



**Magento Mobile
Performance:
The Responsive
Mythes**

Is Magento mobile ready?

- 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!



1.0?

1.2?



1.4?



1.6.2?



SPEED



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



demo store
Magento™

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

Catalog

My Cart

Checkout

Furniture

Living Room

- 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 vergelijker

Geen producten geselecteerd.

Case: Condom-Anoniem.nl

- Glijmiddelen & Massage
 - BodyGliss glijmiddel
 - Speeltjes
 - Losse condooms bestellen
 - Pakketten
 - Vrouwencendoom
 - 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 condoms en gratis Play Massage
€ 5,95

In winkelwagen
Zet op verlanglijst
Toon in vergelijking



Durex Love Collection - 18 condoms assortiment
€ 15,49

In winkelwagen
Zet op verlanglijst
Toon in vergelijking



Klantenbeoordelingen



123 beoordelingen over condom-anoniem.nl



ucten vergelijken

producten geselecteerd.



klantenbeoordelingen



beoordelingen over
condoom-anoniem.nl

Home Inloggen

condoomanoniem.nl
snel, discreet & gratis verzending

durex thuiswinkel waarborg

Durex Conc

Durex Glijm

Durex Play

Home Shop Zoeken Cart More







- [Furniture >](#)
- [Electronics >](#)
- [Apparel >](#)
- [Music >](#)
- [Ebooks >](#)


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Living Room  

- 

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 >



What is
Mobile Performance?

and is it
possible with
Magento



Top 5

- **minim**
defl

SPEED

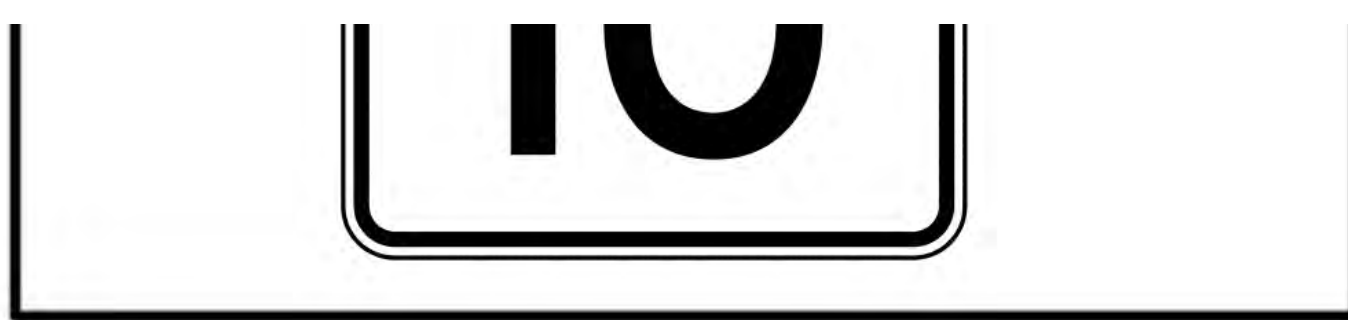
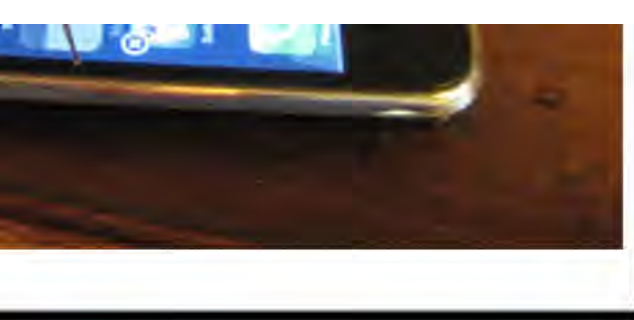
LIMIT

10

Top 5

basic performance

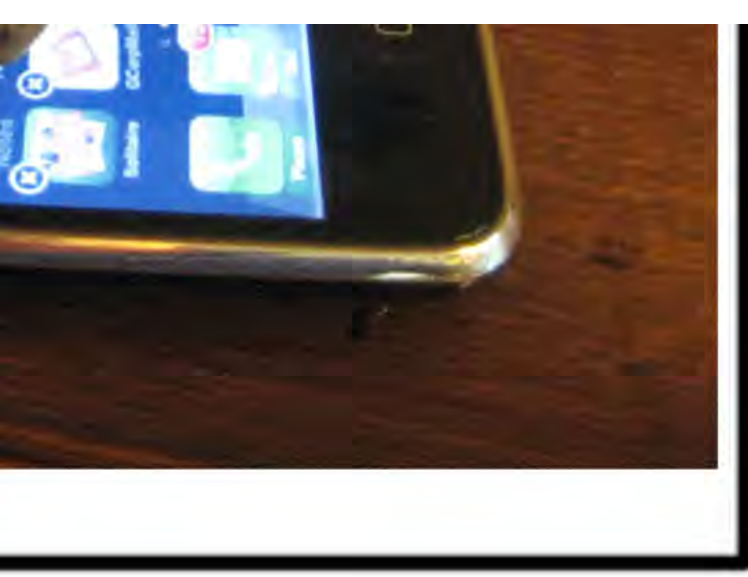




- minimize http request
- deflate content
- merge css/js
- expire data
- images



Network **latency**



10

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



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

minimize nttp req

- deflate content

- merge css/js

- expire data

- images

differentiate content

- merge css/js
 - expire data
 - images
-

expire dat

- images



- i

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?

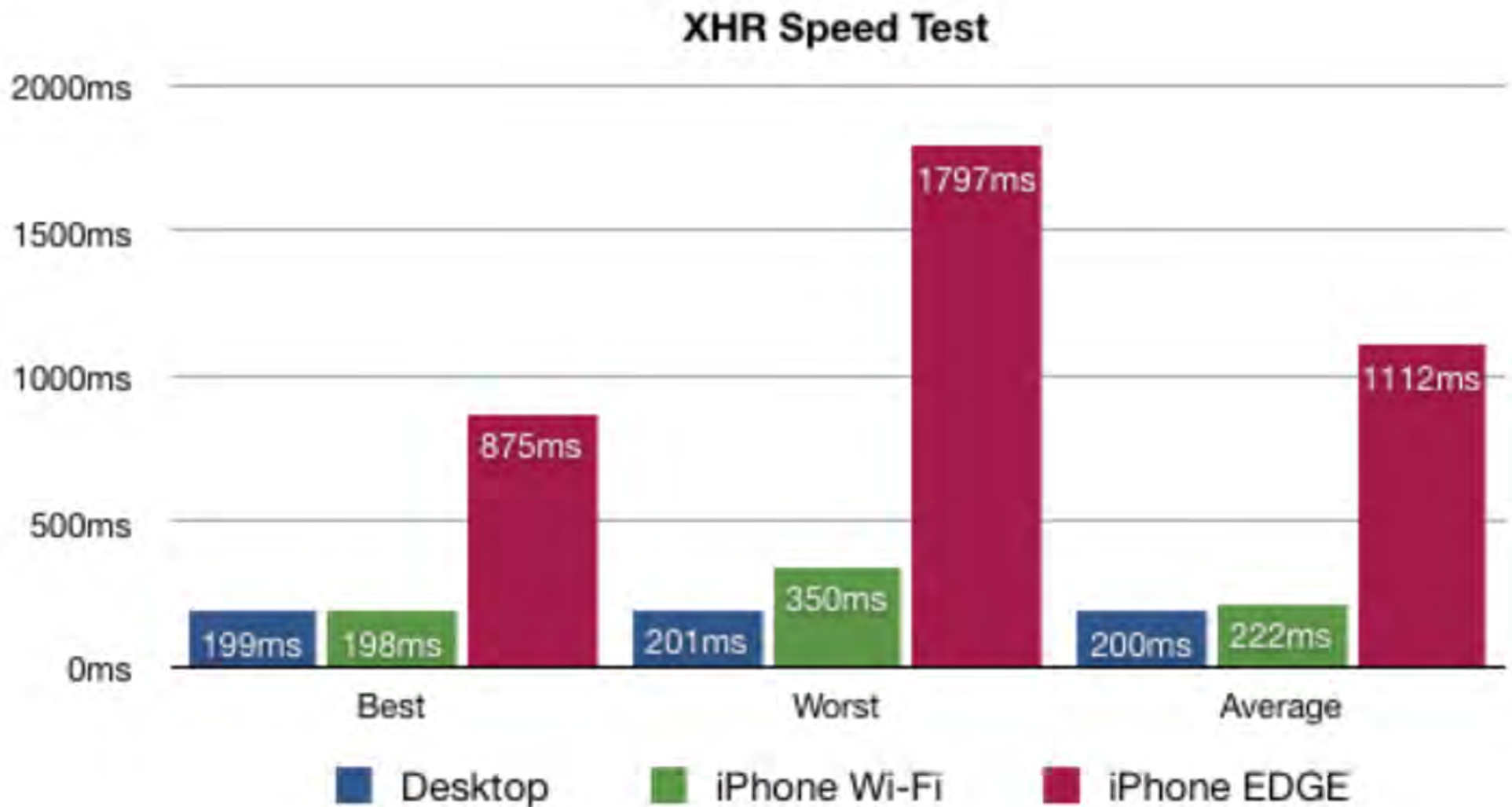
Yes, but there is **much more!**

XHTML Mobile Profile

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

**Hundred o
different d**

Network latency

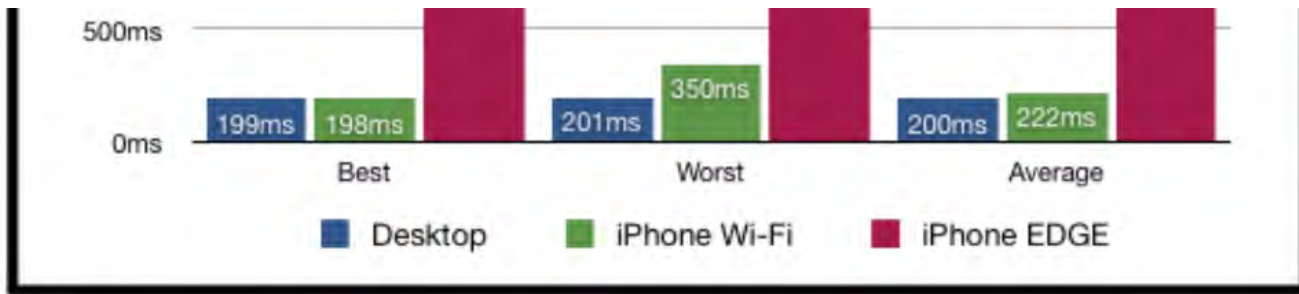


XHTML Mobile Profile

```
<?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"

ch 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"



	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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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,R0lGODlhAQACAIAAAP///
  01NTSH5BAAAAAAALAAAAABAAIAAAICDA
  oA0w==)}
3 #nav-home a,#nav-services a,#nav-
  about a,#nav-contact a
  {background-image:url(data:image/
  png;base64,iVBORw0KGgoAAAANSUHEUg
  AAAIIVAAAAALCAVAAAAD1n1MVAAAAAGYDFWHD
```

```
1 /* Data URI images */
2 #top{background-image:url
  (data:image/
  gif;base64,R0lGODlhAQACAIAAAP///
  01NTSH5BAAAAAAALAAAAAABAAIAAAICDA
  oA0w==)}
3 #nav-home a,#nav-services a,#nav-
  about a,#nav-contact a
  {background-image:url(data:image/
  png;base64,iVBORw0KGgoAAAANSUg
  AAAIVAAAALCAVAAAD1nTMVAAAACYPFWHR
```

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,iVBORw0KGgoAAAANSUg  
  AAAIIVAAAALCAVAAAD1nTM/AAAAACyDcWHD
```

Are there Javascript frameworks for mobile?



Are CSS Sprites A Mobile Web "Worst Practice?"

- no apple-touch-icon (less request)

Tools: Javascript



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

trick to auto



Can we validate/test on

- **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)
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- validator.w3.org/m
- [weinre](#)
- [mobitest Akamai](#)

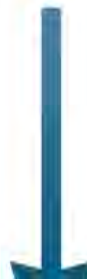
what's the **story** on these **Responsive Mythes**



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 Myths

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?

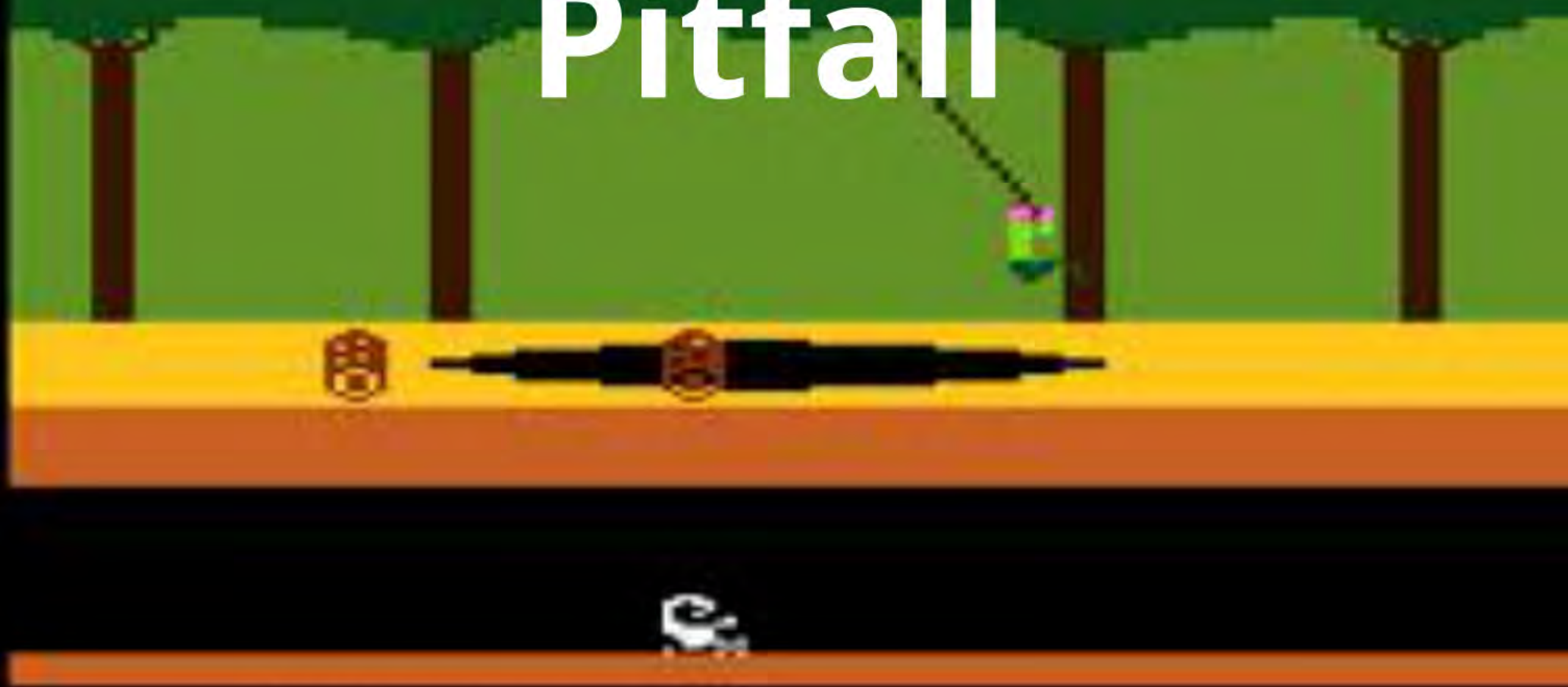
Consider a couple of things before you just pick a responsive theme.

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



1986
|| 19:48

Pitfall



ACTIVISION

demo.mage-world.com/170d2/check

PayPal Website Payments Standard [What is PayPal?](#)

Check / Money order

Credit Card (VISA, MC, AMEX, DEBIT)

Name on Card *

Credit Card Type *


[-Please Select-]

Credit Card Number *

Expiration Date *

Month Year

REVIEW YOUR ORDER

Product Name	Price	Qty	Subtotal
 Coalesce Functioning On Impatience T-Shirt Size Small	\$15.00	1	\$15.00

Update Cart

Subtotal \$15.00

Shipping & Handling (Flat Rate - Fixed) \$100.00

Grand Total \$115.00

DISCOUNT CODES

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

What is your favorite color

I accept the [Terms and Conditions](#)

Subscribe newsletter

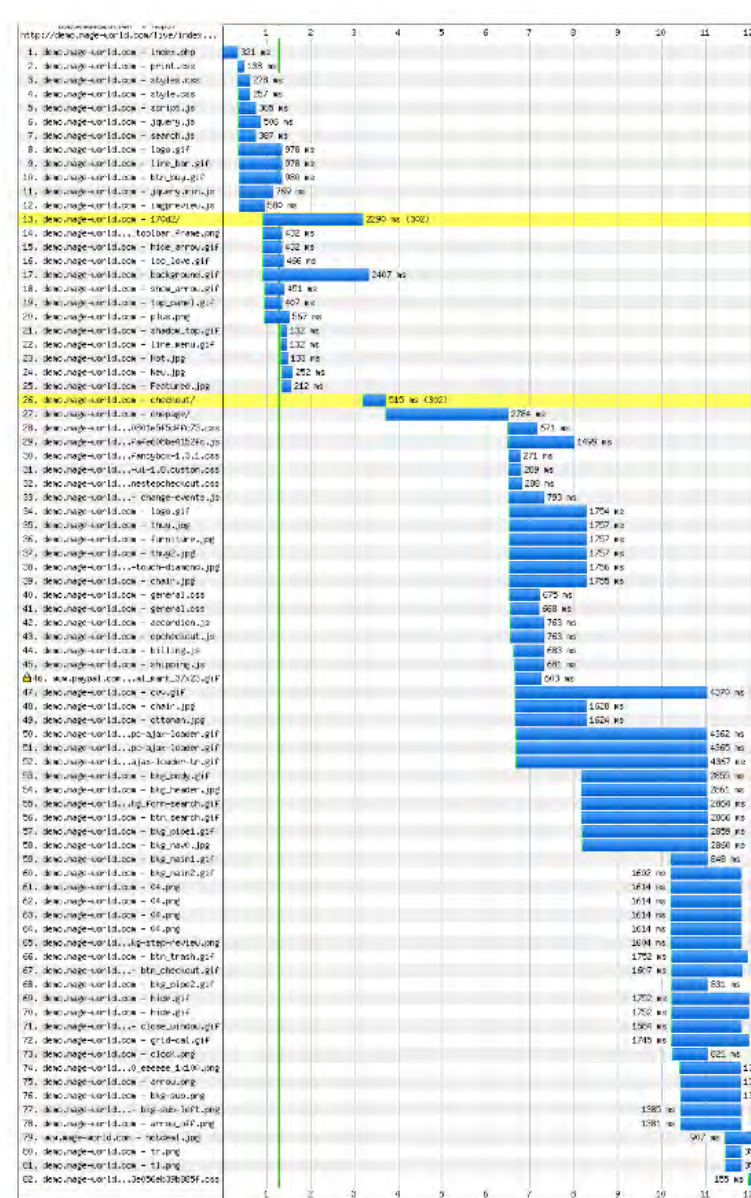
About Us | Customer Service | Privacy Policy
 Site Map | Search Terms | Advanced Search | Orders and Returns | Contact Us

Help Us to Keep Magento Healthy - [Report All Bugs](#) (Ver 1.7.0.2)
 © 2012 Magento Demo Store. All Rights Reserved.

198.193.43

Name	Resources	Network	Sources	Timeline	Profiles
Path					
bkg-su... (/170d2/sk)	GET	200 OK	bbcs...	Script	4.69 s
arrow_o... (/170d2/sk)	GET	200 OK	bbcs...	Script	6.79 s
updates... (/170d2/on)	P..	200 OK	bbcs...	Script	11.6 910
hotdeal... www.mag	GET	200 OK	bbcs...	Script	31 n
coalesc... (/170d2/mc)	GET	304 Not	bbcs...	Script	2.1 165
tr.png (/170d2/sk)	GET	200 OK	bbcs...	Script	3. 34 n
ll.png (/170d2/sk)	GET	200 OK	bbcs...	Script	3. 31 n

54 requests | 40.9 KB transferred | 6.74 s (onload: 4.28 s, DOMContentLoaded: 4.24 s)



Latest Performance Report for:

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

Report generated: Wed, Jun 26, 2013, 8:01 AM -0700

Test Server Region: Massachusetts, Canada
 Using Chrome (Android, Galaxy Nexus), 26.0.1310.42, Firefox (Linux), 17.0.2, Yahoo, 3.1.6

Looka like you're running Magento? [View a list of our Magento optimization services.](#)

Summary

Page Speed Grade: **E (55%)**






YSlow Grade: **C (72%)**

Page load time: 14.53s

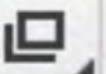
Total page size: 576KB

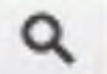


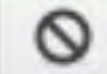

Total number of requests: 83

Options

	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		
	coalesc... /170d2/me	GET	304 Not	i...	bbc5... Script	2... 3.3 l	1... 165	
	tr.png /170d2/ski	GET	200 OK	i...	bbc5... Script	(f... 34 n		
	tl.png /170d2/ski	GET	200 OK	i...	bbc5... Script	(f... 31 n		

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







All | Documents Stylesheets Images Scri 

One Step Checkout Pro Allows to

- + Choose 2 or 3 column layout
- + Customize heading, description, style color
- + Enable/Disable Shopping Cart to speed up

Payment Methods

Supports ALL popular payment methods

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

1 BILLING ADDRESS

First Name * Last Name *
 Company Email Address *
 Address *
 City State/Province
 Zip/Postal Code Country * Netherlands
 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: 06/26/2013
 Time: 09:50 am

4 PAYMENT METHOD

- PayPal Website Payments Standard
 PayPal [What is PayPal?](#)
- Check / Money order
- Credit Card (VISA, M/C, AMEX, DEBIT)

Name on Card *
 Credit Card Type *
 Credit Card Number *

Easy to Update Cart

Customers can add or subtract items from their cart on the checkout page

REVIEW YOUR ORDER

Product Name	Price	Qty	Subtotal
 Chair	\$129.99	1	\$129.99
 Ottoman	\$299.99	1	\$299.99
Subtotal			\$429.98
Shipping & Handling (Flat Rate - Fixed)			\$200.00
Grand Total			\$629.98

Discount Coupon

Allow to apply discount coupon directly on the checkout page

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

image-world.com/170d2/check

Payments Standard **PayPal** What is PayPal?

er

(MC, AMEX, DEBIT)

Year

ORDER

Product Name	Price	Qty	Subtotal
Coalesce:	\$15.00	1	\$15.00
<p>Subtotal \$15.00</p> <p>Shipping & Handling (Flat Rate - Fixed) \$100.00</p> <p>Grand Total \$115.00</p>			

Update Cart

Apply Coupon

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

Please select

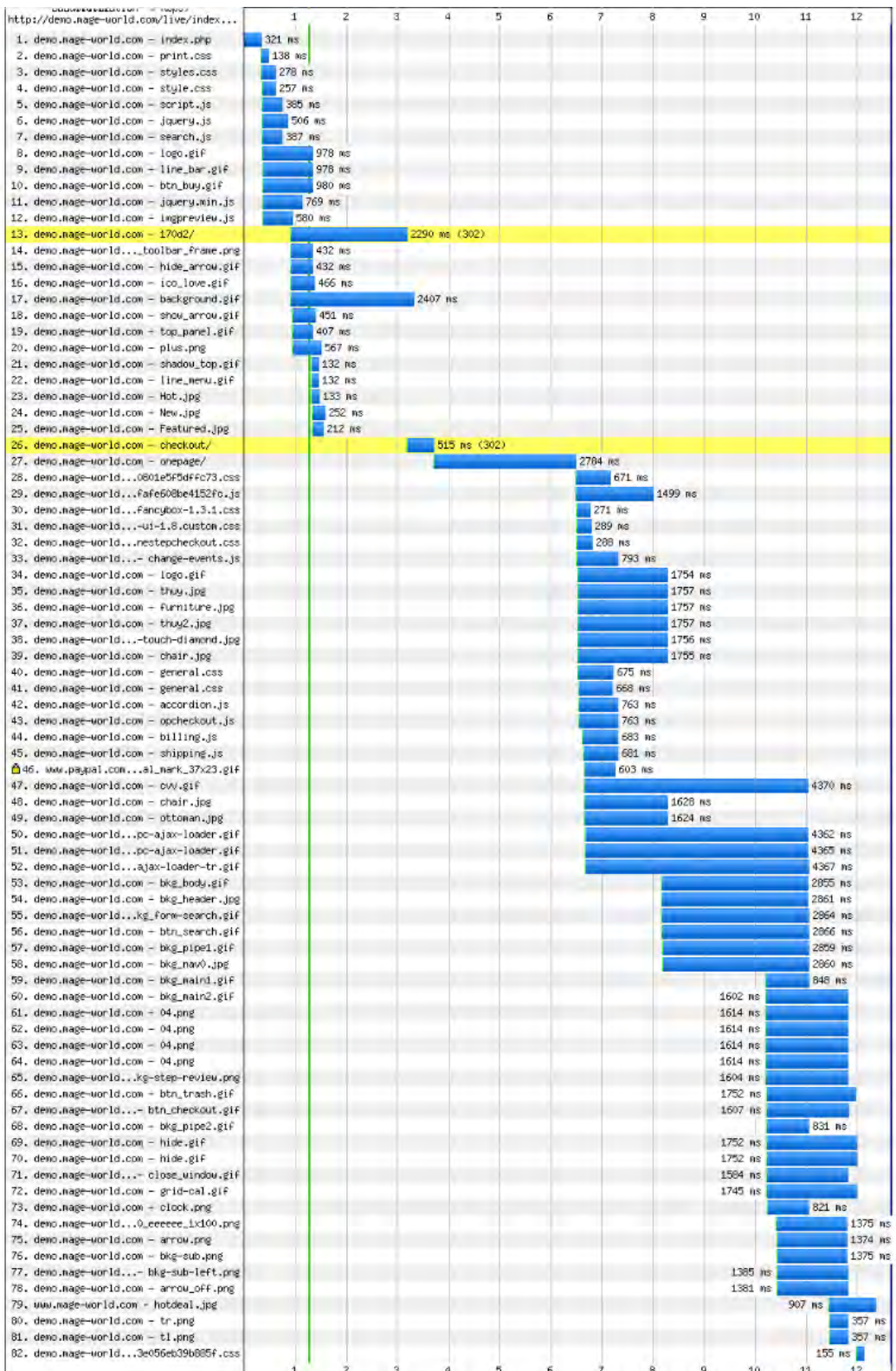
Customer Service | Privacy Policy

Advanced Search | Orders and Returns | Contact Us

Magento Healthy - Report All Bugs (ver. 1.7.0.2)

enlo Demo Store. All Rights Reserved.

198.1.93.43



www.plazathemes.com

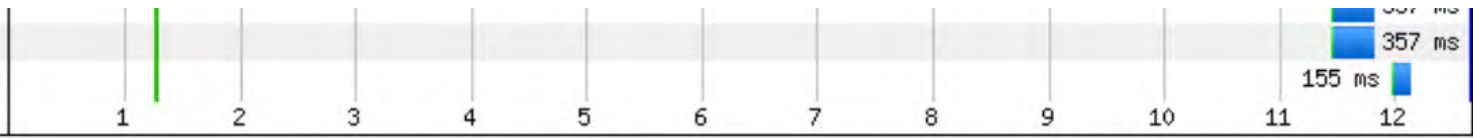
Page: 1 2

NEWSLETTER

Lorem ipsum dolor sit amet, consectetur adipiscing elit.

INFORMATION

81. demo.mage-world.com - t1.png
82. demo.mage-world...3e056eb39b885f.css



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%) ↓

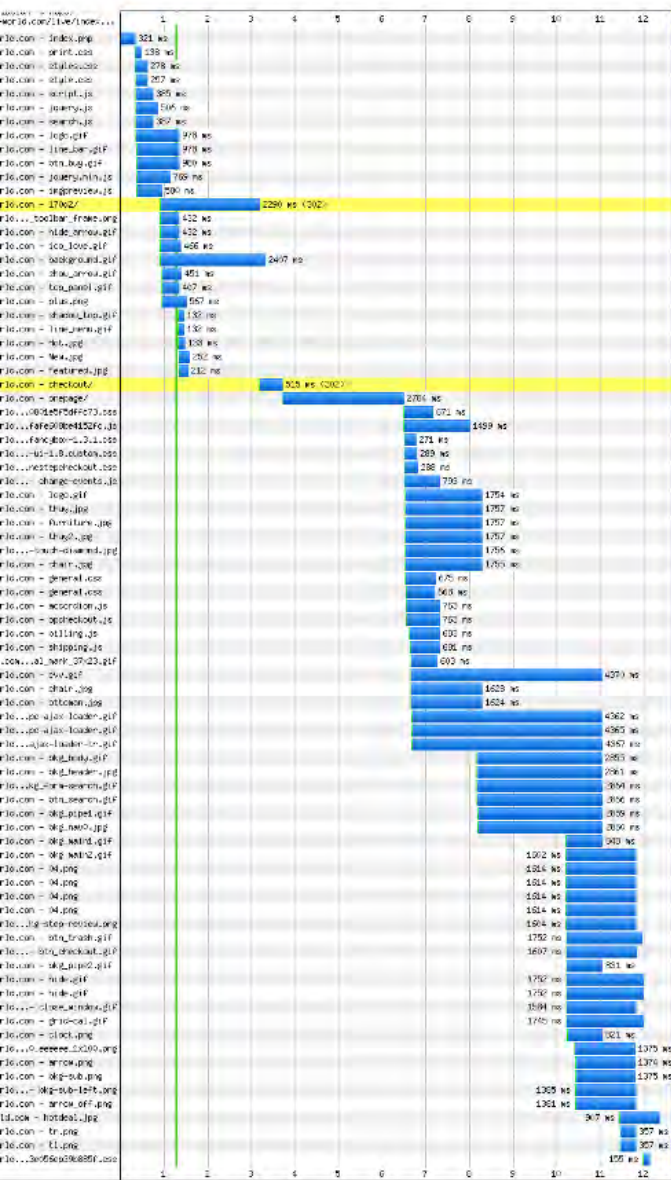
E

YSlow Grade:
(72%) ↓

C

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

Options

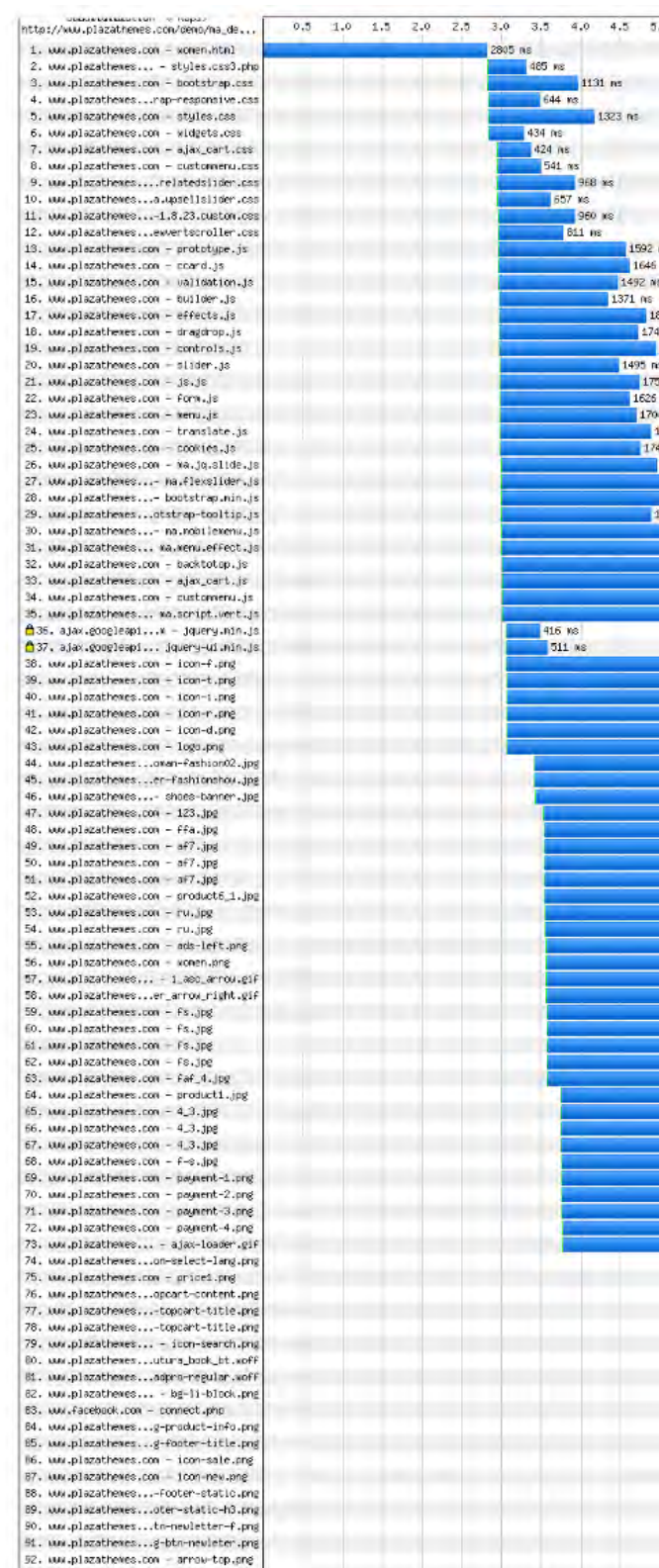


www.plazathemes.com/demo/ma_de

NEWSLETTER

INFORMATION

Name	Path	Size	Time
ajax-loader	/demo/ma	200	100
bg-nav	/demo/ma	200	100
arrow-d	/demo/ma	200	100
arrow-u	/demo/ma	200	100
ui-bg-h	/demo/ma	200	100
ui-bg-g	/demo/ma	200	100
bg-btn	/demo/ma	200	100



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

Report generated: Wed Jun 26, 2013, 8:01 AM -0700

Summary

Page Speed Grade: **E (55%)**

YSlow Grade: **C (72%)**

Page load time: 14.53s

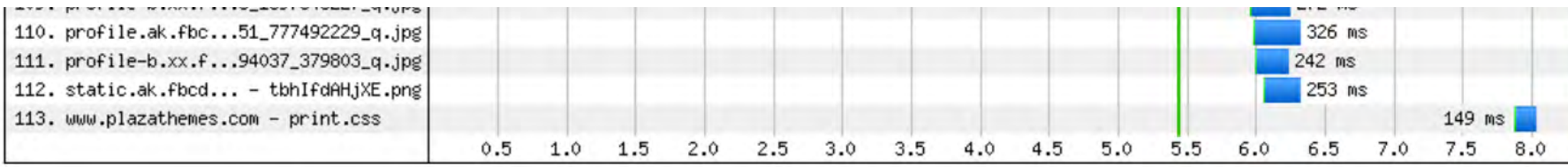
Total page size: 679KB

Total number of requests: 23

	/demo/ma	GET	OK	i...	Script	999	189		
	arrow-d... /demo/ma	GET	200 OK	i...	<u>ma.jq...</u> Script	1.... 101!	1... 180		
	arrow-u... /demo/ma	GET	200 OK	i...	<u>ma.jq...</u> Script	1.... 101:	1... 184		
	ui-bg_h... /demo/ma	GET	200 OK	i...	<u>wom...</u> Parser	1.... 1.1	2... 280		
	ui-bg_g... /demo/ma	GET	200 OK	i...	<u>wom...</u> Parser	1.... 1.4	3... 333		
	bg-btn.... /demo/ma	GET	200 OK	i...	Other	(f... P...			

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

Documents
 Stylesheets
 Images 2



Options

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%)↓	F	YSlow Grade: (64%)↓	D	Page load time: 7.32s Total page size: 2.83MB Total number of requests: 114
------------------------------------	----------	-------------------------------	----------	---



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/mobileperfbkm.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>