

My name: Ray Bogman



- Joomla/Magento evangelist
- Trainer
- Performance nerd
- Security geek

@ SupportDesk.nu

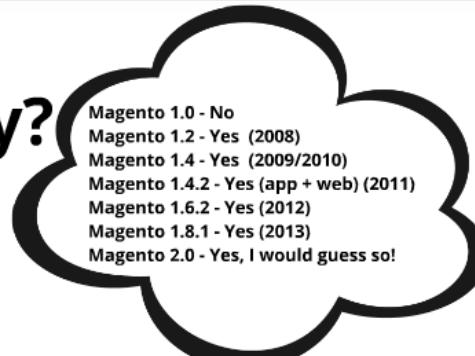
<http://www.linkedin.com/in/raybogman>



Magento Mobile Performance: The Responsive Mythes



Is Magento mobile ready?



1.0?

1.2?



1.4?



1.6.2?



Magento 1.0 - No

Magento 1.2 - Yes (2008)

Magento 1.4 - Yes (2009/2010)

Magento 1.4.2 - Yes (app + web) (2011)

Magento 1.6.2 - Yes (2012)

Magento 1.8.1 - Yes (2013)

Magento 2.0 - Yes, I would guess so!

 Carrier 

9:12 AM



[Log Out](#) | [Account](#) | [Wishlist](#)

Catalog

My Cart

Checkout

Furniture

Home Page

- More Amore Condooms
- EXS Condooms
- Standaard
- Extra voordelig
- Extra Glijmiddel
- Groter / Ruimer
- Kleiner / Strakker
- Ultra dun
- Extra sterk

Zet op verlanglijst
Toon in vergelijking



72 of 144 condooms
durex
topsafe

Zet op verlanglijst
Toon in vergelijking



durex
feeling ultra

Zet op verlanglijst
Toon in vergelijking




Producten vergelijken

Geen producten geselecteerd.

Case: Condoom-Anoniem.nl

- Glijmiddelen & Massage
- BodyGliss glijmiddel
- Speeltjes
- Losse condooms bestellen
- Pakketten
- Vrouwencondoom
- Gadgets & Gifts
- Koopjeshoek
- Eigen verpakking

Nieuwsbrief



Durex Probeerpakket met 8 of 18 condooms

€ 7,75

In winkelwagen

Zet op verlanglijst
Toon in vergelijking



Durex Pleasure Pack 6 condooms en gratis Play Massage

€ 5,95

In winkelwagen

Zet op verlanglijst
Toon in vergelijking



Durex Love Collection - 18 condooms assortiment

€ 15,49

In winkelwagen

Zet op verlanglijst
Toon in vergelijking



Klantenbeoordelingen



UITSTEKEND
9,2/10

123 beoordelingen over
condoom-anoniem.nl

Case: Condoom-Anoniem.nl – Joomla + MageBridge + Magento Mobile

Jira ICT [www.jira.nl | info@jira.nl | #jiraict] – Meet Magento 2011 #mm11nl



ucten vergelijken

producten geselecteerd.

nl



Gantenbeoordelingen



beoordelingen over
condoomanoniem.nl

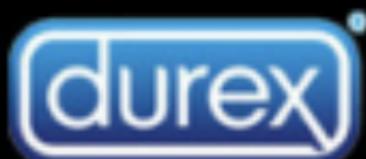


Home

Inloggen



condoomanoniem.nl
snel, discreet & gratis verzending



thuiswinkel
waarborg



Durex Cond



Durex Glijm



Durex Play



Home



Shop



Zoeken



Cart



More

No Service 12:15 PM

Furniture

Electronics

Apparel

Music

Ebooks

About Us

Customer Service

Privacy Policy

Contact Us

3

No Service 12:15 PM

Living Room ▾ Sort

Ottoman >

Regular Price: \$299.99
Special Price: \$199.99

Chair >

Regular Price: \$129.99
Special Price: \$99.99

Couch >

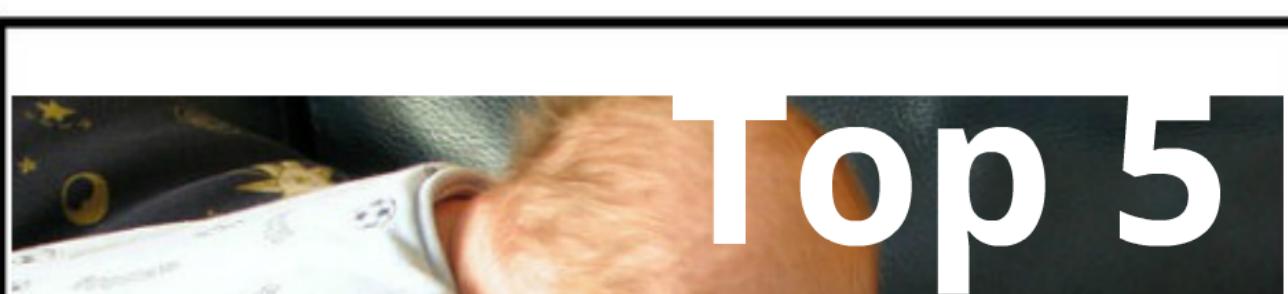
\$599.99

Magento Red Furniture Set >

3



What is
Mobile Performance?
and is it
possible with
Magento



- minim
defi -

**SPEED
LIMIT
10**

Top 5

basic performance

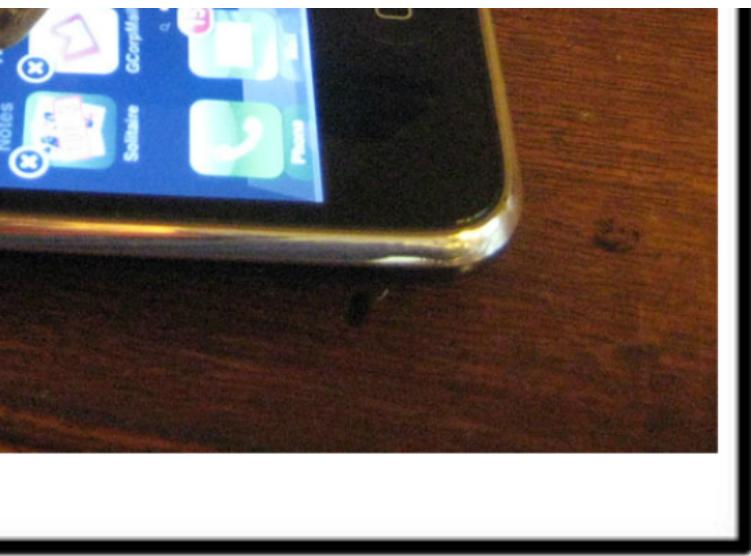




- minimize http request
- deflate content
 - merge css/js
 - expire data
 - images



Network latency



10

- minimize http request
 - deflate content
 - merge css/js
 - expire data



- minimize http requests
 - deflate content
 - merge css/js
 - expire data

minimize http requests

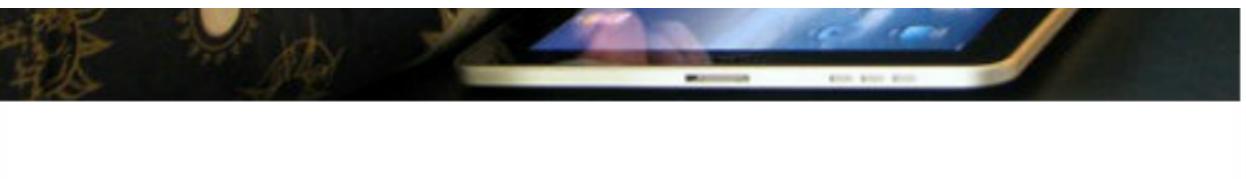
- deflate content
- merge css/js
- expire data
 - images

aggregate content

- merge css/js
- expire data
 - images

expired at

- images



**Is this the same with
mobile performance?**

Yes, but there is **much more!**



XHTML Mobile Profile

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//WAPFORUM//DTD XHTML Mobile 1.2//EN">
```

Hundred of

**is the same with
mobile performance?**

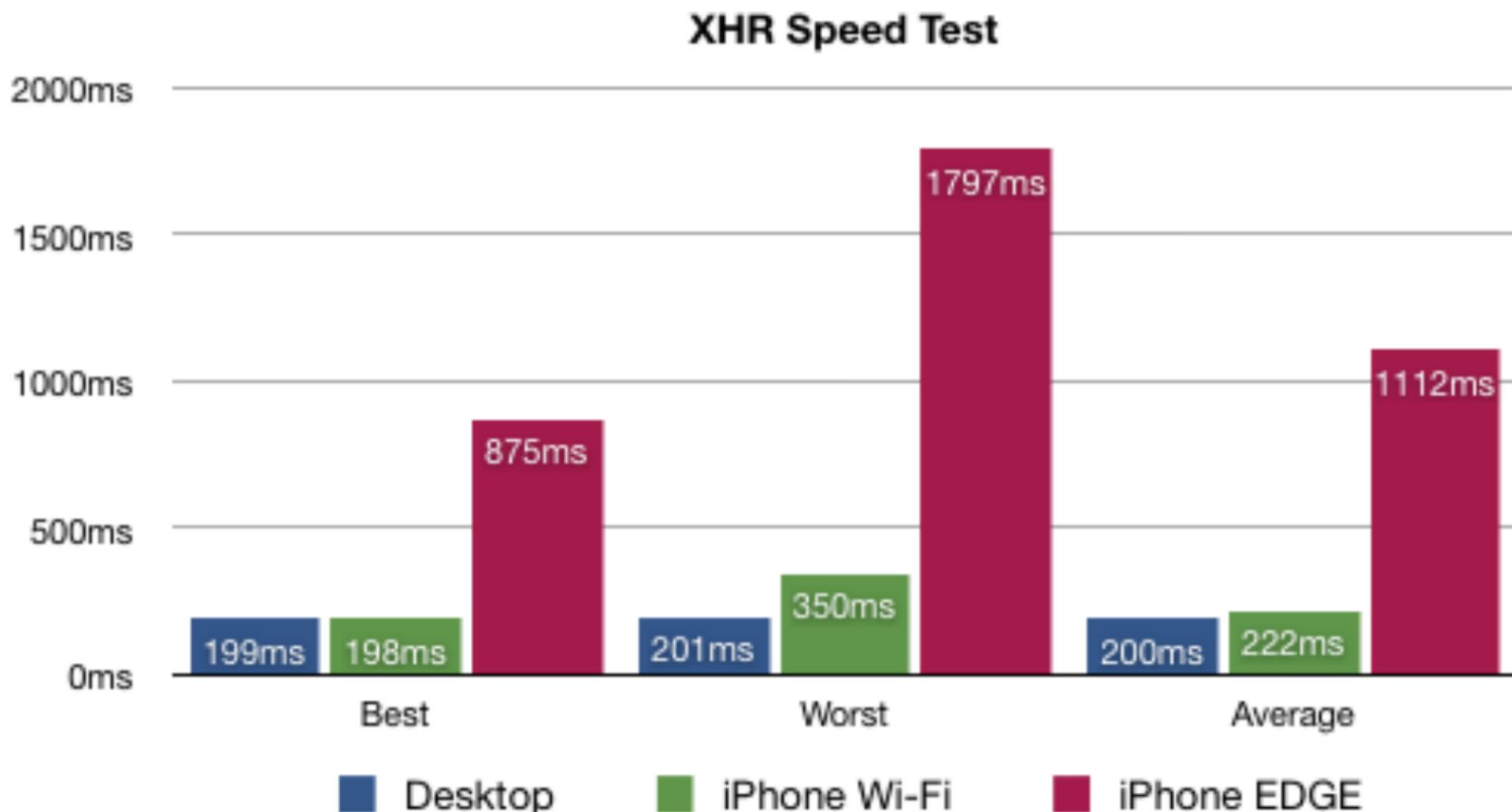
Yes ,but there is much more!

XHTML Mobile Profile

```
1.0" encoding="UTF-8"?>
PUBLIC "-//WAPFORUM//DTD XHTML Mobile 1.2//EN"
enmobilealliance.org/tech/DTD/xhtml-mobile12.dtd">
http://www.w3.org/1999/xhtml" xml:lang="en">
```

Hundred of
different d

Network latency



XHTML Mobile Profile

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//WAPFORUM//DTD XHTML Mobile 1.2//EN"
"http://www.openmobilealliance.org/tech/DTD/xhtml-mobile12.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <title>Hello world</title>
</head>
<body>
  <p>Hello <a href="http://example.org/">world</a>.</p>
</body>
</html>
```

The MIME type for XHTML Mobile Profile is "application/vnd.wap.xhtml+xml"

Watch more!



Hundred of different devices (low, medium, high end devices)



```
<p>Hello <a href="http://example.org/">world</a>.</p>
</body>
</html>
```

The MIME type for XHTML Mobile Profile is "application/vnd.wap.xhtml+xml"

Local Storage

	LocalStorage	SQLite	IndexedDB
Safari iOS 5	✓	✓	✗
Android 2.2 Browser	✓	✓	✗
Firefox 8	✓	✗	✓
Chrome 15	✓	✓	✓
Safari 5	✓	✓	✗
IE 8	✓	✗	✗

	LocalStorage	SQLite	IndexedDB
 Safari iOS 5	✓	✓	✗
 Android 2.2 Browser	✓	✓	✗
 Firefox 8	✓	✗	✓
 Chrome 15	✓	✓	✓
 Safari 5	✓	✓	✗
 IE 8	✓	✗	✗

search ID: ake0008



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www.CartoonStock.com



Less Power





Is
less
More?

How do we optimize image
using Data URI's?



How can we fix this!

Only use image in:

- Logo
- Article
- Map

Don't use image <tag> for:

- Buttons
- Backgrounds
- Visual separators
- Titles

Is there a max on images?

Are there Java



Only use image in:

- Logo**
- Article**
- Map**

Don't use image <tag> for:

- Buttons
 - Backgrounds
 - Visual separators
 - Titles
-
-

How do we optimize image using Data URI's?

```
1 /* Data URI images */
2 #top{background-image:url
(data:image/
gif;base64,R0lGODlhAQACAAIAAP///
01NTSH5BAAAAAAALAAAAAABAAIAAAICDA
oA0w==)}
3 #nav-home a,#nav-services a,#nav-
about a,#nav-contact a
{background-image:url(data:image/
png;base64,iVBORw0KGgoAAAANSUhEUg
AAAIIIVAAAALCAYAAAAD1n7MVAACYDFEWHD
```

```
1 /* Data URI images */
2 #top{background-image:url
3 (data:image/
4 gif;base64,R0lGODlhAQACAAIAAP///
5 01NTSH5BAAAAAAAALAAAAAAABAAIAAAICDA
6 oA0w==)}
7 #nav-home a,#nav-services a,#nav-
8 about a,#nav-contact a
9 {background-image:url(data:image/
10 png;base64,iVBORw0KGgoAAAANSUhEUg
11 AAAIIVYAAAALCAYAAAAD1n7M/AAAACYDFWHD
```

Is there a max on images?

Yes 124kb is max, otherwise it will be loaded in memory

- no favicon.ico
- no apple-touch-icon (less request)

Is there a max on images?

Yes 124kb is max, otherwise it will be loaded in memory

- no favicon.ico
- no apple-touch-icon (less request)

rators

3 #nav-home a,#nav-services a,#nav-about a,#nav-contact a {background-image:url(data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAAIYAAAAALCAVAAAQD1n1MVAACYDFEWHD

Are there Javascript frameworks for mobile?



Are CSS Sprites A Mobile Web “Worst Practice”

What about @font-face

```
@font-face{  
    font-family: Fertigo;  
}
```

```
src: url("Fertigo_PRO.otf") format("opentype"); }
```

```
h1 { font-family: Fertigo; color: #204A87;  
text-shadow: #AAA 2px 2px 0px}
```

- not every mobile device supports this
- Using an extra request to eg. google-fonts: this does not speed up

What is a manifest file, and do I need this?

```
1 CACHE MANIFEST  
2 #version 1  
3  
4 CACHE:
```

Can we va

nt-face

- not every mobile device supports this
- Using an extra request to eg. google-fonts:
this does not speed up

Are CSS Sprites A Mobile Web “Worst Practice?”



- not always a good idea
- know your browser
- penalty on every subsequent page rendering



- not always a good idea
- know your browser
- penalty on every subsequent page rendering

late/test our mobile website?



What is a manifest file, and do I need this?

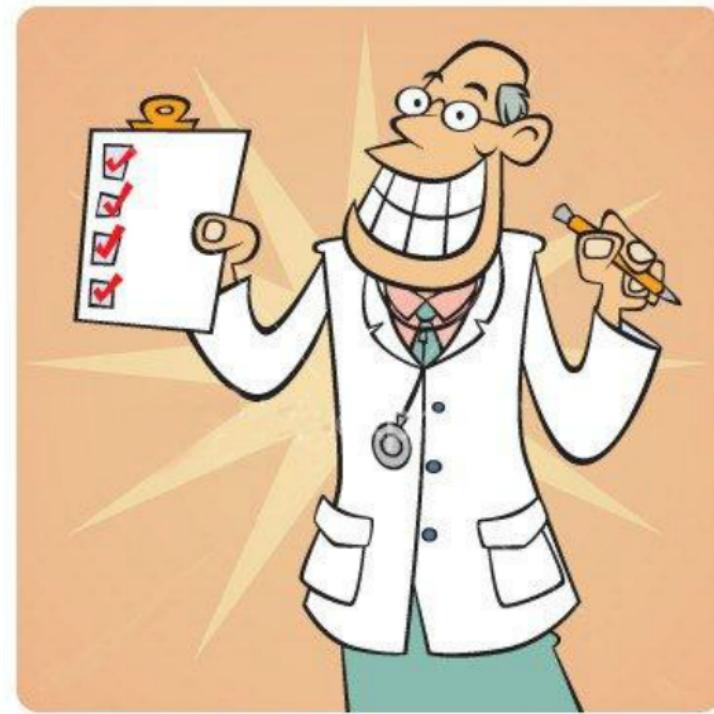
```
1 CACHE MANIFEST
2 #version 1
3
4 CACHE:
5 style.css
6 script.js
7 index.htm
8
9 NETWORK:
10 style2.css
11
12 Fallback:
13 main_image.jpg backup_image.jpg
```

- store images in base64 offline storage for usage as inline images later
- Client Storage (localStorage and sessionStorage)
- Safari on iOS accepts up to 5 MB in offline storage

- not always a good idea
- know your browser
- penalty on every subsequent page rendering

Can we validate/test our mobile website?

- google pagespeed insight - mobile
- ready.mobi
- mobileperf - firebug mobile
- validator.w3.org/mobile/
- weinre
- mobitest Akamai



Mythes

- google pagespeed insight - mobile
- ready.mobi
- mobileperf - firebug mobile
- validator.w3.org/mobile/
- weinre
- mobitest Akamai

- store images in base64 offline storage for usage as inline images later
- Client Storage (localStorage and sessionStorage)
- Safari on iOS accepts up to 5 MB in offline storage

- validator.w3.org/m
- weinre
- mobitest Akamai

what's the **story** on these

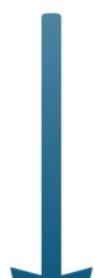
Responsive Mythes



Responsive is a **very nice trick** to auto detect the browser size and scale. Does it **satisfy** on all the performance needs I showed before?

Consider a couple of things before you just pick a responsive theme.

It's **not** the one and only solution for the best optimized mobile website!



RESPONSIVE IVYLINES

Responsive is a **very nice trick** to auto detect the browser size and scale. Does it **satisfy** on all the performance needs I showed before?

Consider a couple of things before you just pick a responsive theme.

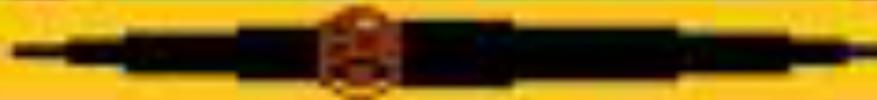
It's **not** the one and only solution for the best optimized mobile website!



1986

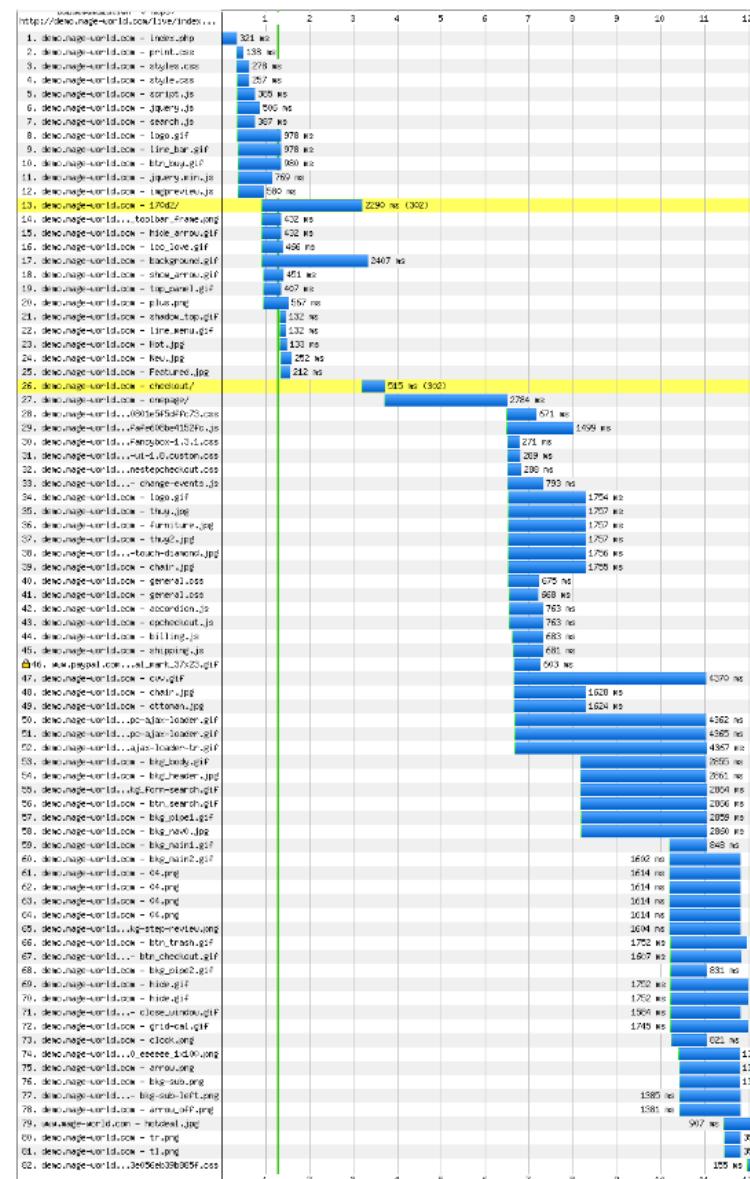
19:48

Pitfall



ACTIVISION

The screenshot shows a Magento checkout page. At the top, it asks for payment method selection: "Check / Money order" or "Credit Card (VISA, MC, AMEX, DEBIT)". Below this, fields for "Name on Card", "Credit Card Type" (dropdown menu), "Credit Card Number", and "Expiration Date" (dropdown menus for Month and Year) are present. A "REVIEW YOUR ORDER" section displays a single item: "Coalesce Functioning On Impatience T-Shirt" (Size: Small, Price: \$15.00, Qty: 1, Subtotal: \$15.00). An "Update Cart" button is available. Below the cart summary, shipping and handling details are shown: "Subtotal" (\$15.00), "Shipping & Handling (Flat Rate - Fixed)" (\$100.00), and "Grand Total" (\$115.00). A "DISCOUNT CODES" input field and an "Apply Coupon" button are at the bottom. A note says "Forgot an item? [Edit Your Cart](#)". Below the cart, there's a "Place Order" button and a "Subscribe newsletter" checkbox. At the very bottom, links for "About Us", "Customer Service", "Privacy Policy", "Site Map", "Search Terms", "Advanced Search", "Orders and Returns", and "Contact Us" are listed.



Latest Performance Report for: <http://demo.mage-world.com/live/index.php?id=1>

Report generated: Wed, Jun 26, 2013, 9:01 AM -0700
Test Server Region: Vancouver, Canada
Using: Chrome (Android, Galaxy Nexus) 26.0.1410.58, Page Speed 1.12.16, YSlow 3.1.8

Summary

Page Speed Grade:	YSlow Grade:
(55%)	(72%)

Page load time: 14.53s
Total page size: 676KB
Total number of requests: 83

A smartphone icon is shown displaying the mobile version of the website. The phone screen shows a grid-based layout with various items and categories.

	updates... /170d2/on	P...	200 OK	te...	bbc5... Script	3.... 11.9	9... 910	
	hotdeal... www.mag	GET	200 OK	i...	bbc5... Script	(f... 31 n	3...	
	coalesc... /170d2/me	GET	304 Not	i...	bbc5... Script	2... 3.31	1... 165	
	tr.png /170d2/ski	GET	200 OK	i...	bbc5... Script	(f... 34 n	3...	
	tl.png /170d2/ski	GET	200 OK	i...	bbc5... Script	(f... 31 n	3...	

54 requests | 40.8 KB transferred | 6.74 s (onload: 4.28 s, DOMContentLoaded: 4.24 s)

□ >≡ 🔍 ⚡ ⚪ 🔍 All Documents Stylesheets Images Scripts ⚙

Sparrow

o.mage-world.com



MAGE WORLD
Live Demo

One Step Checkout Pro

[Buy Now](#)

[More Live Demos](#)

Magento®

Default welcome msg!

[My Account](#) | [My Wishlist](#) | [My Cart \(2 items\)](#) | [Checkout](#) | [Log In](#)

Your Language: English

Furniture Electronics Apparel Shoes

One Step Che

Please fill in th

[Already registered? Click here to login.](#)

① BILLING ADDRESS

First Name * Last Name *

Company Email Address *

Address [Manage Address Fields](#)

You can enable / disable / sort all address fields, set them as mandatory or optional.

City State/Province

Zip/Postal Code Country *

Telephone

Tax/VAT number

Create an account for later use

Ship to same address

② SHIPPING METHOD

United Parcel Service

- Worldwide Expedited \$525.25
- Worldwide Express Saver \$715.22
- Worldwide Express \$741.40
- Worldwide Express Plus \$785.40

③ DELIVERY TIME

Select preferred time

Date: 06/28/2013 Time: 09:50 am

[Time Range](#)

④ REVIEW YOUR ORDER

Chair



Ottoman



Discount Coupon

Allow to apply discount coupon directly on the checkout page

[Update Cart](#)

Shipping & Handling (Flat Rate - Fixed)

Grand Total \$629.98

[Apply Coupon](#)

More Convenient Features

- * Responsive Design! Support ALL devices
- + Allow to add poll (Admin / CMS / Polls)
- + Enable check box for approval of terms and conditions
- + Enable Newsletter subscription when checking out
- + Plus Many More Features!

Forgot an Item? [Edit Your Cart](#)

What is your favorite color [Please select](#)

* I accept the [Terms and Conditions](#)

[Place Order](#)

mage-world.com/170d2/check Standard [PayPal](#) What is PayPal?

M/C, AMEX, DEBIT)

YOUR ORDER

Product Name	Price	Qty	Subtotal
Coalesce: unctioning On mpatience T- shirt ize Small	\$15.00	1	\$15.00

Update Cart

Subtotal	\$15.00
ipping & Handling (Flat Rate - Fixed)	\$100.00
Grand Total	\$115.00

Apply Coupon

Forgot an Item? [Edit Your Cart](#)

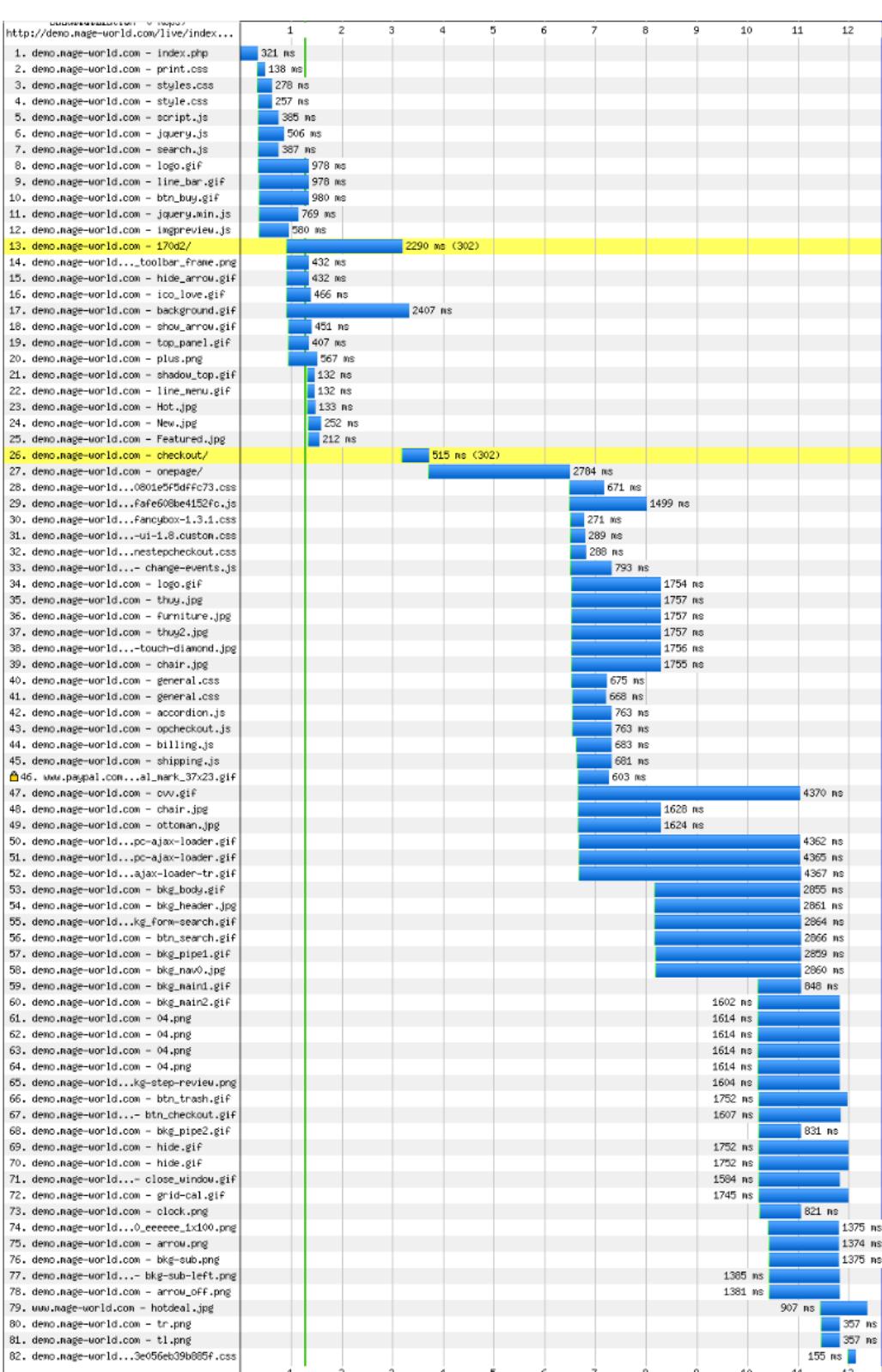
Please select

nd Conditions

| Customer Service | Privacy Policy
Advanced Search | Orders and Returns | Contact Us

agento Healthy - Report All Bugs (ver. 1.7.0.2)
ento Demo Store. All Rights Reserved.

198.1.93.43



www.plazathemes.com

Page: 1 2

NEWSLETTER

Lore ipsum dolor sit amet, cone detur

INFORMATION



Latest Performance Report for: <http://demo.mage-world.com/live/index.php?id=1>

[Download PDF](#)

Report generated: Wed, Jun 26, 2013, 9:01 AM -0700

Test Server Region: Vancouver, Canada

Using: Chrome (Android, Galaxy Nexus) 26.0.1410.58, Page Speed 1.12.16, YSlow 3.1.6



Looks like you're running Magento
[Have a look at our Magento optimization tips »](#)

Summary

Page Speed Grade:
(55%)↓



YSlow Grade:
(72%)↓

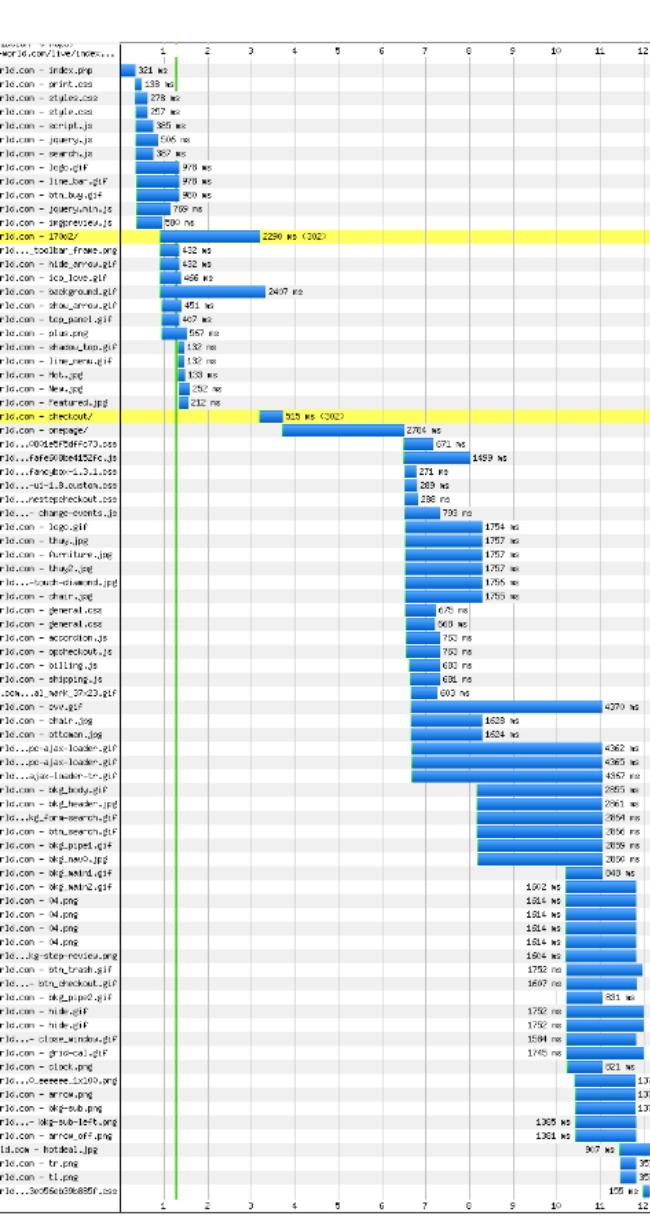


Page load time: 14.53s

Total page size: 676KB

Total number of requests: 83

Options



Latest Performance Report for:
http://www.plazathemes.com/demo/ma_de...

Report generated: Wed, Jun 26, 2013, 9:01 AM -0700
Test Server Region: Vancouver, Canada
Using Chrome (Android: Galaxy Nexus) 26.0.1410.58, Page Speed: 1.12, YSlow: 3.1.6

Looks like you're running Magento
Have a look at our [Magento optimization tips](#).

Summary

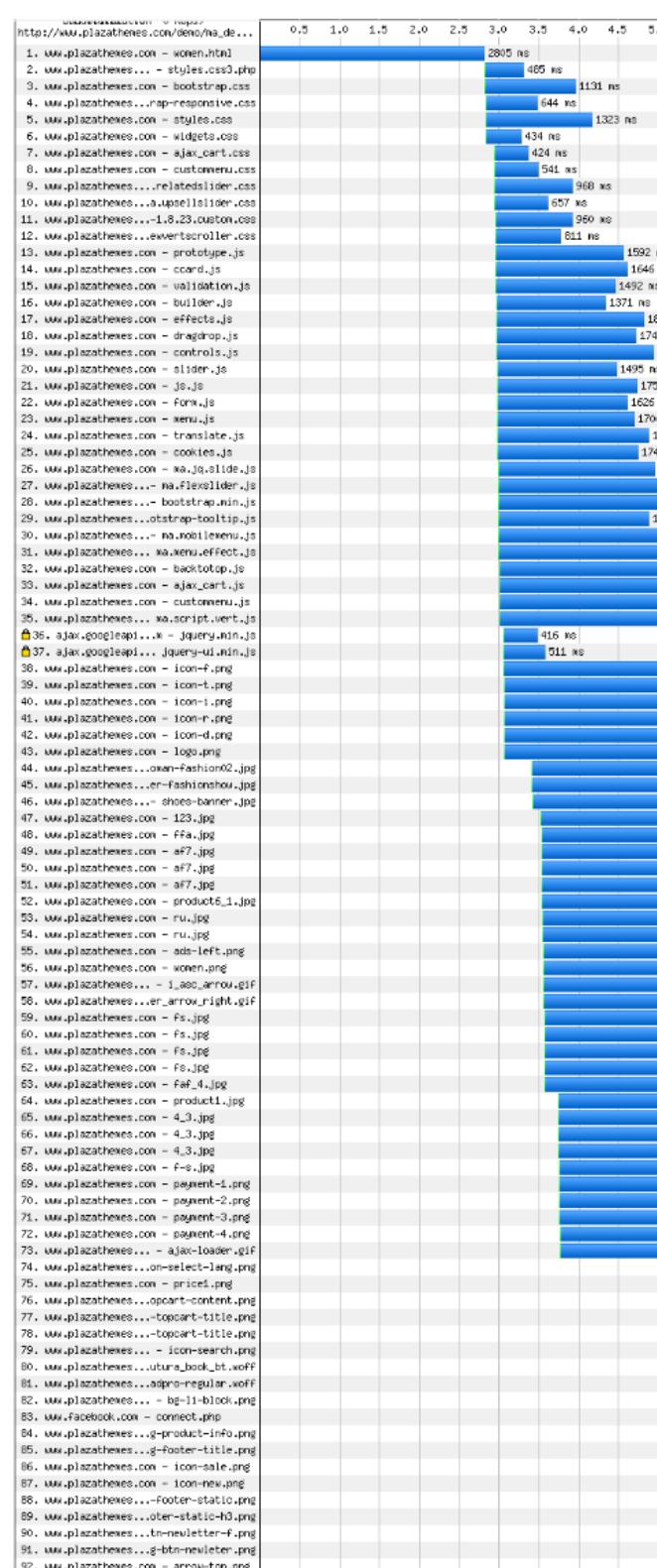
Page Speed Grade: E	YSlow Grade: C
Page load time: 14.53s	Total page size: 679KB
Total number of requests: 83	

119 requests | 2.6 MB transferred | 30.23s (onload: 7.33s, DOMContentLoaded: 4.30s)

Elements Resources Network Sources Timeline Profiles

Name Path ... S... T... Initia... Size T... Timeline 2015: 30.23s

ajax-loa... /demo/ma...	GET 200 1... w... 847 337	...
bg-nav... /demo/ma...	GET 200 OK 1... 999 189	...
arrow-d... /demo/ma...	GET 200 1... ma... 101 180	...
arrow-u... /demo/ma...	GET 200 1... ma... 101 184	...
ui-bg_h... /demo/ma...	GET 200 1... wom... 131 200	...
ui-bg_g... /demo/ma...	GET 200 1... wom... 141 333	...
ui-bt... /demo/ma...	GET 200 Other 1... P... 100 100	...



	/demo/main.js	GET	OK	...	Script	999	189		
	arrow-d...	GET	200	...	ma.jq...	1....	1...		
	arrow-u...	GET	200	...	Script	101:	180		
	ui-bg_h...	GET	200	...	wom...	1....	2...		
	ui-bg_g...	GET	200	...	Parser	1.1	280		
	bg-btn...	GET	200	...	wom...	1....	3...		
	/demo/main...	GET	200	...	Parser	1.4	333		
	bg-btn....	GET	200	...	Other	(f...	P...		

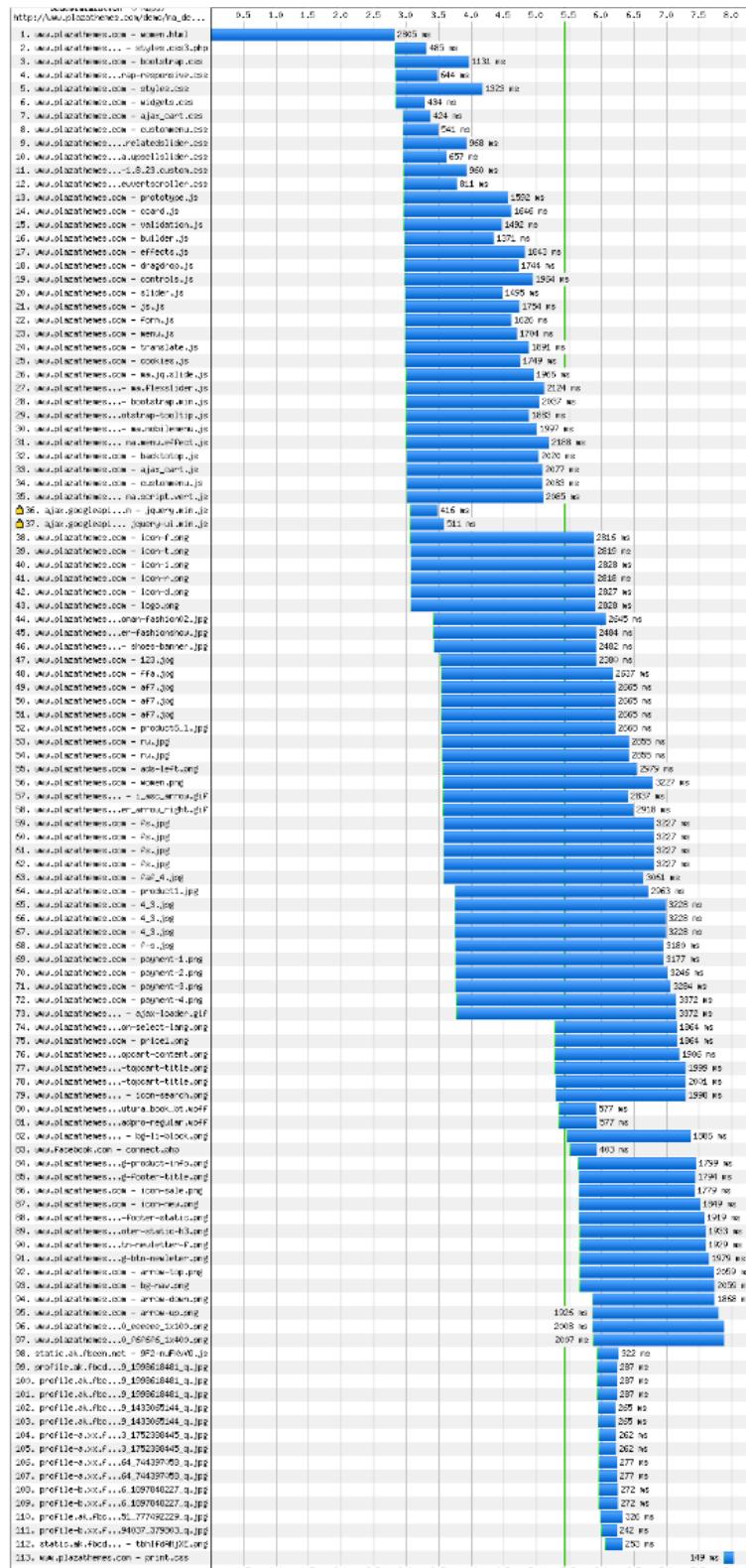
119 requests | 2.6 MB transferred | 30.23 s (onload: 7.33 s, DOMContentLoaded: 4.30 s)

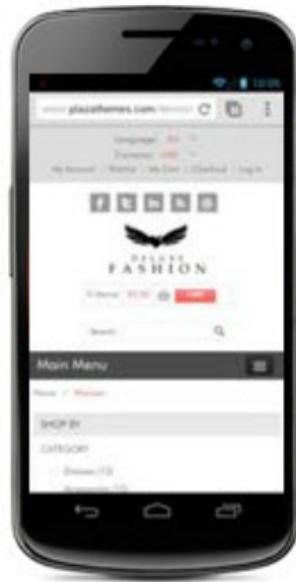
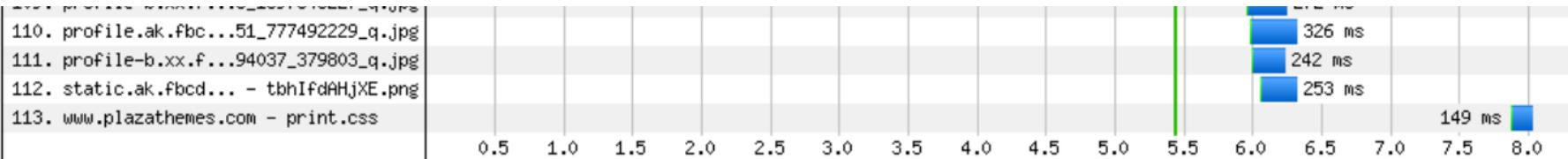


Screenshot of a web browser showing a fashion website. The page features two large images: one of a woman in white pants and another of a woman in a blue top and yellow skirt. Below the images is a newsletter sign-up form with fields for name and email, and a "SUBSCRIBE" button. A "NEWSLETTER" section follows, containing placeholder text. At the bottom, there's an "INFORMATION" section with a file size of 196.154.250.19 and a table showing network requests.

Name	Path	... Status	Size Content	T... Initial	T... Time	Timeline
ajax-los...	/demo/ma...	200	text/w...	OK	1ms	30.23s
bg-nav...	/demo/ma...	200	text/w...	OK	1ms	30.23s
arrow-d...	/demo/ma...	200	text/w...	OK	1ms	30.23s
arrow-u...	/demo/ma...	200	text/w...	OK	1ms	30.23s
ui_bg_h...	/demo/ma...	200	text/w...	OK	1ms	30.23s
ui_bg_g...	/demo/ma...	200	text/w...	OK	1ms	30.23s
bg-blm...	/demo/ma...	200	text/w...	OK	1ms	30.23s

119 requests | 2.6 MB transferred | 30.23s (load: 7.33s, DOMContentLoaded: 4.30s)





Latest Performance Report for: http://www.plazathemes.com/demo/ma_deluxe/women.html

[Download PDF](#)

Report generated: Wed, Jun 26, 2013, 10:05 AM -0700

Test Server Region: Vancouver, Canada

Using: Chrome (Android, Galaxy Nexus) 26.0.1410.58, Page Speed 1.12.16, YSlow 3.1.6



Looks like you're running Magento
[Have a look at our Magento optimization tips »](#)



Your page generation time is slow
[Find out why and explore possible solutions »](#)

Summary

Page Speed Grade:
(44%)↓



YSlow Grade:
(64%)↓



Page load time: 7.32s
Total page size: 2.83MB
Total number of requests: 114

Options

The image features a dark blue circular background with concentric orange and red radiating lines, resembling a sunburst or a stylized speech bubble. Overlaid on this graphic is the text "That's all Folks!" in a white, cursive, handwritten-style font.

That's all Folks!

My name: Ray Bogman



- Joomla/Magento evangelist
- Trainer
- Performance nerd
- Security geek

@ SupportDesk.nu

<http://www.linkedin.com/in/raybogman>



Resources:

- <http://sixrevisions.com/javascript/mobile%C2%A0web-development-frameworks/>
- <http://caniuse.com/fontface>
- <http://blog.cloudfour.com/are-css-sprites-a-mobile-web-worst-practice/>
- <http://stevesouders.com/mobileperf/mobileperf.php>
- https://en.wikipedia.org/wiki/XHTML_Mobile_Profile
- <http://mobile.smashingmagazine.com/2013/01/09/bandwidth-media-queries-we-dont-need-em/>
- <http://www.igvita.com/2013/03/07/faster-smaller-and-more-beautiful-web-with-webp>
- <http://mobitest.akamai.com/m/index.cgi>
- <http://www.slideshare.net/jiraict/magento-mobile-seminar>
- <http://themeforest.net/item/deluxe-responsive-magento-theme/4778953>
- <http://demo.mage-world.com/live/index.php?id=1>