

How to Build a Mobile Site with Drupal

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About Us



drupalize.me



BADCAMP11

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We're still figuring out how to "do mobile"

Adaptive and Responsive

Mobile Apps and Mobile Web

- An App is typically something that you distribute to your users by pointing them to a store
- A website loads in a browser such as Mobile Safari
- Some apps use web technologies (HTML, JavaScript, CSS) while some websites can be installed as Apps!

Build an App?

Write for multiple platforms, test on
multiple platforms

Build a website?

Write one website, but test in
multiple browsers



Why not just target Webkit?



There is no "one" Webkit

The Great WebKit Comparison Table

http://quirksmode.org/webkit_mobile.html

Developing for Mobile

(with HTML and JavaScript)



Let your website join the party

<https://secure.flickr.com/photos/moogan/2976043573/>

A Mobile Web App Is:

1. An name and icon for the home screen or launcher
2. An indication that the application should run in full-screen mode (iOS only)
3. The size of the viewport
4. A startup image (iOS only as well)
5. A list of the files needed for offline use (not just mobile, but need a fallback for IE)

1. Set your site name!

```
drush -y vset site_name for the  
hardcore
```


Home Screen Icon

```
10 <link rel="apple-touch-icon-precomposed" sizes="114x114" href="php print<br/base_path() . path_to_theme(); ?>/114-badcampicon.png">  
11 <link rel="apple-touch-icon-precomposed" sizes="72x72" href="php print<br/base_path() . path_to_theme(); ?>/72-badcampicon.png">
```

2. iOS Enhancements

```
8 <meta name="apple-mobile-web-app-capable" content="yes">  
9 <meta name="apple-mobile-web-app-status-bar-style" content="black">
```

3. Ω Rocks

(it set the `<viewport>` for us)

4. More iOS Enhancements

```
10 <link rel="apple-touch-startup-image" href="<?php print base_path()  
path_to_theme() ?>/startup-screen.png">
```

5. A Cache Manifest

- A plain text file
- `<html manifest="/cache.manifest">`
 - Might need to have your server admin add the content type to Apache
- First line is CACHE MANIFEST
- NETWORK:, CACHE:, FALLBACK:



Danger! Caveats abound!

<https://secure.flickr.com/photos/22490717@N02/2317974773/>

HTML5 Storage



Kittteh Not Included

HTML5 Web Storage

- Supported by all major **mobile** browsers!
 - (still a W3C draft)
- Two types of storage: localStorage and sessionStorage
- localStorage is permanent unless the user clears it
- sessionStorage is temporary, and per tab or window of the site
- Use Web Storage to store data and save on HTTP requests and page size, at the expense of local CPU resources

Web Storage...

... is key-value pairs only

... and is strings only

BADApp 2011

Home

Powered by [Drupal](#)

Distineo Eros Gilvus

Ideo



User searches your site



BADApp 2011

[Home](#)

[Home](#) » [Search](#) » [Content](#)

Search

Recent searches

[Distineo](#)

Search

Powered by [Drupal](#)

Enter your keywords

Search

```
57 $.fn.setSessionItem = function(key) {
58     var json = JSON.stringify(this);
59     sessionStorage.setItem(key, json);
60     return this;
61 }
```

```
49 $.getSessionItem = function(key, def) {  
50     var json = sessionStorage.getItem(key);  
51     if (json != null) {  
52         return JSON.parse(json);  
53     }  
54     return def;  
55 };
```

HTML5 Local Storage Example

<https://drupal.org/sandbox/deviantintegral/131140>
6

<http://lb.cm/badapp>

(who designed this mess?)

Theming for Mobile

Two approaches

- 1) Create a mobile version for an existing site
- 2) Build a new site with a mobile first approach (responsive web design)

Mobile Tools Module



http://drupal.org/project/mobile_tools

Mobile Tools Module

- Redirection to a mobile domain
- User-Agent Detection
- Theme Switching
- Integration with Panels and Context

http://drupal.org/project/mobile_tools

Mobile Tools Module

Redirection to a mobile domain

Mobile Tools

▼ GENERAL CONFIGURATION

Enter the mobile and desktop url for your site. If both urls are equal there will be no

Mobile URL:

Give the name of your mobile site. It is recommended to use the convention of m.do

Desktop URL:

Give the name of your regular website.

▶ REDIRECTION OPTIONS

▶ MOBILE TOOLS BLOCK MESSAGE OPTIONS

▶ MOBILE TOOLS BUILD MODE

▶ ADDITIONAL SETTINGS

Save configuration

Reset to defaults

Mobile Tools Module

User-Agent Detection

▼ CONFIGURATIONS PER DEVICE GROUP

▼ IPHONE

Enable filter for this device group
Choose a theme for this device group

Mobile theme:

- ✓ barefoot_theme
- mobile
- garland

me. See [help](#) for information on the name

▶ IPOD

▶ IPAD

▶ ANDROID

▶ OPERA MINI

▶ BLACKBERRY

Mobile Tools Module

Theme Switching

Mobile Tools

▼ THEMING CONFIGURATION

You can assign a variation of your current theme to all mobile users . this allows you to configure your theme specific for mobile users. See [help](#) for more infor you will have to manually create a second *.info file in your theme directory.

When do you want to switch themes:

- No theme switch
- Switch theme for a mobile device *
- Switch theme based on the URL

Choose one of these methods. *This is not recommended since using 1 url for both mobile and desktop site disable the drupal caching.

Mobile theme:

mobile ▾

Select your default mobile theme. You can specify a different theme for different devices.

▼ ADDITIONAL MOBILE SPECIFIC THEMING CONFIGURATION

- Automatically hide address bar in mobile theme (uses javascript and only work on javascript enabled devices)

Enabling this injects some line of javascript to hide the address bar when the page is loaded

- Add Mobile Tools header

Add mobile specific headers into the header tag. This includes viewport, touch-icon, HandheldFriendly, ... See theme/mobile-tools-header.tpl.php

Mobile Tools Module

Integration with Panels

Summary

Variants » Wine - Mobile - Blush » Selection rules

Variants ▶ Variant operations

▼ Wine - Mobile - Blush ▶

Control the criteria used to decide whether or not this variant is used.

If there is more than one variant on a page, when the page is visited each variant is given an opportunity to see if its selection rules will pass. The first variant that its criteria (as specified below) will be used.

TITLE	DESCRIPTION
Node: type	Node being viewed is type "Wine"
Context exists	Term from node exists
Taxonomy: term	Term from node can be the term "Blush"
Mobile Browser	

Mobile Browser

- Context exists
- Current theme
- ✓ Mobile Browser
- Node: accessible
- Node: language
- Node: type
- PHP Code
- String: URL path
- Taxonomy: parent term
- Taxonomy: term
- Taxonomy: vocabulary
- User: language
- User: permission
- User: role

Selection Rule:

Mobile Browser

save

CSS Media Queries

Detect a device screen size and load a stylesheet

`media="screen and (max-device-width: 480px)"`

```
<link rel="stylesheet" type="text/css" media="screen and (max-device-width: 480px)" href="style.css" />
```


CSS Media Queries

Portrait vs. Landscape

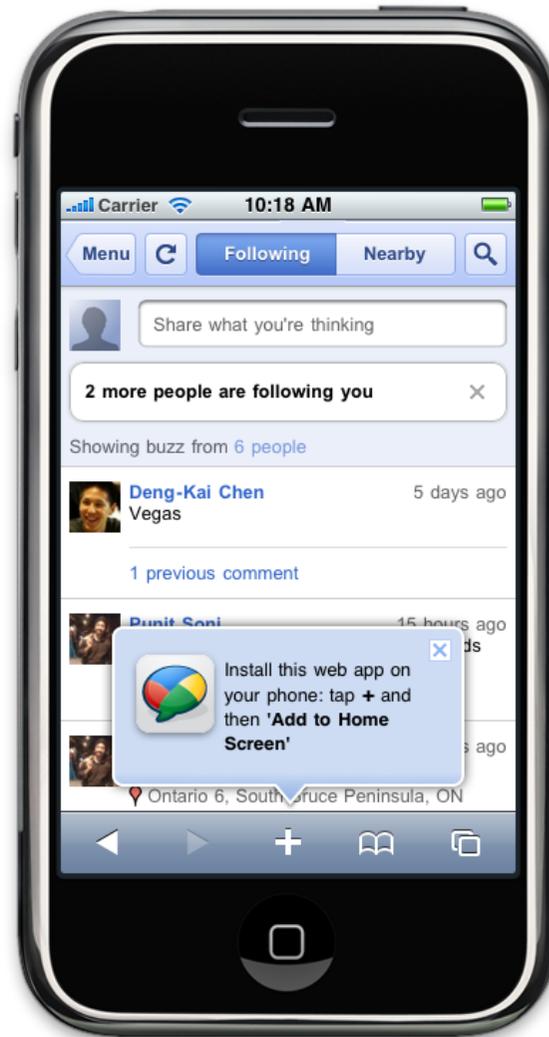
```
/* Portrait */
```

```
@media screen and (orientation:portrait) {  
  /* Portrait styles */  
}
```

```
/* Landscape */
```

```
@media screen and (orientation:landscape) {  
  /* Landscape styles */  
}
```

Google Bookmark Bubble



Create your own:

<http://code.google.com/p/mobile-bookmark-bubble/>

Responsive Web Design

One Site & Theme for any device



Responsive Drupal Themes

Omega



<http://drupal.org/project/omega>

Adaptive



<http://drupal.org/project/adaptivetheme>

Responsive jQuery Plugins

FitText



FitText

A jQuery plugin for inflating web type [Download on Github](#)

FitText makes font-sizes flexible. Use this plugin on your fluid or responsive layout to achieve scalable headlines that fill the width of a parent element.

FitText

FitText

FitText

FitText

Oh, and don't you dare let us catch you using FitText on paragraph text. This is for gigantic display text only!

<http://fittextjs.com>

FitVids



FITVIDS.JS

RWD BLOG

Ethan wrote a cool book

Mr. T Treat your mother right

A lightweight, easy-to-use jQuery plugin for fluid width video embeds.

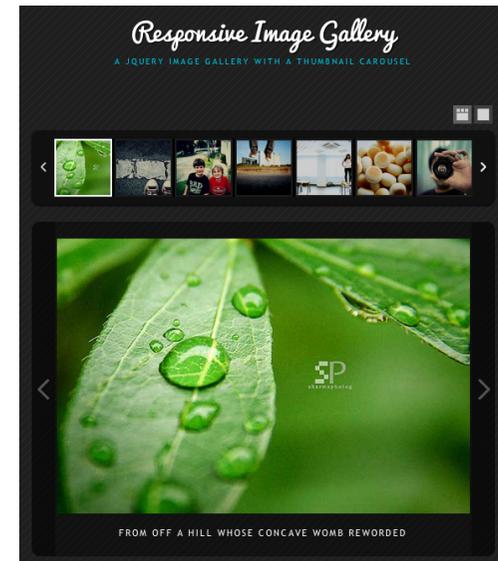
<http://fitvids.js>

Responsive jQuery Code Snippets

Elastislide



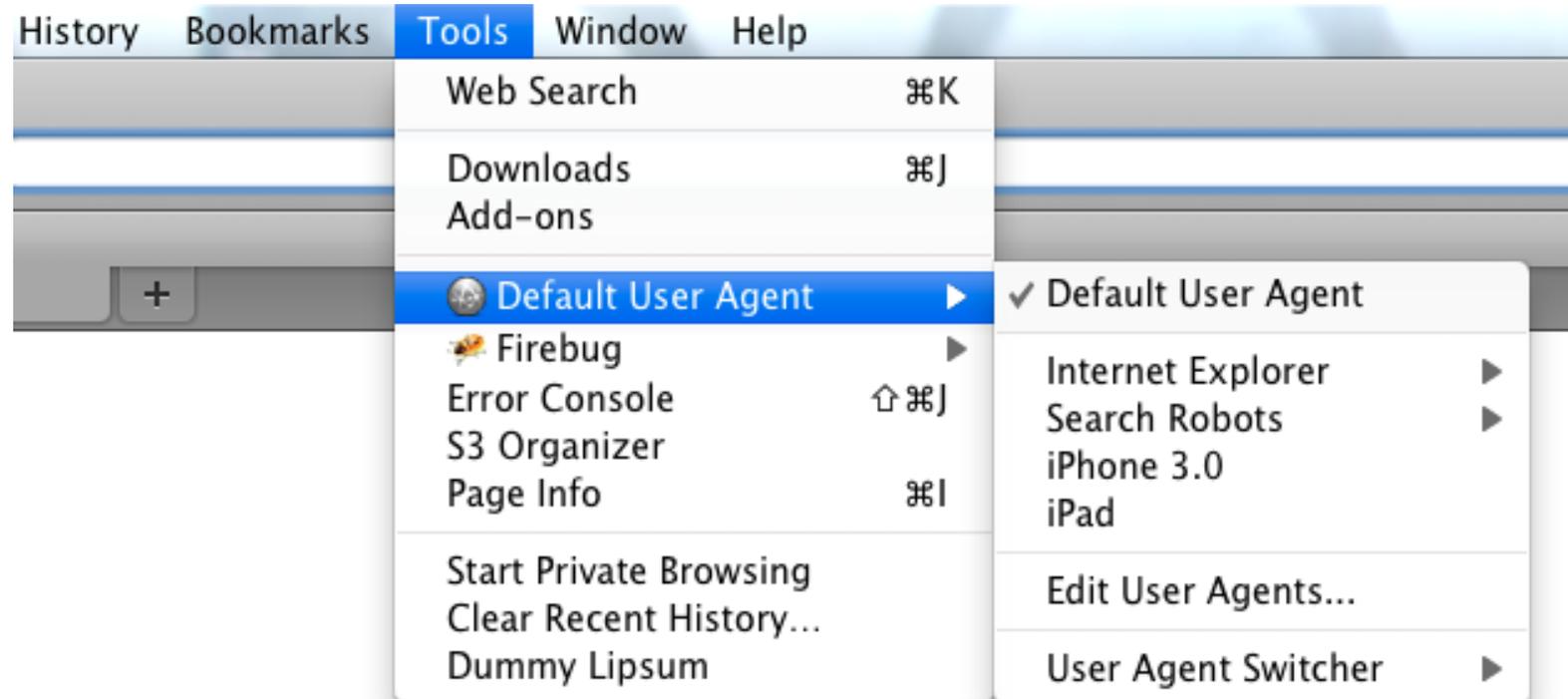
Image Gallery



<http://tympanus.net/codrops/>

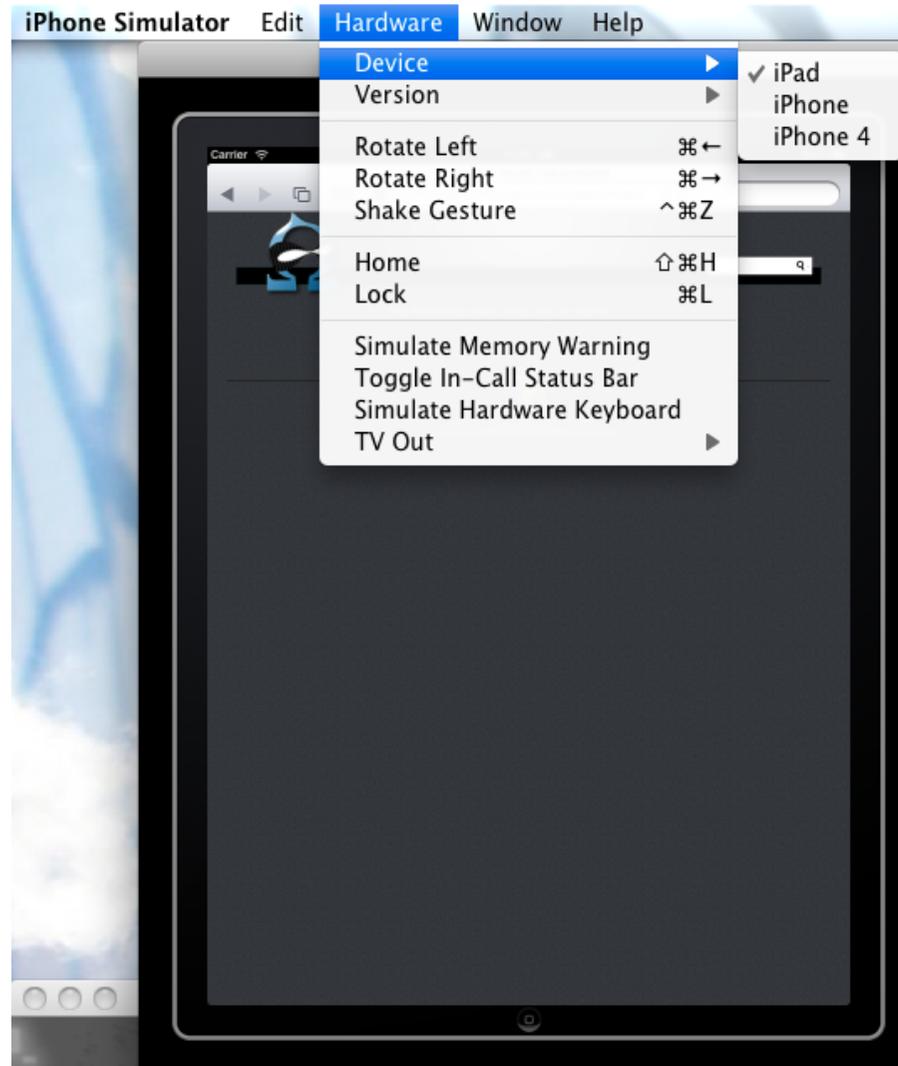
Testing Tools

Firefox User Agent Add-on



Supports iPad and iPhone
Great for testing mobile browser detection,
url and theme switching

Apple XCode iOS Simulator



<http://developer.apple.com/xcode/>

Awesome Resources

<http://lb.cm/bc11-mobile-notes>

Discussion