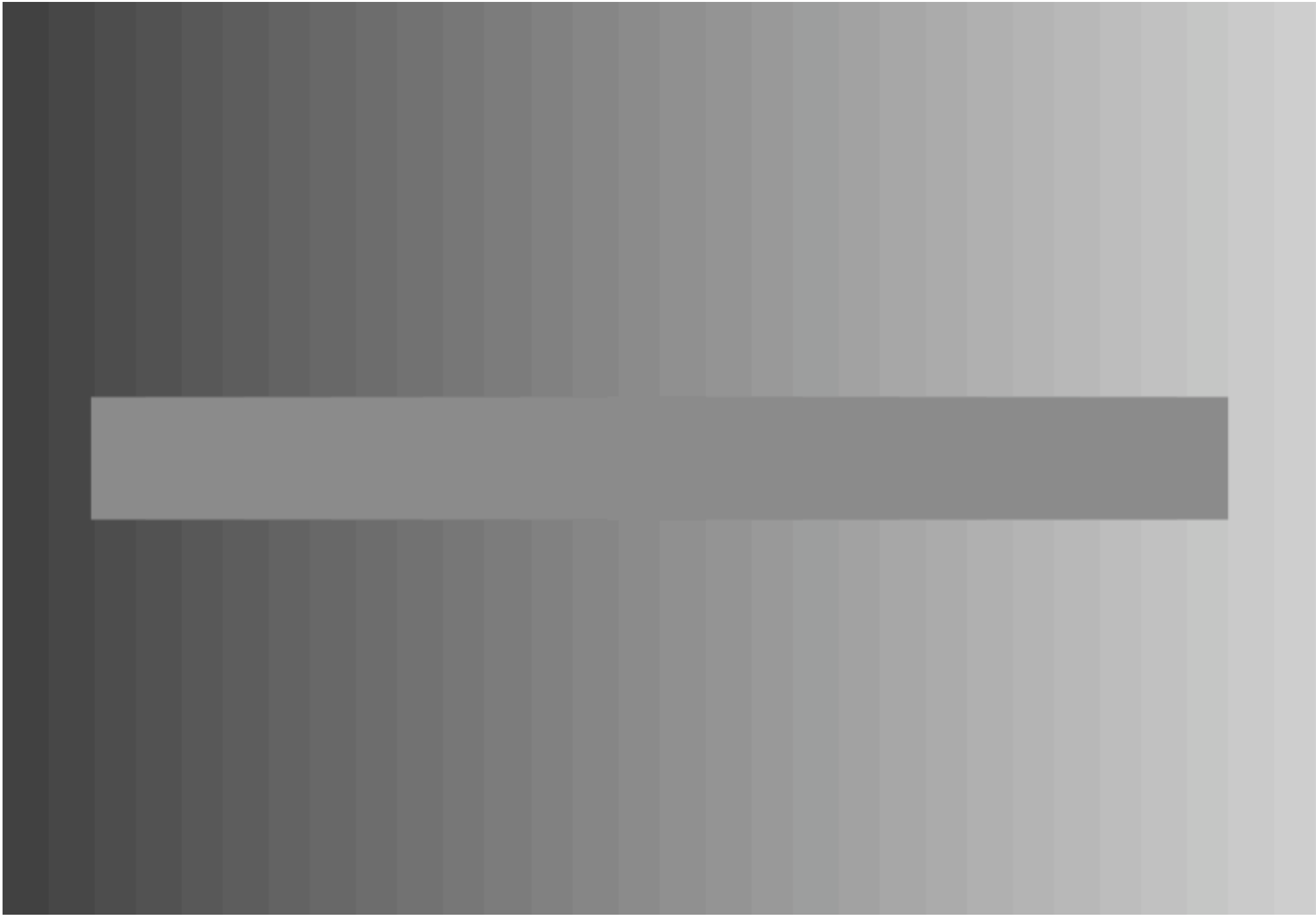
- Psychology, physiology
- Effects of waiting
- “Time is money”
- Make people happy

Perception



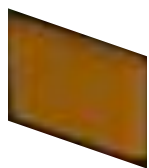
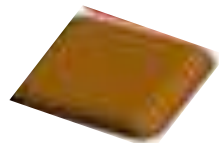
Perception











Durations



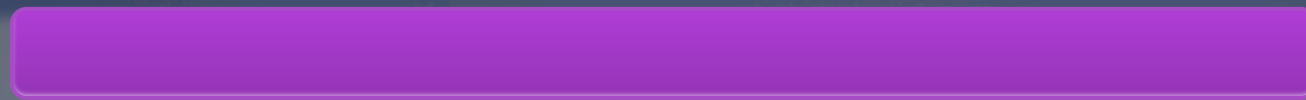
actual



expected



perceived



rem'd



time

It feels slower when...

- Unpleasant
- Unknown
- Boring
- Too much to keep track

First time experience

- Unfamiliar = slow
- Optimize empty cache or there will be no full cache

So... go progressive!

ζο... ἀο προδρεσσιβε;

But before we begin...

But before we begin...

The basics

- Reducing the # HTTP
- Gzip
- Minification
- Image smushing
- Expires
- CDN

The basics

- Yahoo!'s best practices
- Google's
- perfplanet.com

Progressive

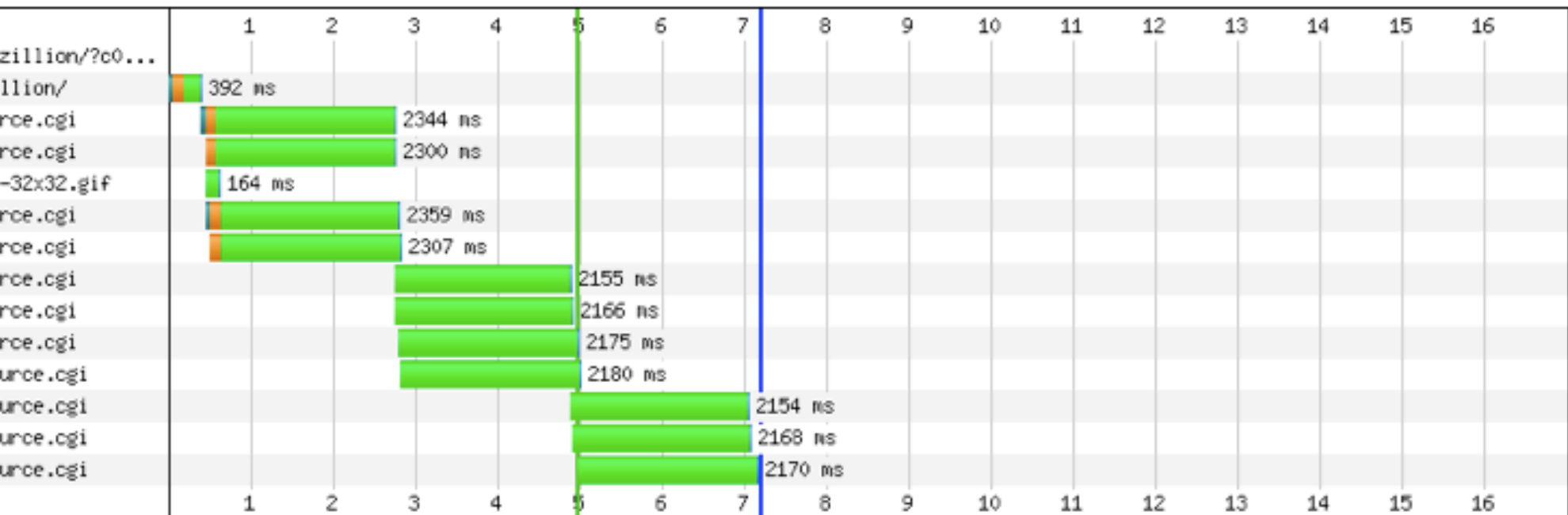
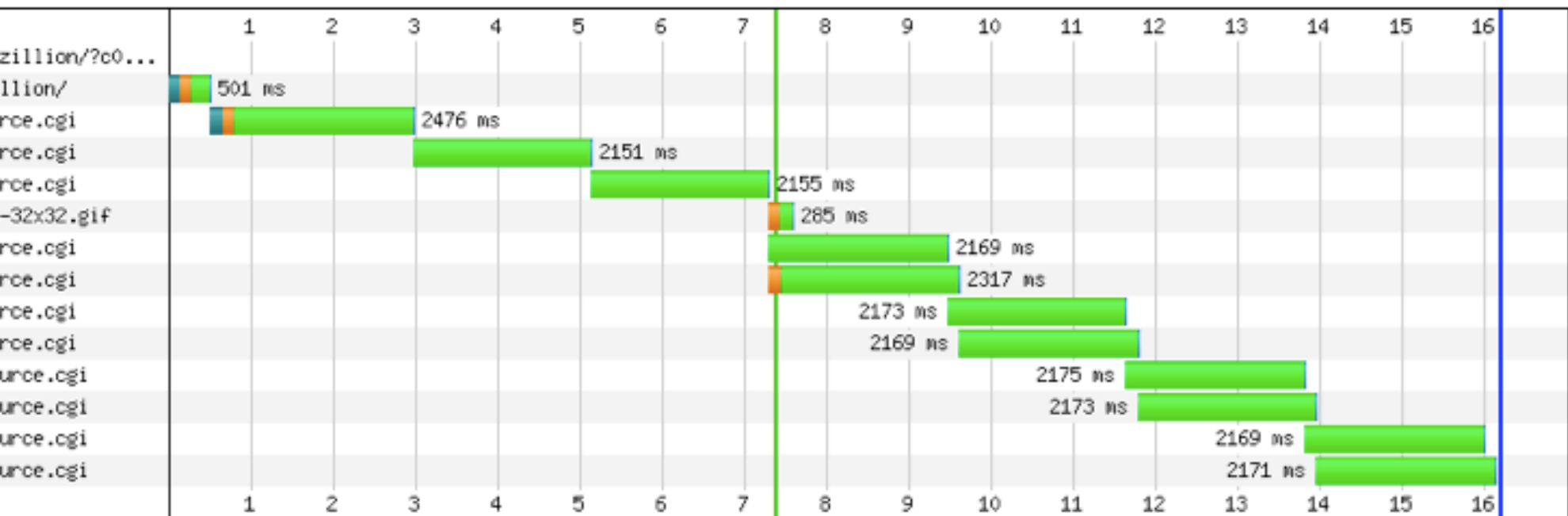
PROGRESSIVE

Progressive enhancement

Progressive enhancement

Progressive downloads

Progressive downloads



Progressive rendering

Progressive rendering

Agenda

- Blocking JavaScript
- Flushing
- CSS and rendering
- Blocking `<!--[if IE 6]>`
- Preloading, MHTML...

Blocking JavaScript

БЛОКИРУЇА JAVASCRIPT

JavaScript blocks

html

js

png

png

JavaScript blocks

- A no-no!

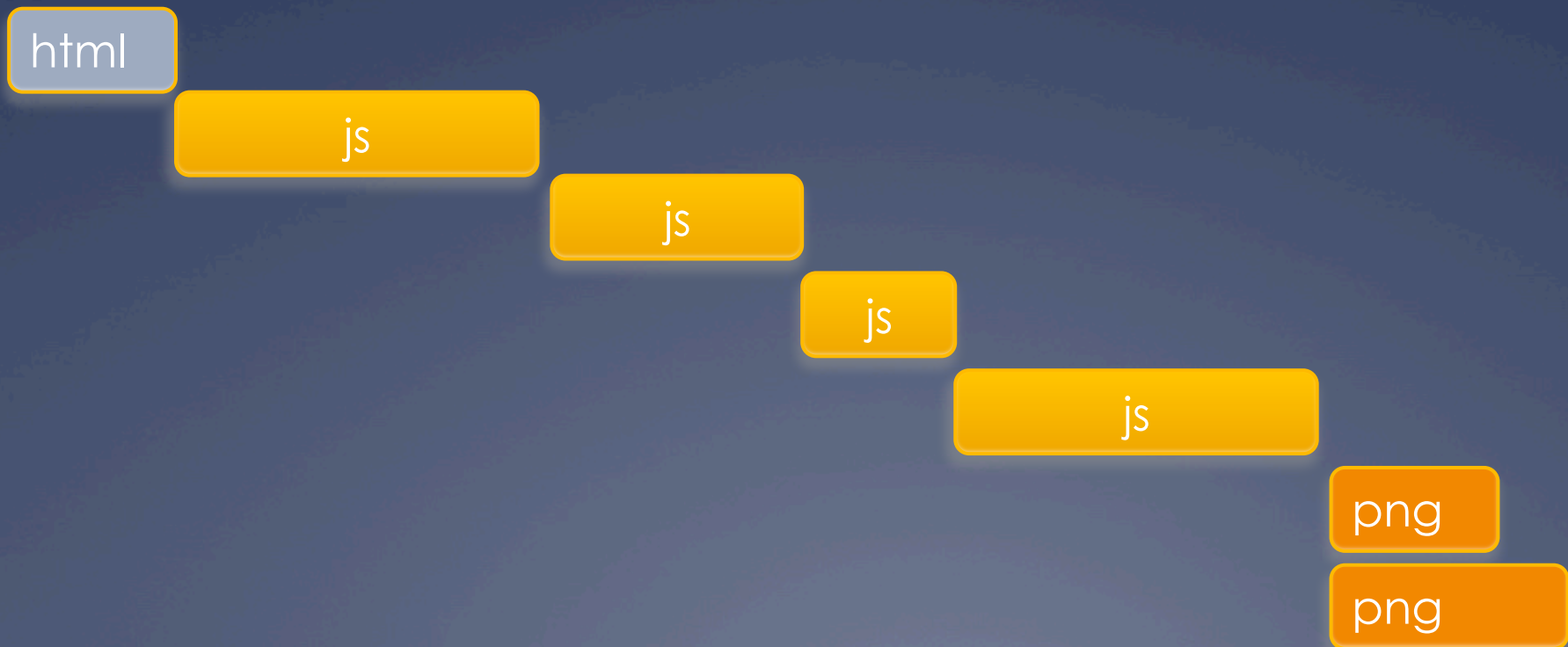
```
<script src="jquery.js"></script>
```

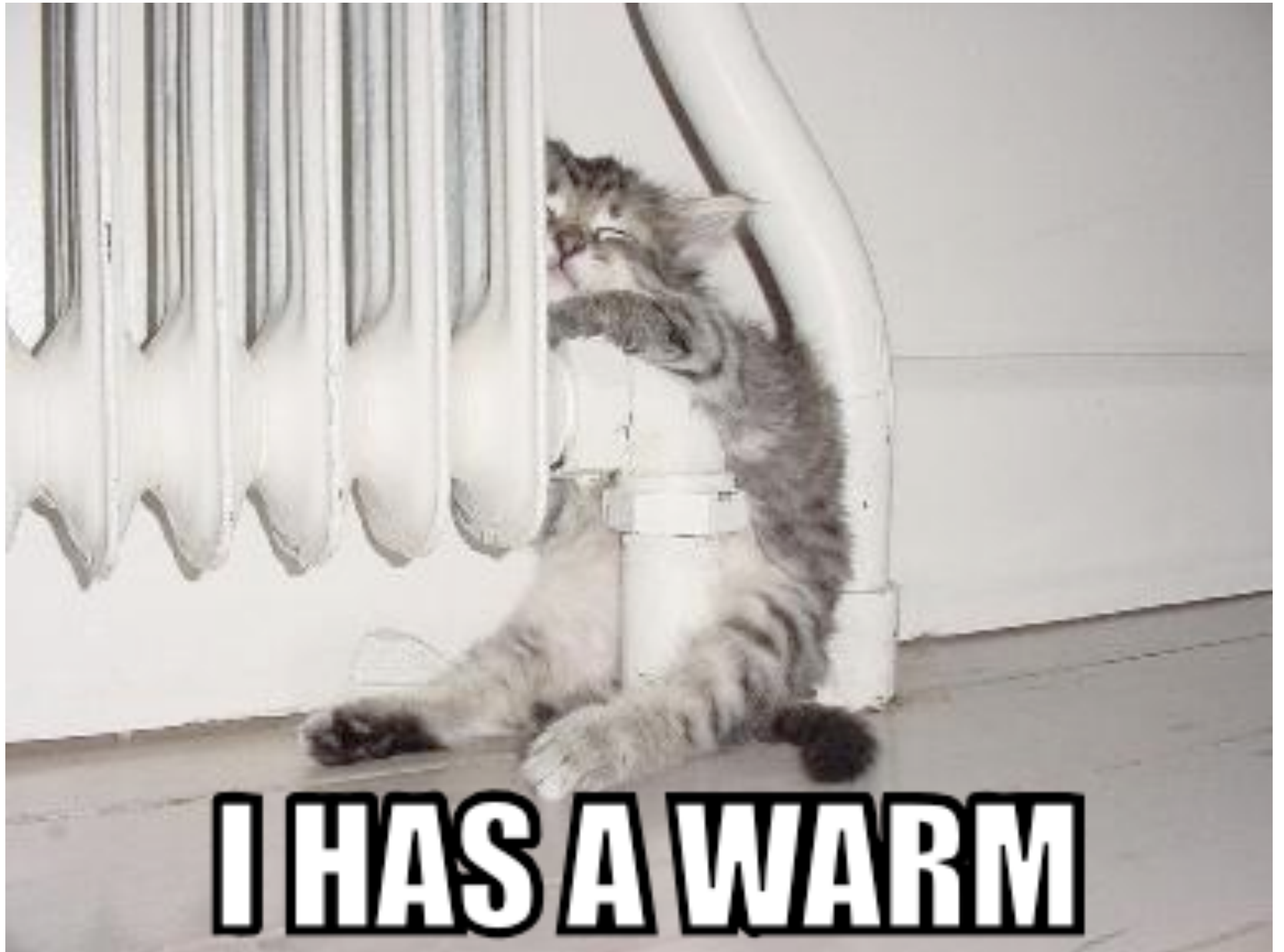
```
<script src="jquery.twitter.js"></script>
```

```
<script src="jquery.cookie.js"></script>
```

```
<script src="myapp.js"></script>
```

This waterfall looks ridiculous





I HAS A WARM

MONORAIL CAT



JavaScript at the bottom

html

png

png

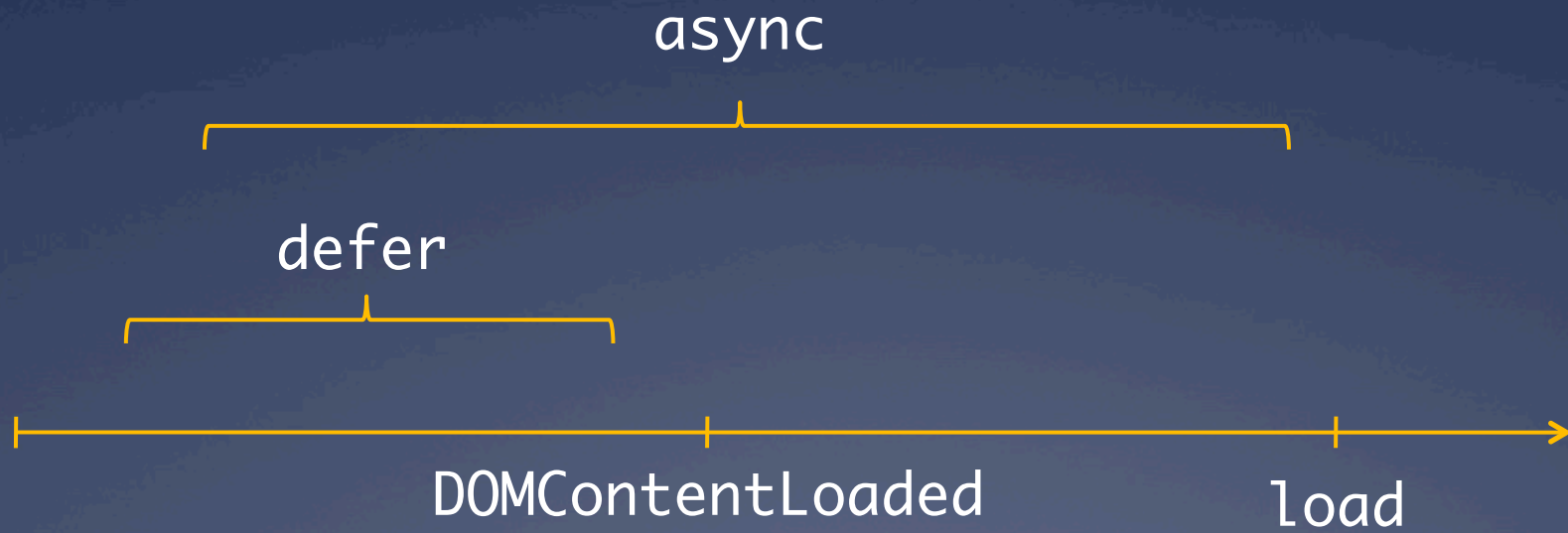
js

Non-blocking JavaScript

- defer and async
- Defer: IE innovation, ok to delay, but keep order
- Async: HTML5, whatever

```
<script async src="my.js" onload="doIt()"></script>  
<script defer src="my.js" onload="doIt()"></script>
```

defer and async timeline



Non-blocking JavaScript

- Asynchronous loading



```
var js = document.createElement('script');  
js.src = 'myscript.js';  
var h = document.getElementsByTagName('head')[0];  
h.appendChild(js);
```

Flush

Flush

flush() early

html

png

js

CSS



html

png

js

CSS



flush()

```
<html>
<head>
  <script src="my.js"
    type="text/javascript"></script>
  <link href="my.css"
    type="text/css" rel="stylesheet" />
</head>
<?php flush() ?>
<body>
  ....
```

Chunked encoding

HTTP/1.1 200 OK

Content-Type: text/plain

Transfer-Encoding: chunked

25

This is the data in the first chunk

1C

and this is the second one

0

Chunked encoding

- Progressive rendering
 - Semantic app chunks
- vs.
 - Server-level chunks

Progressive rendering

Web [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) ▼

[Sign in](#)



flowers

Search

[Advanced Search](#)
[Preferences](#)

Chunk
#1

Web [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) ▼

Results 1 - 10 of about 166,000,000 for flowers (0.22 seconds)

Flowers at 1-800-FLOWERS
1-800-flowers.com - Same Day Delivery Available! 100% Satisfaction Guaranteed.
Send Flowers from \$19.99
Send Flowers.com - Send Roses, Lilies & Other Flowers "Best Value" - Wall Street Journal
© 2006 florists.com. All rights reserved.

Save \$10 on Flowers Today
www.1-800-flowers.com - Special Flowers, Vases and Vase. Same Day Local Delivery.
Flowers, Roses, Gift Baskets, Flower Bouquets - 1-800-FLOWERS.COM
Send Flowers, roses, lilies, orchids, plants, gift baskets and gourmet food from 1-800-FLOWERS.COM. We work 24 hours a day. © 2006 florists.com. All rights reserved.
Bouquets - Sprouts & Cornish - Same Day Delivery - Get More
www.1-800-flowers.com - Contact Us

FTD.COM - Flowers, Roses, Gifts, Gift Baskets | Fresh Flower Delivery
Send Flowers, roses, gifts, gift baskets and more with convenient local delivery. Order fresh flowers from FTD.com
Send Flowers & Plants - Birthday - Under \$20 - Same Day Delivery
www.ftd.com - Contact Us

Flowers and Gifts - ProfFlowers Official Site
Send Flowers for delivery from ProfFlowers - your online florist. Order flowers, plants, roses, and gifts nationwide.
Bouquets - Get More - Get More Flowers - Best Sellers
www.profflowers.com - Contact Us

Image results for flowers - Report abuse

Local business results for flowers near Santa Monica, CA - Change location

A. East Floral Design: Flowers & Gifts - www.eastflowers.com - (310) 392-1410 - 1.2 miles
B. Flower Box - www.proflowers.com - (310) 392-9878 - 1.3 miles
C. Coast Florist - www.coastflorist.com - (310) 392-1117 - 1.4 miles
D. Delancey Flower Boutique and Professional Florist - www.delanceyflowers.com - (310) 398-9998 - 1.5 miles
E. Santa Monica Flowers - www.santamonicaflowers.com - (310) 326-4343 - 1.5 miles
F. Coast Flowers - www.coastflowers.com - (310) 320-7774 - 1.6 miles
G. Day & Dawn Co. Flowers & Floral Design - www.holidayflorist.com - (310) 319-4100 - 1.7 miles
H. Delancey Flower Bouquets - www.delanceyflowers.com - (310) 326-2745 - 1.7 miles
I. Marjorie's Flowers & Gift Shop - www.marjoriesflowers.com - (310) 326-2745 - 1.7 miles
J. The Flower Lab - www.theflowerlab.com - (310) 310-1029 - 1.8 miles

More business results for flowers near Santa Monica, CA

Flowers, Florist Flower Delivery - Send Flowers Online - Teleflora
Not sure whether to send a flower bouquet, plant or gift basket or maybe you are in a rush and need gift ideas? Then our Bestselling Flowers category is ...
www.teleflora.com - Contact Us

Flowers, Florist - Same Day Flower Delivery from Virtual Florist
Same day flower delivery of fresh flowers and gifts for occasions from Virtual Florist.
100% Satisfaction Guaranteed. Send a FREE Virtual Flower ...
www.virtualflorist.com - Contact Us

Flowers, Florists - Send Flowers Online with 1-800-FLOWERS Florist
Send flowers online. Award-winning online florist specializing in same-day and next-day flower delivery in the USA and Canada. Order flowers and plants ...
www.1-800-flowers.com - Contact Us

FLORIST FLOWERS - Florist flowers, delivery and Virtual Flowers
Send Flowers Virtual Flowers.com™. Welcome! We are the leading on-line florist you can trust to send flowers, same day delivery of fresh flowers ...
www.virtflowers.com - Contact Us

Flower - Wikipedia, the free encyclopedia
A flower, sometimes known as a bloom or blossom, is the reproductive structure found in flowering plants (angiosperms).
www.wikipedia.org/wiki/Flower - Contact Us

1-800-Flowers - Send Flowers Online | Cheap Flower Delivery
Call 1-888-274-8268 to send flowers or order flower delivery online & save up to 50%!
Flower Delivery Today! 1-800-Flowers.com. Order flowers and plants ...
www.1-800-flowers.com - Contact Us

Everyday Flowers Orange County Florist
Orange County Florist: Order flowers, roses, lilies and Stuffed Animals online for delivery
© 2006 Every Day Flowers. All rights reserved. Search Lake Forest ...
www.everydayflowers.net - Contact Us

Searches related to flowers
flowers meaning flowers names wedding flowers flowers pictures flower gardens

Coocoooooooooolec
1 2 3 4 5 6 7 8 9 10 Next

Chunk
#2

flowers

Search

[Search within results](#) - [Language Tools](#) - [Search Help](#) - [Dissatisfied? Help us improve](#) - [Try Google Experimental](#)

[Google Home](#) - [Advertising Programs](#) - [Business Solutions](#) - [Privacy](#) - [About Google](#)

Chunk
#3

```
<!doctype html>
<html>
<head><title>My App</title></head>
<body>
  <div id="header">
    
    ...
  </div>
```

<!-- end of chunk #1 -->

... The full body of the page ...

```
<script src="all_20100925.js"></script>
</body>
</html>
```

<!-- end of chunk #3 -->

Progressive + source order

amazon.com Hello, Stoyan Stefanov. We have [recommendations](#) for you. (Not Stoyan?)
Stoyan's Amazon.com | Today's Deals | Gifts & Wish Lists | Gift Cards | Your Account | Help

Shop All Departments | Search: All Departments | GO | Cart | Wish List

Object-Oriented JavaScript: Create scalable, reusable high-quality JavaScript applications and libraries (Paperback)
by [Stoyan Stefanov](#) (Author)
Key Phrases: primitive data types, typeof, somevar, object literal notation, Pacific Standard Time, The Browser Environment, Document Object Model (more...)
★★★★☆ (9 customer reviews)
List Price: ~~\$39.99~~
Price: **\$35.99** & this item ships for **FREE with Super Saver Shipping**. [Details](#)
You Save: **\$4.00 (10%)**
In Stock.
Ships from and sold by **Amazon.com**. Gift-wrap available.

Want it delivered **Wednesday, August 12?** Order it in the next 22 hours and 40 minutes, and choose **One-Day Shipping** at checkout. [Details](#)
13 new from \$35.99 | **10 used** from \$34.95

Quantity: 1 | Add to Shopping Cart
or
Add to Cart with **FREE Two-Day Shipping**
Amazon Prime Free Trial required. Sign up when you check out. [Learn More](#)
Add to Wish List

More Buying Choices
23 used & new from **\$34.95**
Have one to sell? [Sell yours here](#)

Share your own customer images | Search inside this book

Tell the Publisher!
I'd like to read this book on Kindle
Don't have a Kindle? [Get yours here.](#)

Frequently Bought Together
Price For All Three: **\$86.83**
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[Show availability and shipping details](#)

- This item:** Object-Oriented JavaScript: Create scalable, reusable high-quality JavaScript applications and libraries by Stoyan Stefanov
- Pro JavaScript Design Patterns (Recipes: a Problem-Solution Ap)** by Ross Harmes
- JavaScript: The Good Parts** by Douglas Crockford

Customers Who Bought This Item Also Bought

Page 1 of 20

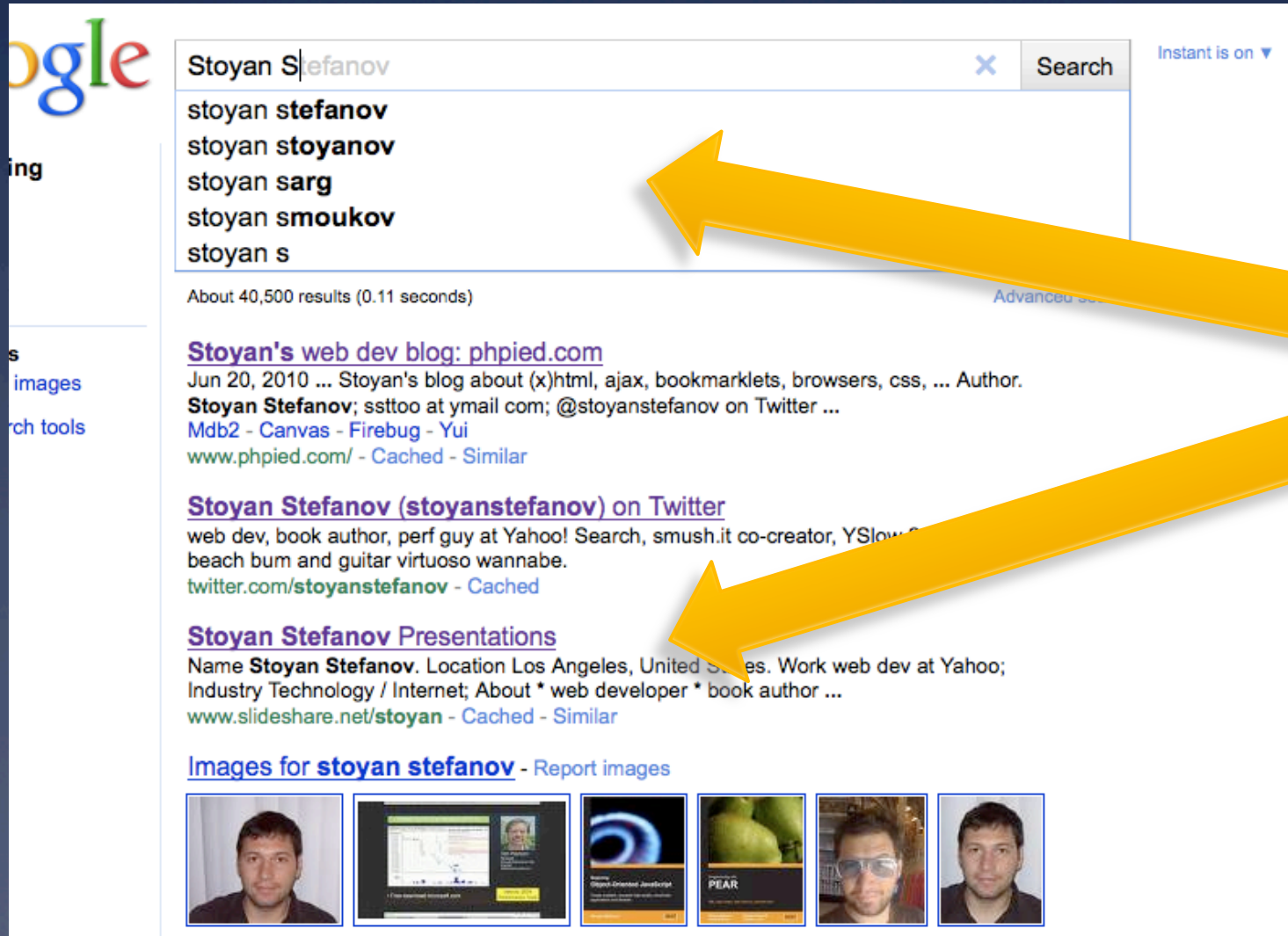
3

4

1

2

HTTP chunking: not only HTML



Stoyan Stefanov

stoyan stefanov
stoyan stoyanov
stoyan sarg
stoyan smoukov
stoyan s

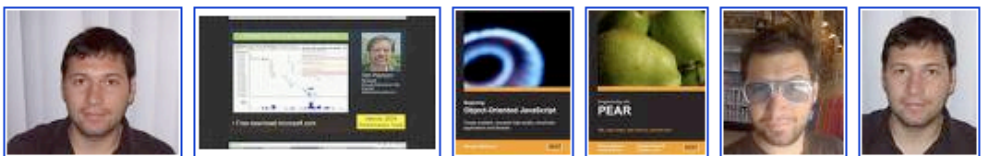
About 40,500 results (0.11 seconds)

Stoyan's web dev blog: phpied.com
Jun 20, 2010 ... Stoyan's blog about (x)html, ajax, bookmarklets, browsers, css, ... Author.
Stoyan Stefanov; ssttoo at ymail com; @stoyanstefanov on Twitter ...
[Mdb2](#) - [Canvas](#) - [Firebug](#) - [Yui](#)
www.phpied.com/ - [Cached](#) - [Similar](#)

Stoyan Stefanov (stoyanstefanov) on Twitter
web dev, book author, perf guy at Yahoo! Search, smush.it co-creator, YSlow ...
beach bum and guitar virtuoso wannabe.
twitter.com/stoyanstefanov - [Cached](#)

Stoyan Stefanov Presentations
Name **Stoyan Stefanov**. Location Los Angeles, United States. Work web dev at Yahoo;
Industry Technology / Internet; About * web developer * book author ...
www.slideshare.net/stoyan - [Cached](#) - [Similar](#)

[Images for stoyan stefanov](#) - [Report images](#)



HTTP chunking: not only HTML

- Google Instant
- `/*""*/` - delimited JSON pieces
- Chunk #1 suggestions
- Chunk #2 results

CSS and rendering

CSS and rendering

Worst enemy?

CSS

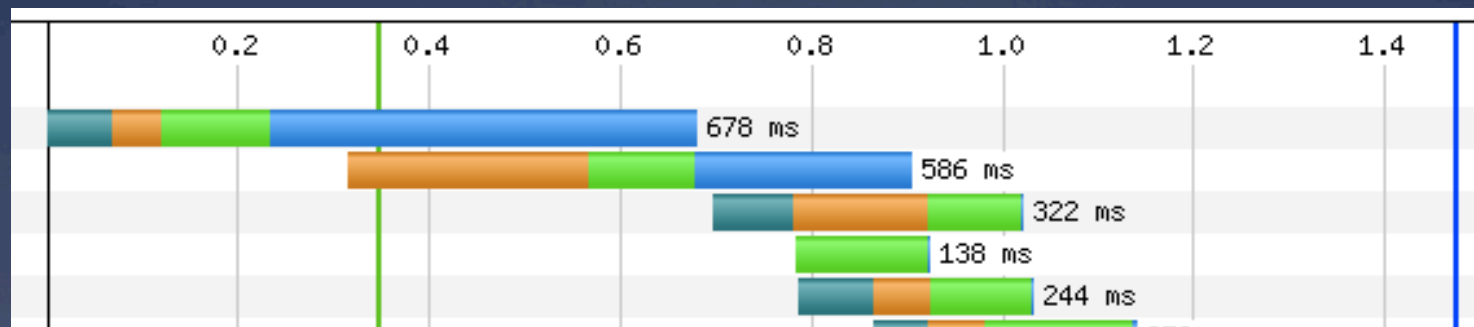
CSS blocks rendering

- The worst component type
- Place way at the top
- Inline all @media print, etc

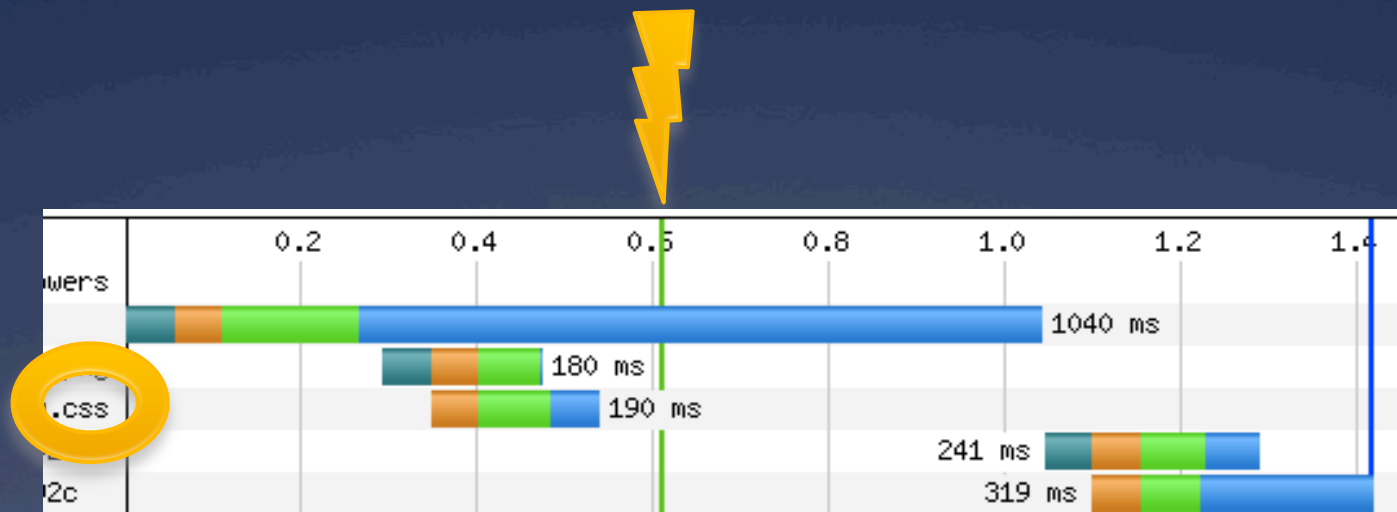
<http://www.phpied.com/delay-loading-your-print-css/>

<http://www.phpied.com/rendering-styles/>

CSS



CSS



CSS block downloads?

But they do block:

- When followed by an *inline* script
- When in conditional comments



Inline CSS

- Google search
- Bing.com: inline + postload

Same domain

- If you split across domains
- and if you don't use CDN
- Saves a DNS lookup

CC block

CC block

Normal page



With conditionally commented CSS file



What...?! Case #1

```
<link type="text/css" rel="stylesheet"  
      href="1.css">
```

```
<!--[if IE 6 ]>
```

```
  <link type="text/css" rel="stylesheet"  
        href="ie.css">
```

```
<![endif]-->
```

What...?! Case #2

```
<!--[if IE 6]>  
    <body class="ie6">  
<![endif]-->  
<!--[if !IE]><!-->  
    <body>  
<!--<![endif]-->
```


Solution for case #1

```
<!DOCTYPE html>
```

```
<!--[if IE 6]><![endif]-->
```

```
<html>
```

```
...
```

Solution for case #2

```
<!--[if IE 6]>  
    <html class="ie6">  
<![endif]-->  
<!--[if !IE]><!-->  
    <html>  
<!--<![endif]-->
```

Preloads

Preloads

Preloads

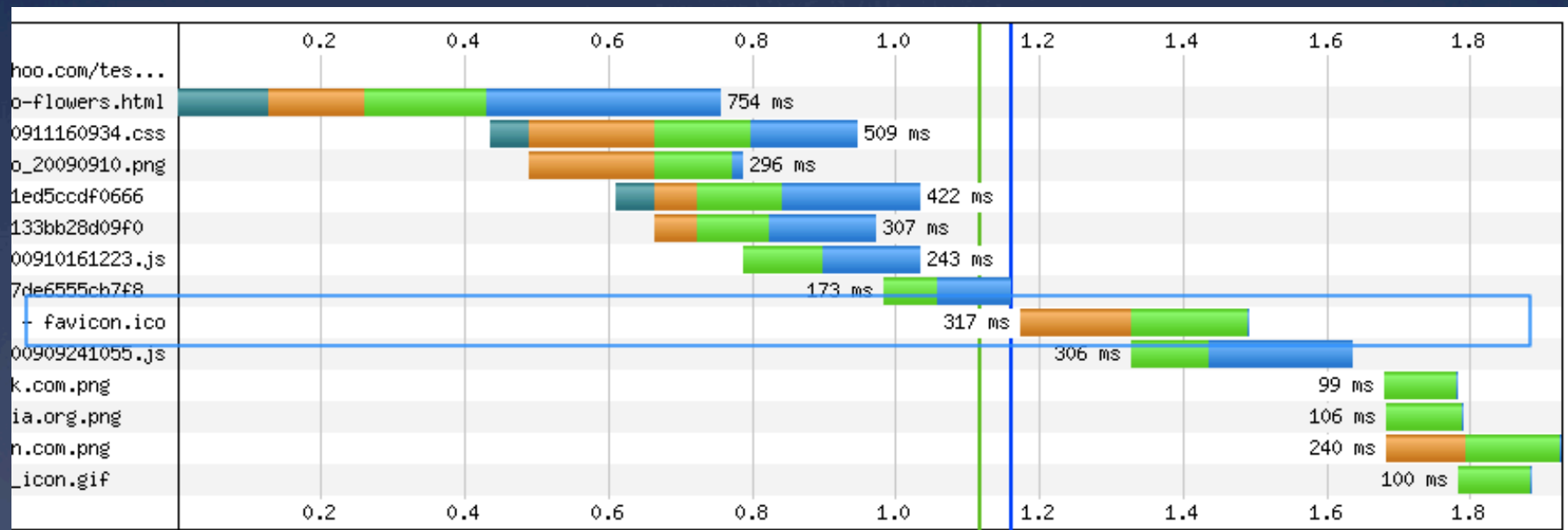
- Anticipate next page
- Problems:
 - does next page anticipate you?
 - parsing and execution time
- `<link prefetch="http://..">`

Preload sans execute

```
var preload;  
if (/*@cc_on!@*/false) { // IE  
    preload = function (file) {  
        new Image().src = file;  
    };  
} else {  
    preload = function (file) {  
        var obj = document.createElement('object'),  
            body = document.body;  
        obj.width = 0;  
        obj.height = 0;  
        obj.data = file;  
        body.appendChild(obj);  
    };  
}
```

Blocking favicon

BLOCKING FAVICON



Data URIs

Data URIs

Fewer HTTP requests

- Inline images:
in CSS sprites
with data: URI scheme



<http://csssprites.com>

<http://spriteme.org>

Fewer HTTP requests

- data: URI scheme

```
$ php -r "echo base64_encode(file_get_contents('my.png'));"  
iVBORw0KGgoAAAANSUhEUgAAAAQAAAADCAIAAA71jmRAAAAGE1EQVQIW2P4  
DwcMDAxAfBvMAhEQMYgcACEHG8ELxtbPAAAAAE1FTkSuQmCC
```

Fewer HTTP requests

- data: URI scheme

```
background-image: url("data:image/png;base64,iVBORw0KG...");
```

Fewer HTTP requests

- data: URI scheme

```

```



base64

Search

View Notes (2)

SearchScan - On

Also try: [base64 decoder](#), [base64 encode](#), [base64 encoding](#), [More...](#)

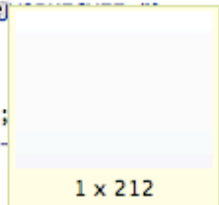
[Base64 - Wikipedia, the free encyclopedia](#)

Edit div#h-status.app < div.hd < div#sidebar < div#bd

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://
<html class=" js" lang="en" firebugversion="1.6X.0a10">
  <head>
  <body id="ysch" class="firefox gecko mac v1_9">
    <div id="doc">
      <h1 class="off-left">Yahoo! Web Search</h1>
      <div id="uh">
      <div id="hd">
      <div id="bd" role="document">
        <div id="sidebar">
          <div class="hd">
            <div id="h-status" class="app sp">
            <div id="safety-status" class="app
safety">
          </div>
          <div class="bd">
          </div>
          <div id="results">
          <div class="bdc">
        </div>
      <div id="ft" role="contentinfo">
```

Style Computed Layout DOM

```
html {
  background-
  image: url("data:image/png;base64,iVBORw0KGgoAAAANSU
hEUgAAAAEAAAADUCAIAAADShN5K
/7/z+FUBSJhYNB4OWSBnZkY7;zd1YwGZCC3mcFZC+KIPpru2D
tCV6RX7sFX607KbS6kTcRL3MKdFFs
/pY6UDEPOyI8bvxmlnG8AAAAASU
");
}
html {
  background-color: #E8EDF0;
  background-repeat: repeat-
overflow-y: scroll;
}
html {
  background: none repeat scroll 0 0 #FFFFFF;
  color: #000000;
}
```



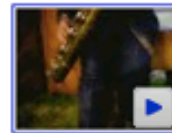
Something different
tom petty
john mayer
ben harper
counting crows
pearl jam



Videos for dave matthews



[Late Night with Jimmy Fallon:
Dave Matthews GPS](#)
3 min 1 sec - Jun 4, 2009
www.hulu.com



[Dave Matthews Band - Crash
Into Me](#)
4 min 17 sec - Oct 2, 2009
www.youtube.com

antsmarching.org: Dave Matthews Band

Dedicated to the band and their music. Offers a forum, message board, set list archives, lyrics, tablatures, and downloads.

antsmarching.org/ - Cached - Similar

Related to

[Front R](#)
Your Per:
Award St
Millionair

[Cheap](#)
Best Sea
Fast Deli
www.dan

[Buy Da](#)
Same Tic
For 25%
AAATicke

[Dave M](#)
Find Dav

```
img#vidthumb11 < a < td < tr < tbody < table.ts < div < td < tr < tbody < table.ts < li.g < ol < div#ires < div#res.
<tbody>
  <tr>
    <td width="290" valign="top" colspan="1">
      <div>
        <table class="ts" style="width: auto;">
          <tbody>
            <tr>
              <td valign="top" style="padding: 7px 8px 0pt 0pt;">
                <a href="/url?q=http://www.hulu.com/watch/75863/late-night-with-jimmy-fallon-dave-matthews-gps&ei=5LHnS9DGF17asQ0Su5micQ&sa=X&oi=video_result&resnum=11&ct=thumbnail&cad=14853056102515674757&ved=0CFIQuAIwCg&usg=AFQjCNHFecqEhjbz8Bb9g9hk7fz5gh6QM4A">
                  <div style="height: 33px; position: absolute; width: 44px;">
                    
                    80 x 60
                  
```

Both

- flushes
- data: URIs

Blog posts about dave matthews band

- [Dave Matthews Band To Play Wrigley Field - Chicago on HuffingtonPost.com](#) - 6 Jul 2010
- [LancasterOnline.com:Entertainment:Zac Brown Band rockets to the ...](#) - LancasterOnline - 8 Jul 2010
- [Music Review: Sevendust - Sevendust \(Definitive Edition\) CD/DVD ...](#) - Music articles at Blogcritics - 9 Jul 2010

Videos for dave matthews band



[Dave Matthews Band - Folsom Field - All Along ...](#)
9 min - 18 Jul 2006
Uploaded by Ballashoes
[www.youtube.com](#)



[Dave Matthews Band - Ants Marching \(Central Park\)](#)
5 min - 1 Jul 2007
Uploaded by vickgallagher
[www.youtube.com](#)

Images for dave matthews band -



YSlow Console HTML CSS Script DOM Net Page Speed Page Speed Activity Firefinder

#imgt...gthumb18 < a < div < div#iur < li#imagebox.g < ol < div#ires

```
 /blog/germany/dave-matthews-  
band-tour_8989.html&h=455&w=400&sz=45&  
tbnid=04XK_Fs559yknM:&tbnh=128&tbnw=113&  
prev=/images%3Fq%3Ddave%2Bmatthews%2Bband&  
usg=__4zeZQjErpdT0IQy4Id2NIj5Qovk=&  
sa=X&ei=hQtGTICzBs7KjAFKk4m2Bw&  
ved=0CIUBEPUBMBE">  
<img id="imgthumb18" class="imathumb18" h  
inline-block; hei n: 3px;  
padding: 1px; wid  
68px;" title="htt om  
/blog/germany/dav  
band-tour_8989.ht  
/gif;base64,R0lG  
1 x 1
```

Style Computed Layout DOM

```
element.style {  
  display: inline-block;  
  height: 78px;  
  margin: 3px;  
  padding: 1px;  
  width: 68px;  
}
```

Inherited from a images%3...BEPUBMBE

```
a:link, .w, .q:active, .q:visited, .tbotu {  
  color: #1111CC;  
  cursor: pointer;  
}
```

a:link, .w, #prs a:visited, #prs a:active, .q:active,
a:visited {

[Dave Matthews Band to Play Wrigley Field - Chicago on HuffingtonPost.com - 8 Jul 2010](#)
[LancasterOnline.com:Entertainment:Zac Brown Band rockets to the ... - LancasterOnline - - 8 Jul 2010](#)
[Music Review: Sevendust - Sevendust \(Definitive Edition\) CD/DVD ... - Music articles at Blogcritics - 9 Jul 2010](#)

Videos for dave matthews band



[Dave Matthews Band - Folsom Field - All Along ...](#)
9 min - 18 Jul 2006
Uploaded by Ballashoes
www.youtube.com



[Dave Matthews Band - Ants Marching \(Central Park\)](#)
5 min - 1 Jul 2007
Uploaded by vickgallagher
www.youtube.com

Images for dave matthews band - Report images



Searches related to dave matthews band

[dave matthews band songs](#)

[dave matthews band set list](#)

```
YSlow Console HTML CSS Script DOM Net Page Speed Page Speed Activity Firefinder
Edit img#vidt...dthumb16 < a < td < tr < tbody < table.ts < div < td < tr < tbody < table.ts < li.g < ol < div#ires < div
<textarea id="hcache" style="display: none;"></textarea>
▶ <div id="xjsd">
▶ <div id="xjsi">
▶ <script>
▼ <script>
  1 { var x = document.getElementById('vidthumb17');x &&( x.src='data:image/jpeg;base64,/9j/4AAQSkZJRgABAQAAQABAAD/2wCEAAMC
  </script>
▶ <script>
▶ <script>
▶ <script>
▶ <script>
▶ <script>
```

Fewer HTTP requests

- data: URI scheme
- works in IE!...

Fewer HTTP requests

- data: URI scheme
- works in IE8!

Fewer HTTP requests

- data: URI scheme
- MHTML for IE < 8

MHTML

- MIME HTML
- Works in IE 6,7
- Indeed it actually absolutely does work in IE7/Vista too

<http://phpied.com/the-proper-mhtml-syntax/>

MHTML - one part

Content-Location: myimage

Content-Transfer-Encoding: base64

iVBORw0KGgoAAAANSU...U5ErkJggg==

MHTML - multi parts

Content-Type: multipart/related; boundary="MYSEPARATOR"

--MYSEPARATOR

[here comes part one]

--MYSEPARATOR

[here's part two]

--MYSEPARATOR--



The
double-
dash of
doom

MHTML.css – all together

```
/*
Content-Type: multipart/related; boundary="MYSEPARATOR"

--MYSEPARATOR
Content-Location: myimage
Content-Transfer-Encoding: base64

iVBORw0KGgoAAAANSUhEUgAAABgAAAAYCAMAADxqc3KAAAD...U5ErkJggg==
--MYSEPARATOR
Content-Location: another
Content-Transfer-Encoding: base64

iVBORw0KGgoAAAANSUhEUgAAABgAAAAYCAMAADxqc3KAAAA...U5ErkJggg==
--MYSEPARATOR--
*/
.myclass {
    background-image: url(mhtml:http://example.org/styles.css!myimage);
}
.myotherclass {
    background-image: url(mhtml:http://example.org/styles.css!another);
}
```


MHTML: inline too

```
<!doctype html>
<html>
  <head>
    <title>Look Ma' No HTTP requests</title>
    <style type="text/css">
/*
Content-Type: multipart/related; boundary="_"

--_
Content-Location:locoloco
Content-Transfer-Encoding;base64

iVBOR...CC
--_
Content-Location:polloloco
Content-Transfer-Encoding;base64


iVBOR...gg==
--__
*/
.image1 {
  background-image: url("data:image/png;base64,iVBOR...CC"); /* normal */
  *background-image: url(mhtml:http://...html!locoloco); /* IE < 8 */
}
.image2 {
  background-image: url("data:image/png;base64,iVBOR...gg=="); /* normal */
  *background-image: url(mhtml:http://...html!polloloco); /* IE < 8 */
}
body {
  font: bold 24px Arial;
}
</style>
</head>
<body>
  <h1>MHTML + Data:URIs inline in <code>style</code></h1>
  <p class="image1">hello<br>hello</p>
  <p class="image2">bonjour<br>bonjour</p>
</body>
</html>
```

<http://phpied.com/inline-mhtml-data-uris/>

MHTML + data URI

- X-browser
 - single request
 - web apps

Single request

- WT  ?
- Separation of concerns
- Content-presentation-behavior
- yes, it's a tradeoff

MHTML + data URI

- drawback: repeats the same encoded image
- solutions:
 - browser-specific CSS
 - keep close = better gzip
 - or... an ingenious hack

MHTML + data URI

- image header + css + data

/9j/4AA0;background-image:url(data:image/jpeg;base64;00,/9j/4AA0

Reality:	JPG	CSS	JPG	DATA
IE:	JPG	TRASH		DATA
Others:	???	CSS	JPG	DATA

<http://habrahabr.ru/blogs/webdev/90761/>

Animations as distractions...

Animations as distractions...

Distractimations

Any time

Latest

Past 2 days

All results

Wonder wheel

Sites with images

Page previews

▼ More search tools



7th graders'
Mars discovery



Cyrus defends
risqué outfits



Superstar's
goofy goal



Obama
mortgage plan in
trouble

1 - 4 of 32



Parting words

Իսպիմա խօսք

What not to say...

- “Everyone is on high-speed these days”
- “It’s all in the cache”

Do care about

- Progressive,
non-blocking,
asynchronous downloads
- Progressive rendering

Thank you!

Stoyan Stefanov

@stoyanstefanov

<http://www.phpied.com>