DRUPALCON

DENVER

MARCH 19-23, 2012

Collaborative Publishing for Every Device

You have an uncontrollable urge to sit down and participate in this Drupalcon session:

Rethinking Responsive Building Techniques

with Sass & Drupal themes & modules

John Albin Wilkins

OBEY

OBEY

The obvious method: region-based layouts

"Multi-Device Layout Patterns"
http://www.lukew.com/ff/entry.asp?1514

Look, Ma!

I'm responsive!

http://www.flickr.com/photos/69455149@N00/2655745750/

Mobile First

Content First

Users First

Drag your butt out of bed

And go see Luke Wroblewski

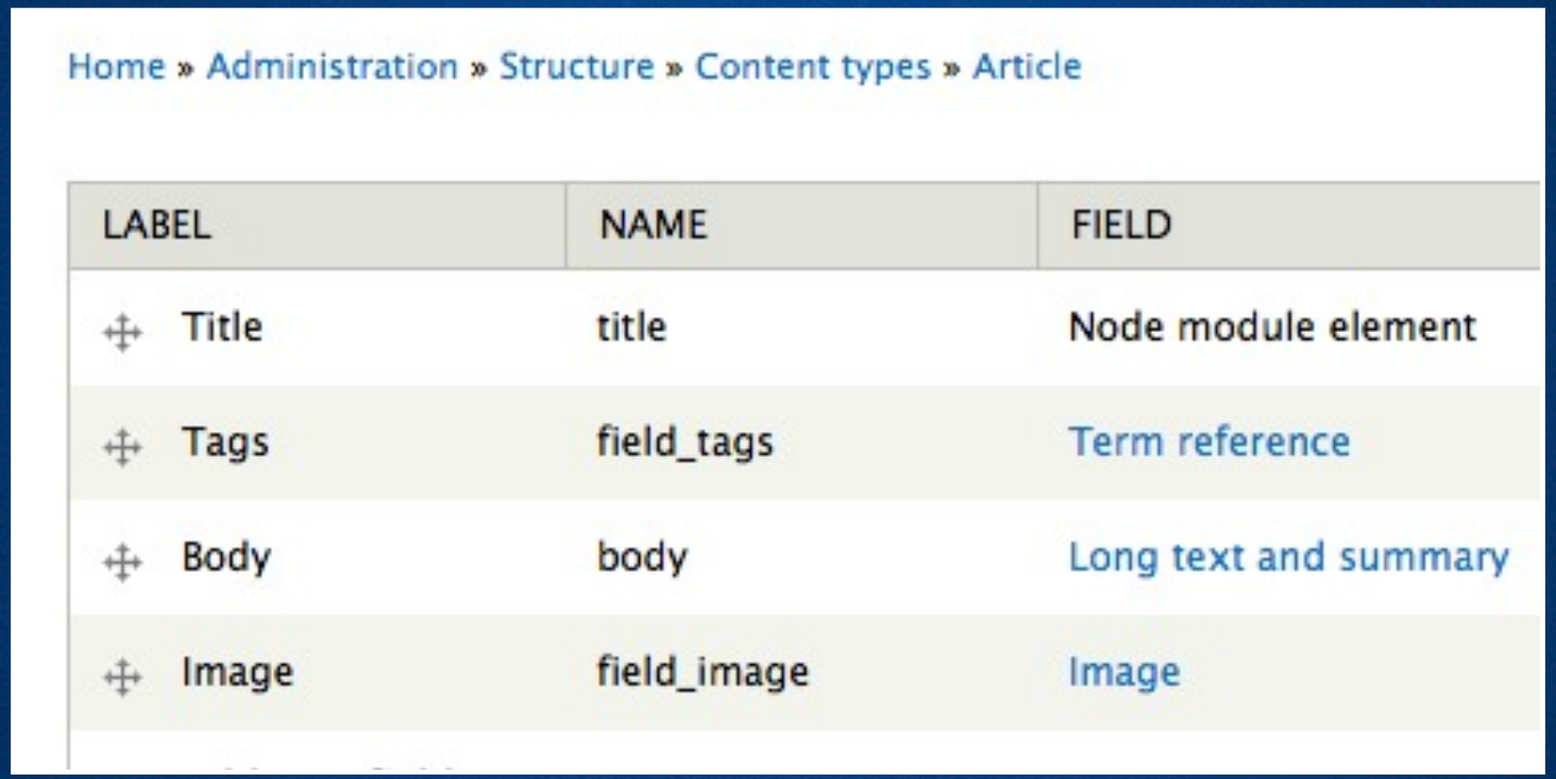
Mobile First

Content First

Users First

Drupal 7 provides an opportunity

Drupal 7 provides an opportunity



Field-based responsive layouts means “responsive content”

Responsive Content Example

Palantir.net

http://www.palantir.net/experience

Let’s start with fields…

Drupal 7 assumes the worst

(Multi-value, plain text fields with label)

```
<div class="field-NAME etc">
  <div class="field-label">
    LABEL: 
  </div>

  <div class="field-items">
    <div>VALUE 1</div>
    <div>VALUE 2</div>
  </div>
</div>
```

drupal.org/project/fences

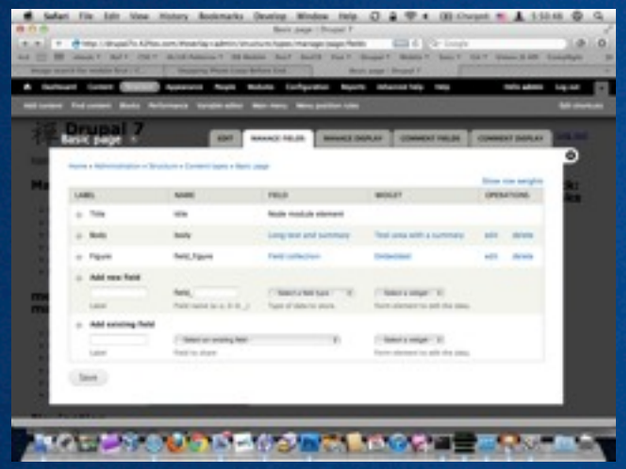
Fences assumes the norm

(There's already markup in your field content)

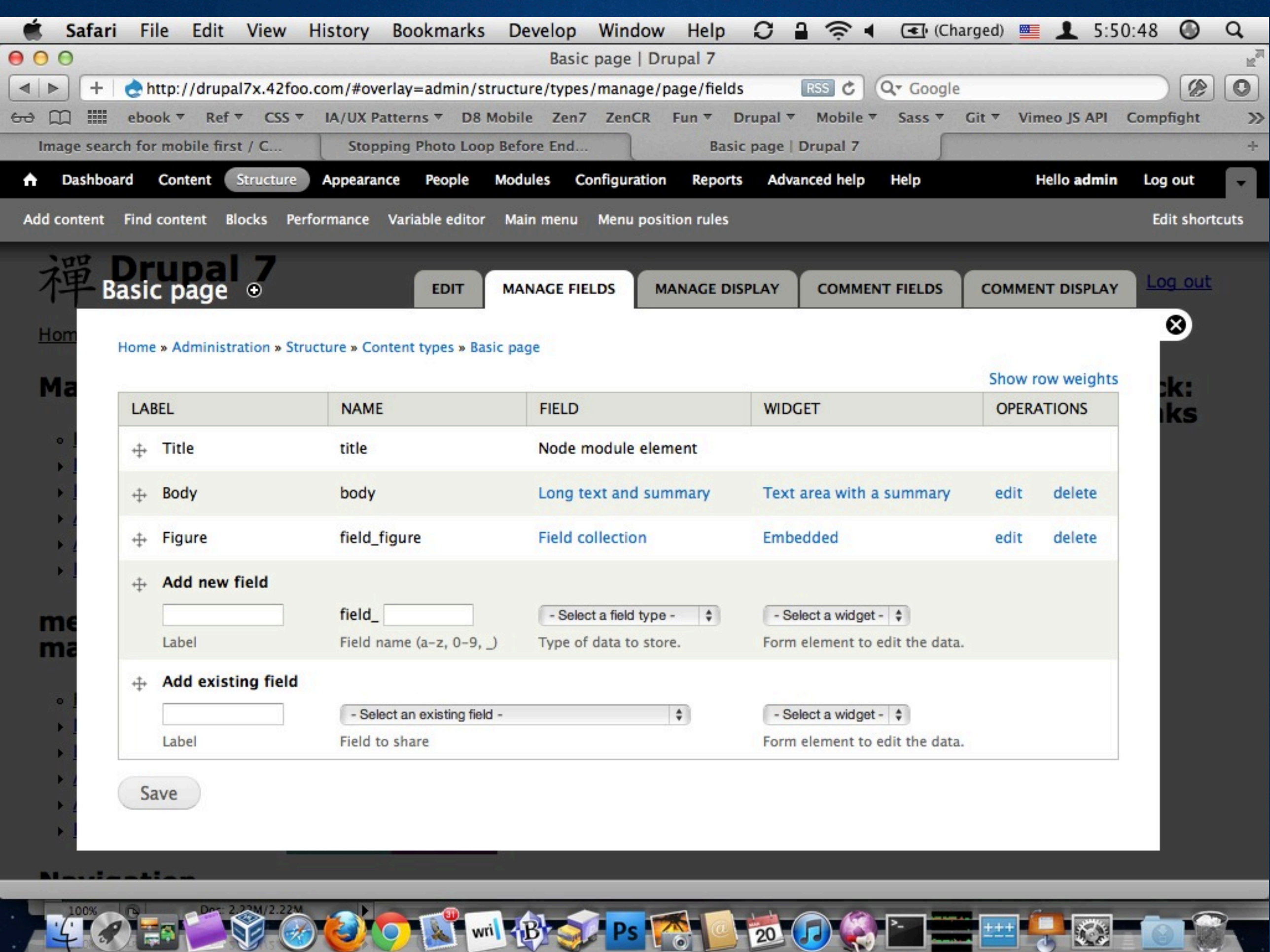
```
<h3 class="field-label">
  LABEL
</h3>

<ELEMENT class="field-NAME etc">
  VALUES
</ELEMENT>
```

Fences



http://drupal.org/project/fences


Safari File Edit View History Bookmarks Develop Window Help
(Charged) 5:50:48
Basic page | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/page/fields
Google
ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight
Image search for mobile first / C...
Stopping Photo Loop Before End...
Basic page | Drupal 7
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts
Drupal 7
Basic page
EDIT MANAGE FIELDS MANAGE DISPLAY COMMENT FIELDS COMMENT DISPLAY
Log out
Home » Administration » Structure » Content types » Basic page
Show row weights
LABEL NAME FIELD WIDGET OPERATIONS
Title title Node module element
Body body Long text and summary Text area with a summary edit delete
Figure field_figure Field collection Embedded edit delete
Add new field
Label
field_
Field name (a-z, 0-9, _)
- Select a field type -
Type of data to store.
- Select a widget -
Form element to edit the data.
Add existing field
Label
- Select an existing field -
Field to share
- Select a widget -
Form element to edit the data.
Save

Safari File Edit View History Bookmarks Develop Window Help (4:28) 8:31:06
Body | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/article/fields/body RSS Google
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts

Text format Filtered HTML

More information about text formats

- To post pieces of code, surround them with <code>...</code> tags. For PHP code, you can use <?php ... ?>, which will also colour it based on syntax.
- Web page addresses and e-mail addresses turn into links automatically.
- Lines and paragraphs break automatically.

Wrapper markup

division — — Generic container; only use as a last resort

Choose the HTML to use to wrap the field.

***BODY* FIELD SETTINGS**

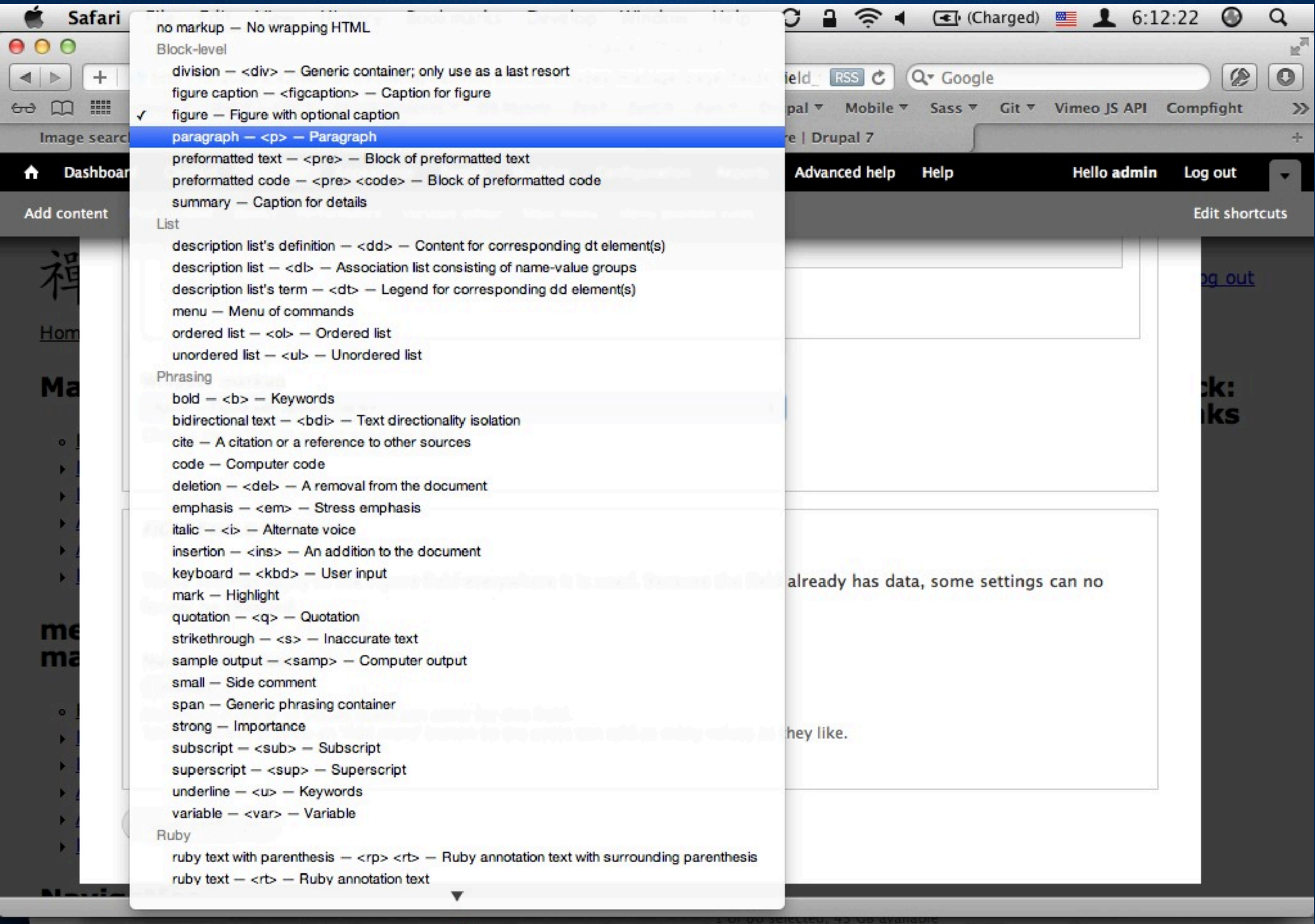
These settings apply to the *Body* field everywhere it is used. Because the field already has data, some settings can no longer be changed.

Number of values

1

Maximum number of values users can enter for this field.
'Unlimited' will provide an 'Add more' button so the users can add as many values as they like.

Save settings


Safari
(Charged)
6:12:22
Google
Mobile
Sass
Git
Vimeo JS API
Compfight
Drupal 7
Dashboar
Advanced help
Help
Hello admin
Log out
Add content
Edit shortcuts
no markup — No wrapping HTML
Block-level
division — — Generic container; only use as a last resort
figure caption — <figcaption> — Caption for figure
figure — Figure with optional caption
paragraph — <p> — Paragraph
preformatted text — <pre> — Block of preformatted text
preformatted code — <pre> <code> — Block of preformatted code
summary — Caption for details
List
description list's definition — <dd> — Content for corresponding dt element(s)
description list — <dl> — Association list consisting of name-value groups
description list's term — <dt> — Legend for corresponding dd element(s)
menu — Menu of commands
ordered list — — Ordered list
unordered list — — Unordered list
Phrasing
bold — <b> — Keywords
bidirectional text — <bdi> — Text directionality isolation
cite — A citation or a reference to other sources
code — Computer code
deletion — <del> — A removal from the document
emphasis — — Stress emphasis
italic — <i> — Alternate voice
insertion — <ins> — An addition to the document
keyboard — <kbd> — User input
mark — Highlight
quotation — <q> — Quotation
strikethrough — <s> — Inaccurate text
sample output — <samp> — Computer output
small — Side comment
span — Generic phrasing container
strong — Importance
subscript — <sub> — Subscript
superscript — <sup> — Superscript
underline — <u> — Keywords
variable — <var> — Variable
Ruby
ruby text with parenthesis — <rp> <rt> — Ruby annotation text with surrounding parenthesis
ruby text — <rt> — Ruby annotation text
already has data, some settings can no
hey like.

bidirectional text — <bdi> — Text directionality isolation
cite — A citation or a reference to other sources
code — Computer code
deletion — <del> — A removal from the document
emphasis — — Stress emphasis
italic — <i> — Alternate voice
insertion — <ins> — An addition to the document
keyboard — <kbd> — User input
mark — Highlight
quotation — <q> — Quotation
strikethrough — <s> — Inaccurate text
sample output — <samp> — Computer output
small — Side comment
span — Generic phrasing container
strong — Importance
subscript — <sub> — Subscript
superscript — <sup> — Superscript
underline — <u> — Keywords
variable — <var> — Variable

Ruby

ruby text with parenthesis — <rp> <rt> — Ruby annotation text with surrounding parenthesis
ruby text — <rt> — Ruby annotation text
ruby — Ruby annotation(s)

Sectioning

address — Contact information for a page or article element
article — Self-contained syndicatable or reusable composition
aside — Sidebar for tangentially related content
block quote — <blockquote> — A section quoted from another source
details — Disclosure control for hiding details
footer — Footer for a page or section
heading rank 1 — <h1> — Section heading
heading rank 2 — <h2> — Section heading
heading rank 3 — <h3> — Section heading
heading rank 4 — <h4> — Section heading
heading rank 5 — <h5> — Section heading
heading rank 6 — <h6> — Section heading
header — Introductory or navigational aids for a page or section
heading group — <hgroup> — Heading group
navigation — <nav> — Section with navigational links
section — Generic document or application section

When in doubt go naked

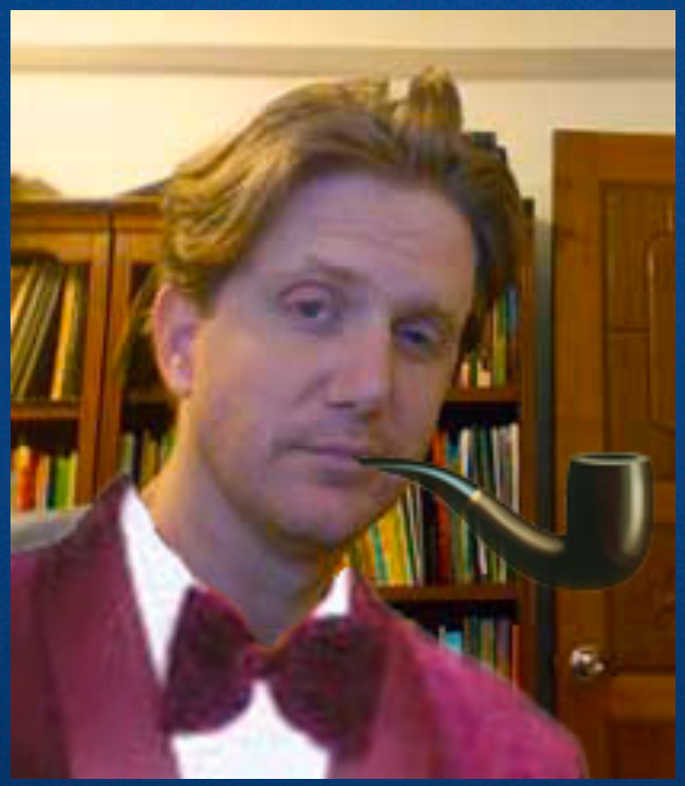
```
<h3 class="field-label">
  LABEL
</h3>

VALUES
```

Fences everywhere! Automatically.

- View modes
- Views
- Anywhere field.tpl.php is used!

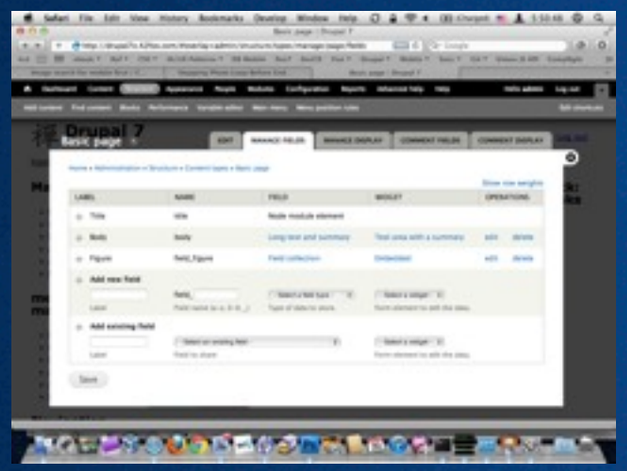
Fences works using theme hook suggestions

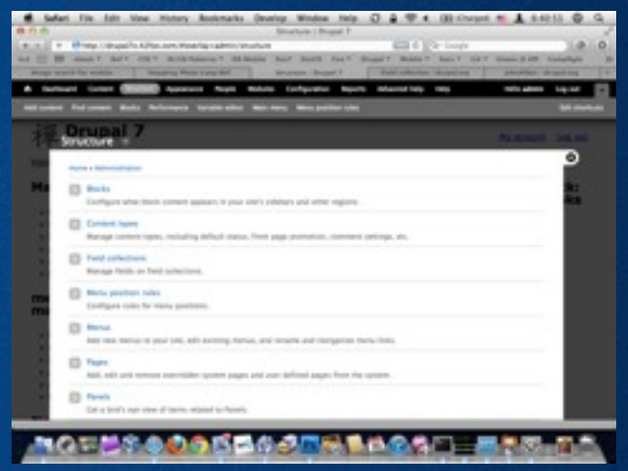
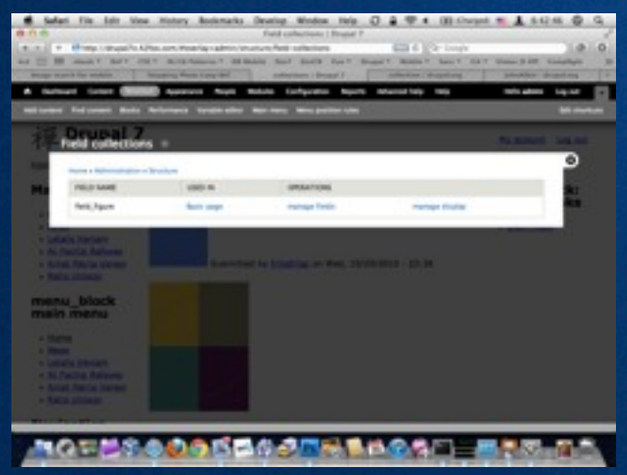
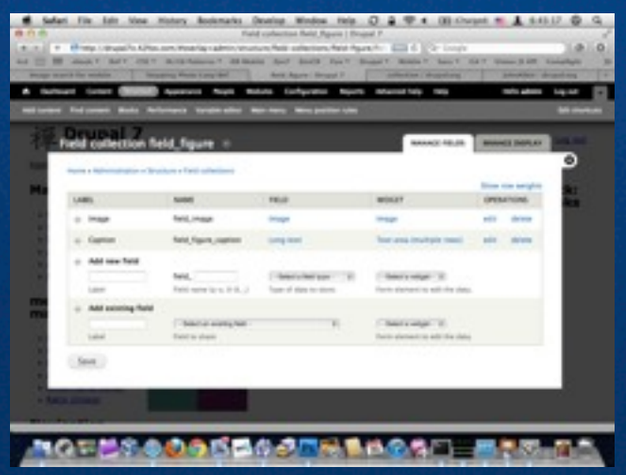
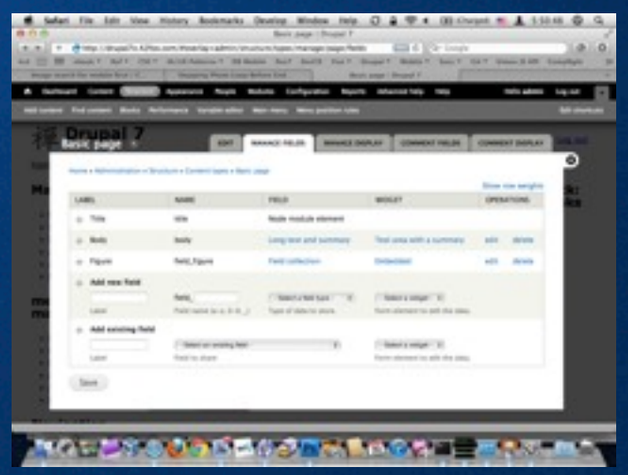


Smart custom markup you define

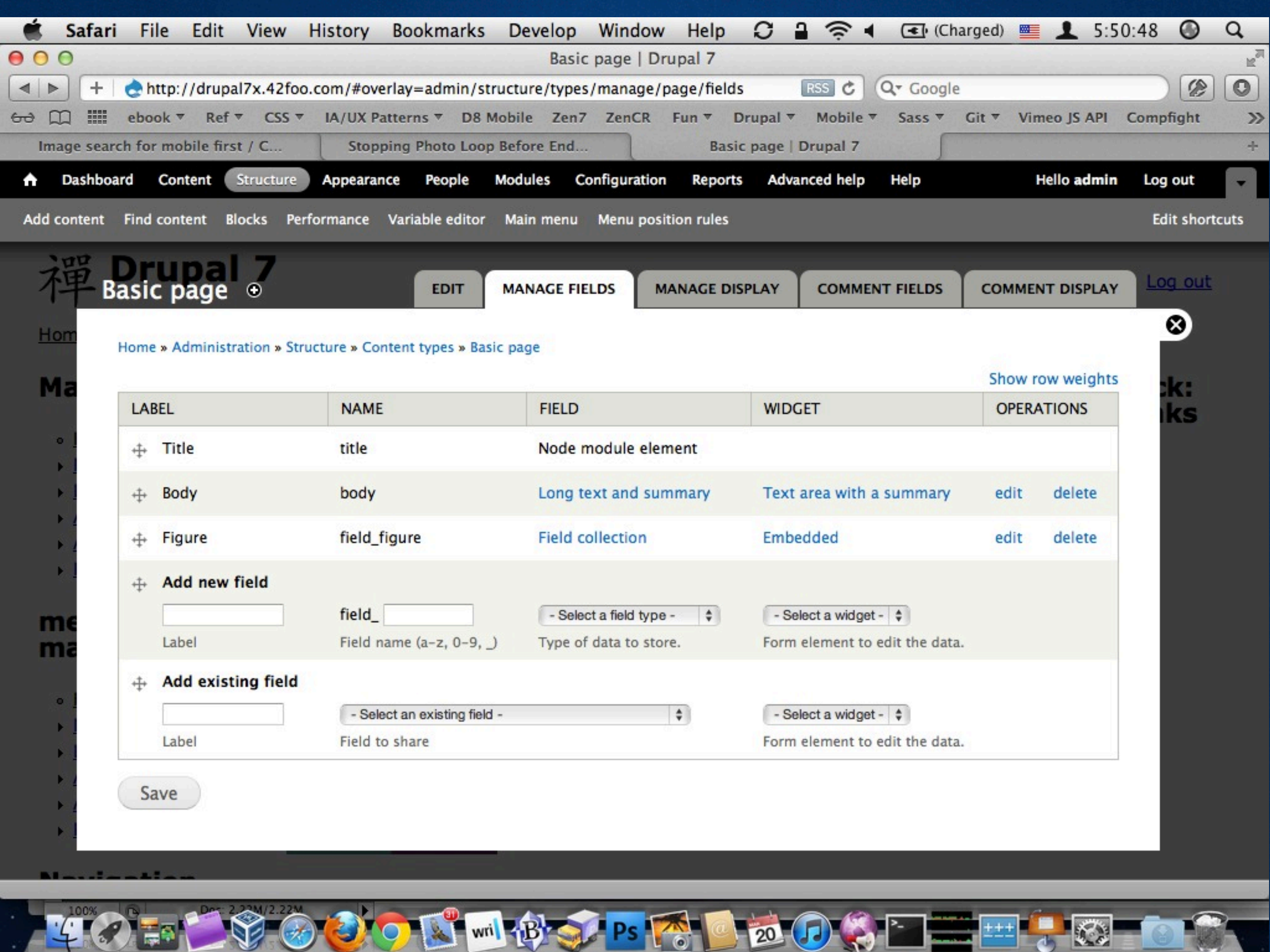
http://drupal.org/node/1089656

Field Collection + Fences



http://drupal.org/project/field_collection


Safari File Edit View History Bookmarks Develop Window Help
(Charged) 5:50:48
Basic page | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/page/fields
Google
ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight
Image search for mobile first / C...
Stopping Photo Loop Before End...
Basic page | Drupal 7
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts
Drupal 7
Basic page
EDIT MANAGE FIELDS MANAGE DISPLAY COMMENT FIELDS COMMENT DISPLAY
Log out
Home » Administration » Structure » Content types » Basic page
Show row weights
LABEL NAME FIELD WIDGET OPERATIONS
Title title Node module element
Body body Long text and summary Text area with a summary edit delete
Figure field_figure Field collection Embedded edit delete
Add new field
Label
field_
Field name (a-z, 0-9, _)
- Select a field type -
Type of data to store.
- Select a widget -
Form element to edit the data.
Add existing field
Label
- Select an existing field -
Field to share
- Select a widget -
Form element to edit the data.
Save

Safari File Edit View History Bookmarks Develop Window Help (Charged) 6:10:06
Figure | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/page/fields/field_
Google
ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight
Image search for mobile first / C... Stopping Photo Loop Before End... Figure | Drupal 7

DEFAULT VALUE

The default value for this field, used when creating new content.

Image *

Choose File no file selected Upload

Files must be less than **2 MB**.
Allowed file types: **png gif jpg jpeg**.

Caption *

Text format Filtered HTML More information about text formats

- To post pieces of code, surround them with <code>...</code> tags. For PHP code, you can use <?php ... ?>, which will also colour it based on syntax.
- Web page addresses and e-mail addresses turn into links automatically.
- Lines and paragraphs break automatically.

Remove

Wrapper markup

figure — Figure with optional caption

Choose the HTML to use to wrap the field.

Safari File Edit View History Bookmarks Develop Window Help (Charged) 6:40:53

Structure | Drupal 7

http://drupal7x.42foo.com/#overlay=admin/structure

ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight

Image search for mobile... | Stopping Photo Loop Bef... | Structure | Drupal 7 | Field collection | drupal.org | JohnAlbin | drupal.org

Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out

Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts

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Structure

My account Log out

Home » Administration

Blocks
Configure what block content appears in your site's sidebars and other regions.

Content types
Manage content types, including default status, front page promotion, comment settings, etc.

Field collections
Manage fields on field collections.

Menu position rules
Configure rules for menu positions.

Menus
Add new menus to your site, edit existing menus, and rename and reorganize menu links.

Pages
Add, edit and remove overridden system pages and user defined pages from the system.

Panels
Get a bird's eye view of items related to Panels.

Safari File Edit View History Bookmarks Develop Window Help (Charged) 6:42:46

Field collections | Drupal 7

http://drupal7x.42foo.com/#overlay=admin/structure/field-collections

ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight

Image search for mobile... | Stopping Photo Loop Bef... | collections | Drupal 7 | collection | drupal.org | JohnAlbin | drupal.org

Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out

Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts

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My account Log out

Field collections

Home » Administration » Structure

FIELD NAME	USED IN	OPERATIONS	
field_figure	Basic page	manage fields	manage display

Hom

Ma

ck:
ks

- Letalis Veniam
- At Facilisi Refoveo
- Amet Patria Vereor
- Ratis Ulciscor

Submitted by frihofrilac on Wed, 10/20/2010 - 23:36

menu_block main menu

- Home
- News
- Letalis Veniam
- At Facilisi Refoveo
- Amet Patria Vereor
- Ratis Ulciscor

Navigation

Safari File Edit View History Bookmarks Develop Window Help (Charged) 6:43:17
Field collection field_figure | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/field-collections/field-figure/fiel
Google
ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight
Image search for mobile... Stopping Photo Loop Bef... field_figure | Drupal 7 collection | drupal.org JohnAlbin | drupal.org
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts
禪 Drupal 7

Field collection field_figure

MANAGE FIELDS | MANAGE DISPLAY

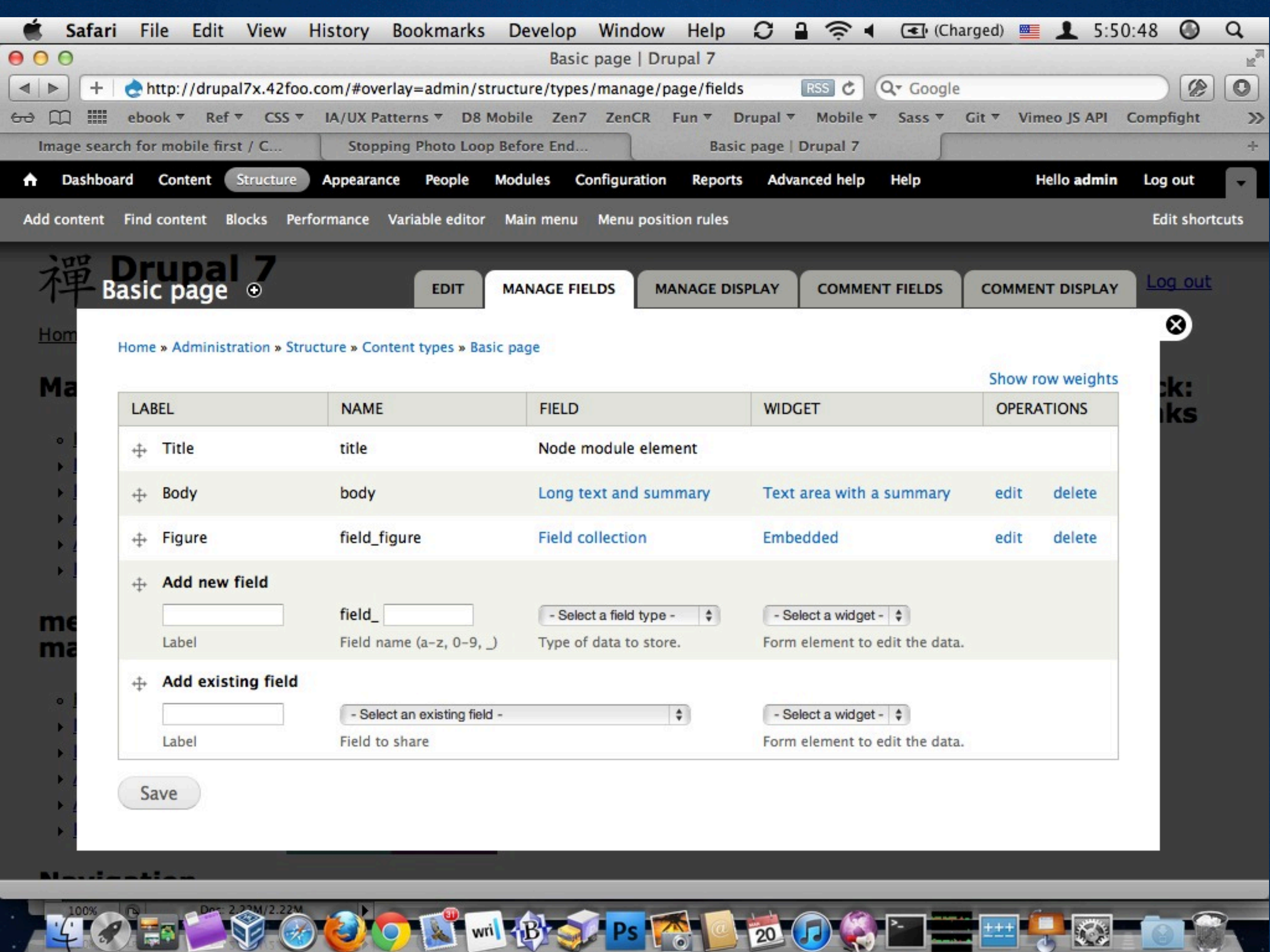
Log out

Show row weights

LABEL	NAME	FIELD	WIDGET	OPERATIONS
Image	field_image	Image	Image	edit delete
Caption	field_figure_caption	Long text	Text area (multiple rows)	edit delete
Add new field				
Label	field_ Field name (a-z, 0-9, _)	- Select a field type - Type of data to store.	- Select a widget - Form element to edit the data.	
Add existing field				
Label		- Select an existing field - Field to share	- Select a widget - Form element to edit the data.	

Save

Ratis Ulciscor


Safari File Edit View History Bookmarks Develop Window Help
(Charged) 5:50:48
Basic page | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/page/fields
Google
ebook Ref CSS IA/UX Patterns D8 Mobile Zen7 ZenCR Fun Drupal Mobile Sass Git Vimeo JS API Compfight
Image search for mobile first / C...
Stopping Photo Loop Before End...
Basic page | Drupal 7
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Menu position rules Edit shortcuts
Drupal 7
Basic page
EDIT MANAGE FIELDS MANAGE DISPLAY COMMENT FIELDS COMMENT DISPLAY
Log out
Home » Administration » Structure » Content types » Basic page
Show row weights
LABEL NAME FIELD WIDGET OPERATIONS
Title title Node module element
Body body Long text and summary Text area with a summary edit delete
Figure field_figure Field collection Embedded edit delete
Add new field
Label
field_
Field name (a-z, 0-9, _)
- Select a field type -
Type of data to store.
- Select a widget -
Form element to edit the data.
Add existing field
Label
- Select an existing field -
Field to share
- Select a widget -
Form element to edit the data.
Save

Next let's look at layout markup…

Custom CTools Layouts

http://drupal.org/node/495654

http://www.flickr.com/photos/19907278@N00/3628195311/

Step 1

Add this to your theme's .info file:

```
; Custom panels layouts
plugins[panels][layouts] = layouts
```

Step 2

Add these files to your theme's directory:

layouts / layout_name / layout_name.inc
layouts / layout_name / layout-name.tpl.php
layouts / layout_name / layout-name.css

Step 2

Add these files to your theme's directory:

layouts / layout_name / layout_name.inc
layouts / layout_name / layout-name.tpl.php
layouts / layout_name / layout-name.css

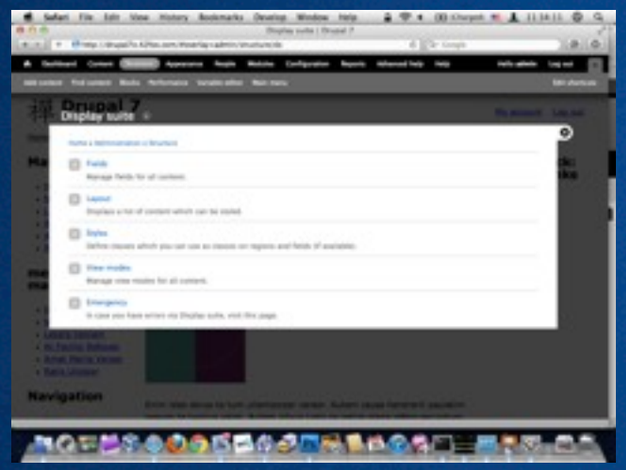
layouts / layout_name / layout-name.png
layouts / layout_name / layout-name-admin.tpl.php
layouts / layout_name / layout-name-admin.css

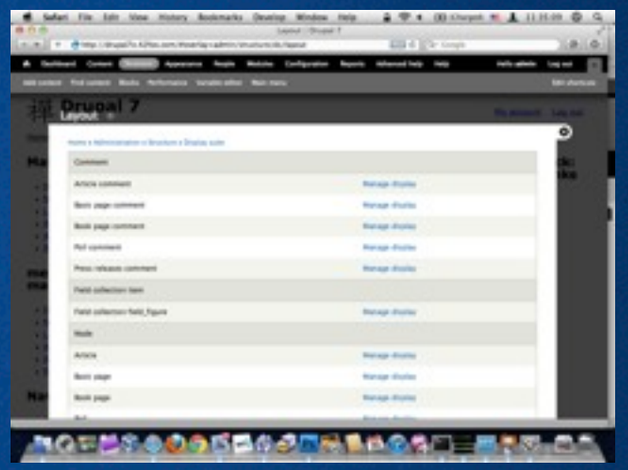
Step 3

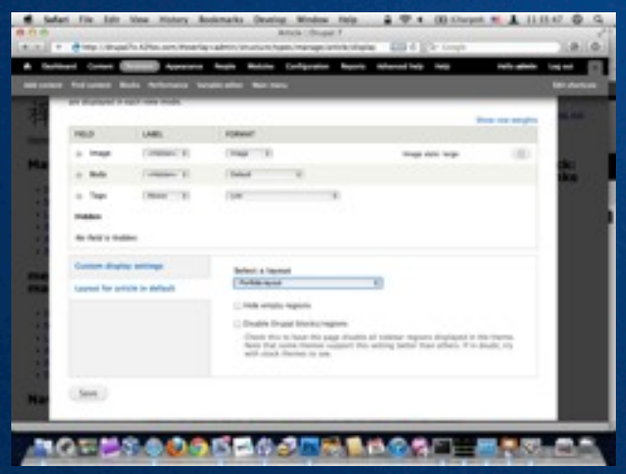
Edit all the files

http://www.flickr.com/photos/27861585@N02/2606362543/

Step 5







Configure!

Safari File Edit View History Bookmarks Develop Window Help (Charged) 11:34:11
Display suite | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/ds
Google
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Edit shortcuts

禅 Drupal 7
Display suite

Fields
Manage fields for all content.

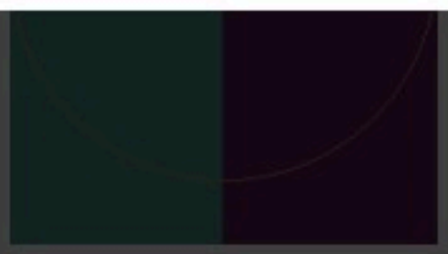
Layout
Displays a list of content which can be styled.

Styles
Define classes which you can use as classes on regions and fields (if available).

View modes
Manage view modes for all content.

Emergency
In case you have errors via Display suite, visit this page.

- Letalis Veniam
- At Facilisi Refoveo
- Amet Patria Vereor
- Ratis Ulciscor



Navigation

Enim ideo obruo te tum ullamcorper vereor. Autem causa hendrerit paulatim

Safari File Edit View History Bookmarks Develop Window Help (Charged) 11:35:09
Layout | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/ds/layout
Google
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Edit shortcuts
禪 Drupal 7
Layout
My account Log out

Home » Administration » Structure » Display suite

Comment	
Article comment	Manage display
Basic page comment	Manage display
Book page comment	Manage display
Poll comment	Manage display
Press releases comment	Manage display
Field collection item	
Field collection field_figure	Manage display
Node	
Article	Manage display
Basic page	Manage display
Book page	Manage display
Poll	Manage display

Safari File Edit View History Bookmarks Develop Window Help (Charged) 11:35:47
Article | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/article/display RSS Google
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Edit shortcuts

are displayed in each view mode.

Show row weights

FIELD	LABEL	FORMAT	
Image	<Hidden>	Image	Image style: large
Body	<Hidden>	Default	
Tags	Above	Link	

Hidden

No field is hidden.

Custom display settings

Layout for article in default

Select a layout

Portfolio layout

☐ Hide empty regions

☐ Disable Drupal blocks/regions

Check this to have the page disable all sidebar regions displayed in the theme. Note that some themes support this setting better than others. If in doubt, try with stock themes to see.

Save

Safari File Edit View History Bookmarks Develop Window Help (Charged) 11:41:36
Article | Drupal 7
http://drupal7x.42foo.com/#overlay=admin/structure/types/manage/article/display RSS Google
Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help Hello admin Log out
Add content Find content Blocks Performance Variable editor Main menu Edit shortcuts

禅 Drupal 7

Article

EDIT | MANAGE FIELDS | MANAGE DISPLAY | COMMENT FIELDS | COMMENT DISPLAY

Log out

Default | Teaser

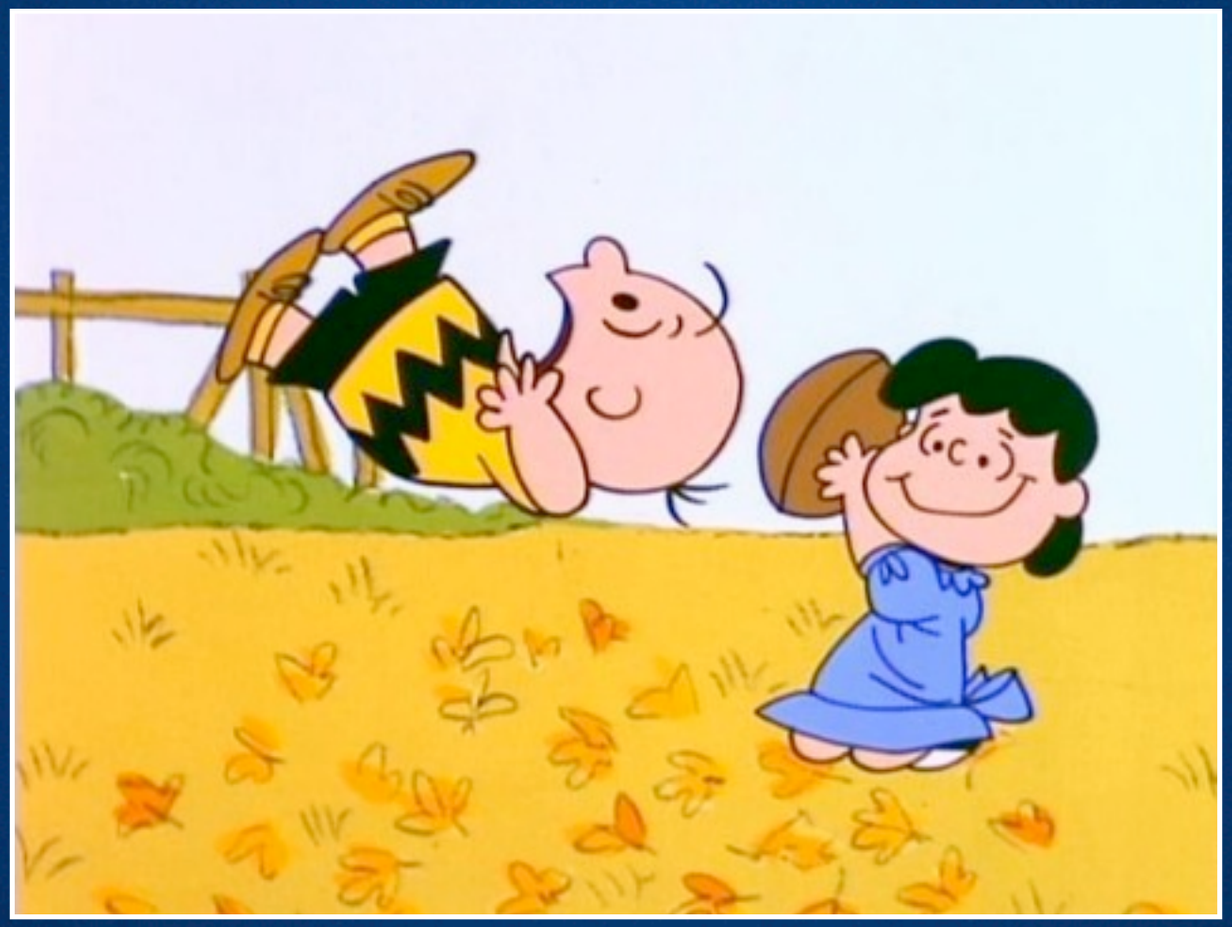
Content items can be displayed using different view modes: Teaser, Full content, Print, RSS, etc. *Teaser* is a short format that is typically used in lists of multiple content items. *Full content* is typically used when the content is displayed on its own page.

Here, you can define which fields are shown and hidden when *Article* content is displayed in each view mode, and define how the fields are displayed in each view mode.

Show row weights

FIELD	REGION	LABEL	FORMAT	
Intro				
Image	Intro	<Hidden>	Image	Image style: large
Portfolio				
Body	Portfolio	<Hidden>	Default	
Complementary				
Post date	Complementary	<Hidden>	Long	
Links	Complementary	<Hidden>	Default	
Disabled				

Front-end Performance



Front-end Performance Improvements

by Matt Farina

Blackmesh room (MHB 1E)

at 3:45 today

GO SEE

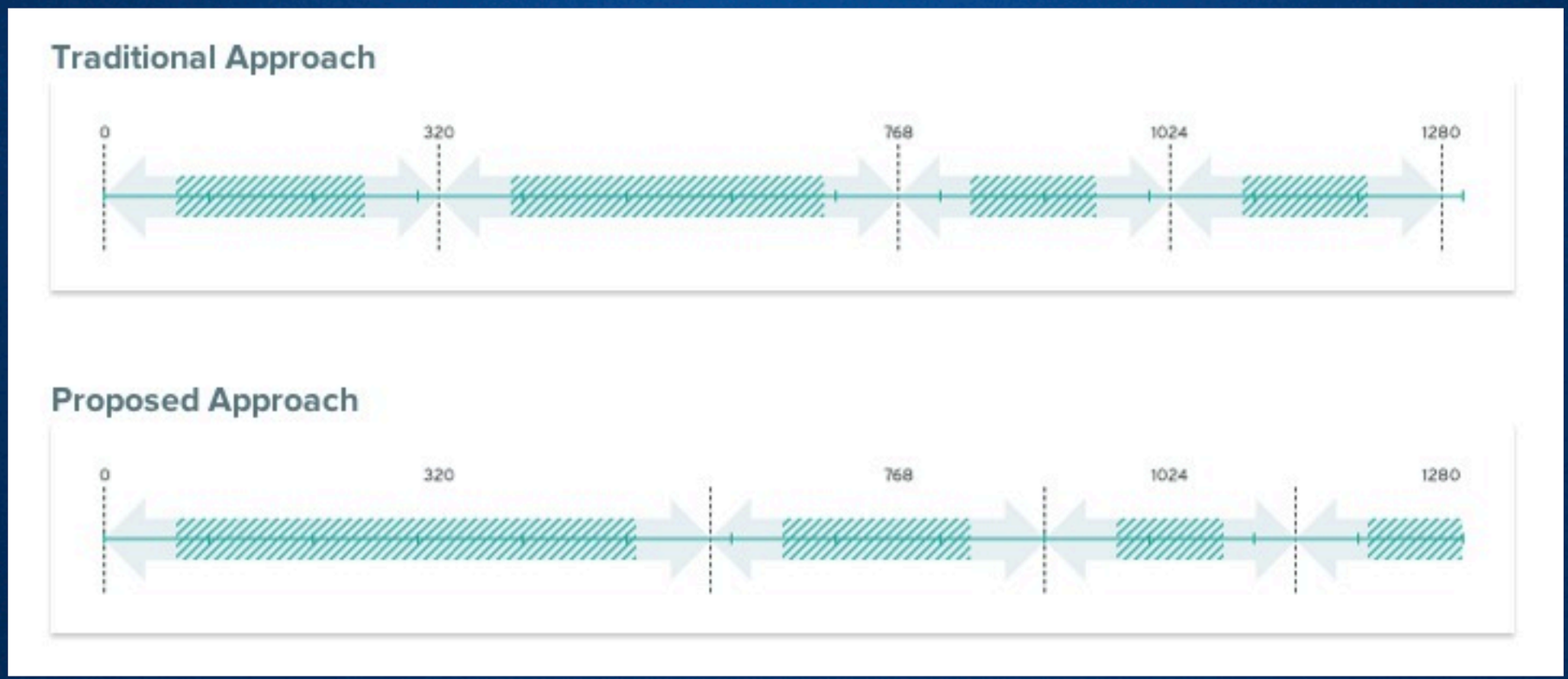
Let's talk about…

TANGENTS!

Responsive Images

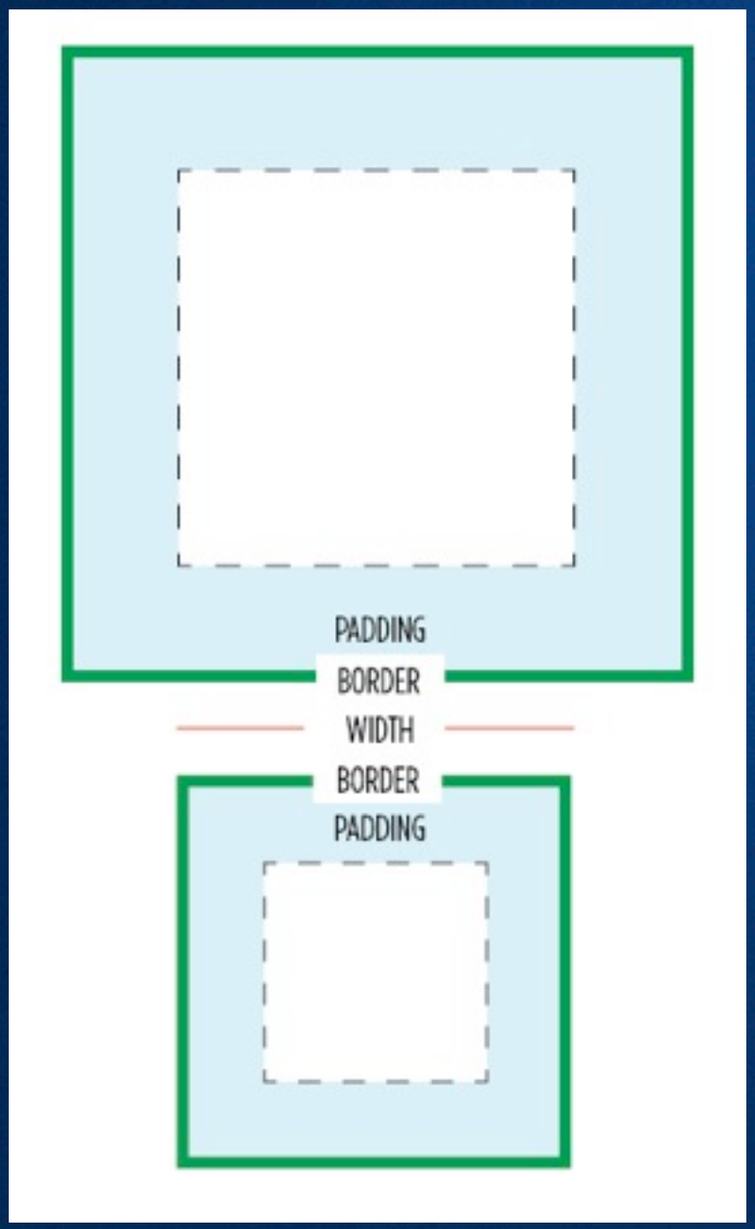
- Adaptive Image module http://drupal.org/project/ adaptive_image Based on Matt Wilcox's Adaptive Images.
- Borealis http://drupal.org/project/ borealis
- Evaluate the solutions based on the problem space. Jason Grisby explains it best. http://cloudfour.com/responsive-imgs/

Naturual vs. Unnatural Breakpoints



http://www.palantir.net/blog/re-thinking-breakpoints-responsive-design

Gutters



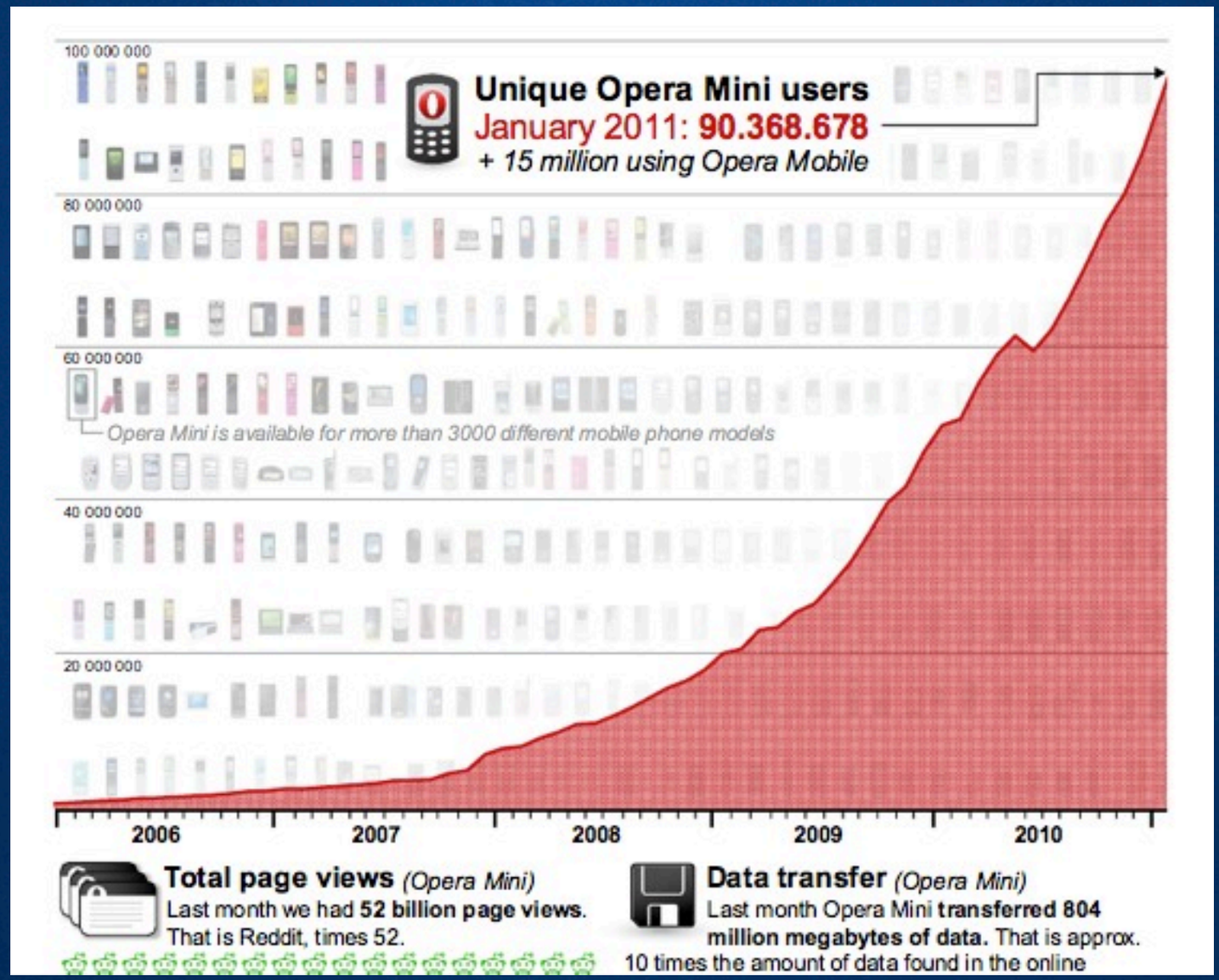

```
box-sizing: border-box;
```

http://paulirish.com/2012/box-sizing-border-box-ftw/

Who are your users?

Beware of statistics!

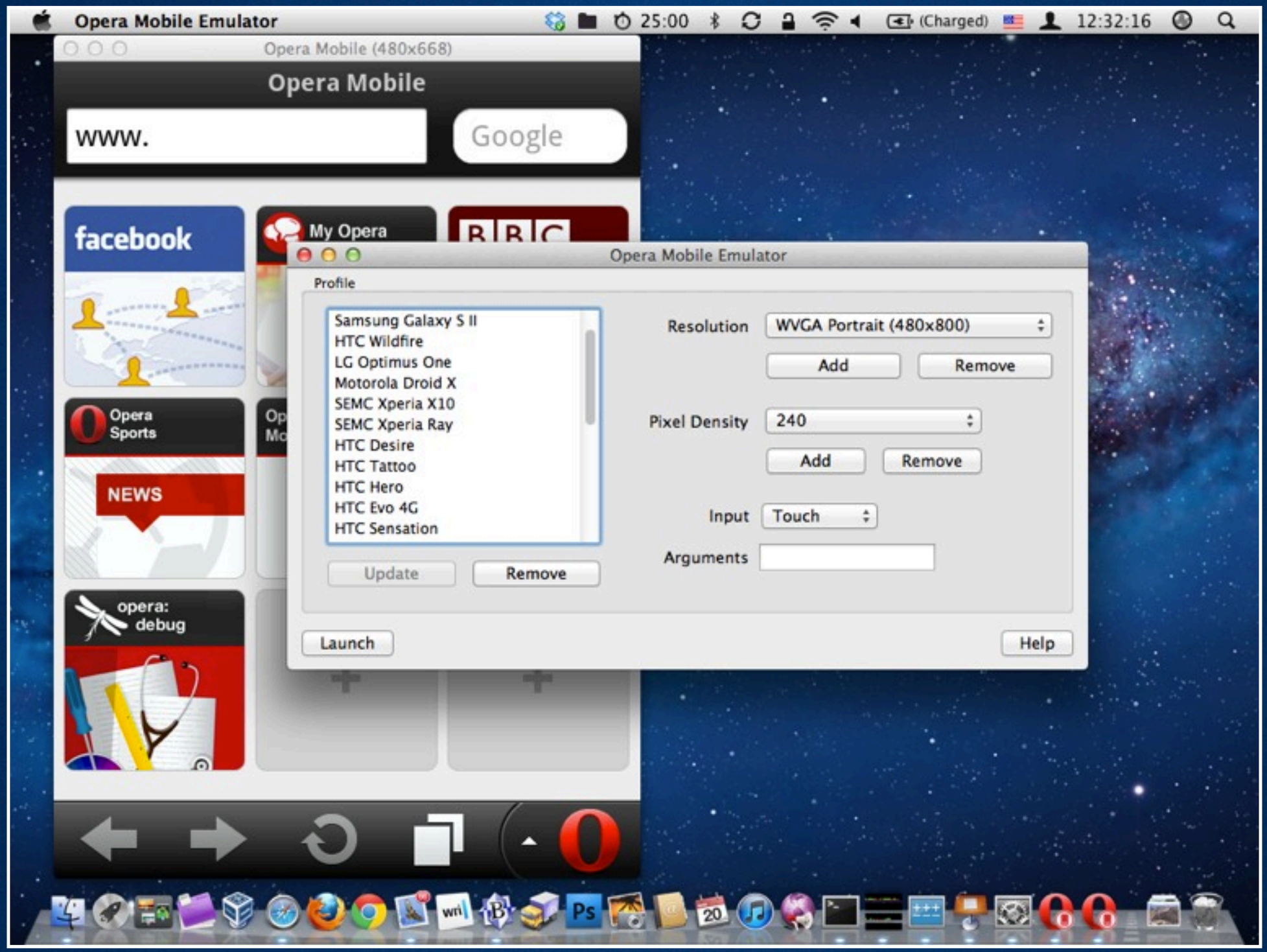
Who are your users?



http://www.slideshare.net/grigs/

Mobile Testing

- Opera Mini Simulator (web-based)
  www.opera.com/developer/tools/mini/
- Opera Mobile Emulator (desktop app)
  www.opera.com/developer/tools/mobile/
- iPhone and iPad Simulator (Mac OS X app)
  Included with XCode 4 on Mac App Store.
  developer.apple.com/devcenter/ios/
- Android emulator
  http://developer.android.com/sdk/



Opera Mobile Emulator

Even more mobile testing

Mobile Emulators & Simulators:
The Ultimate Guide

http://www.mobilexweb.com/emulators

Let's talk about responsive layout building techniques…

Building techniques

http://www.flickr.com/photos/93755244@N00/4083220012/

There's a difference between having the right tools and knowing how to use them.

Adding classes to HTML doesn't scale

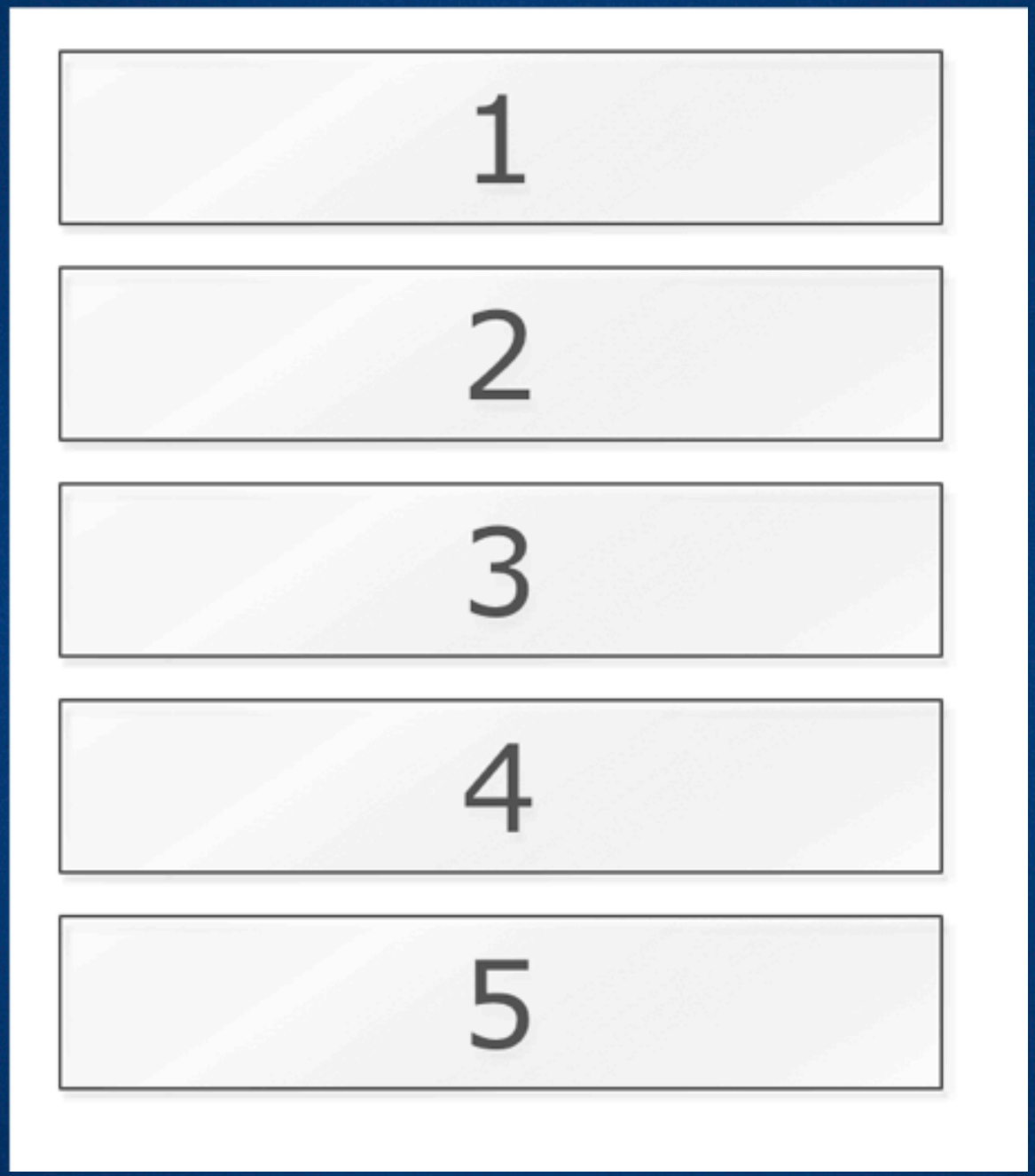
http://www.flickr.com/photos/14700745@N04/3330067933/

Sass to the rescue!

http://zengrids.com/

Content first

http://www.flickr.com/photos/14829735@N00/3035036771/



Use your content's natural semantic ordering.

(All other rules depend on it.)

The Adjacent Sibling Rule

http://www.flickr.com/photos/51682904@N00/97322542/

Rows are composed of elements that are next to each other in the HTML source.

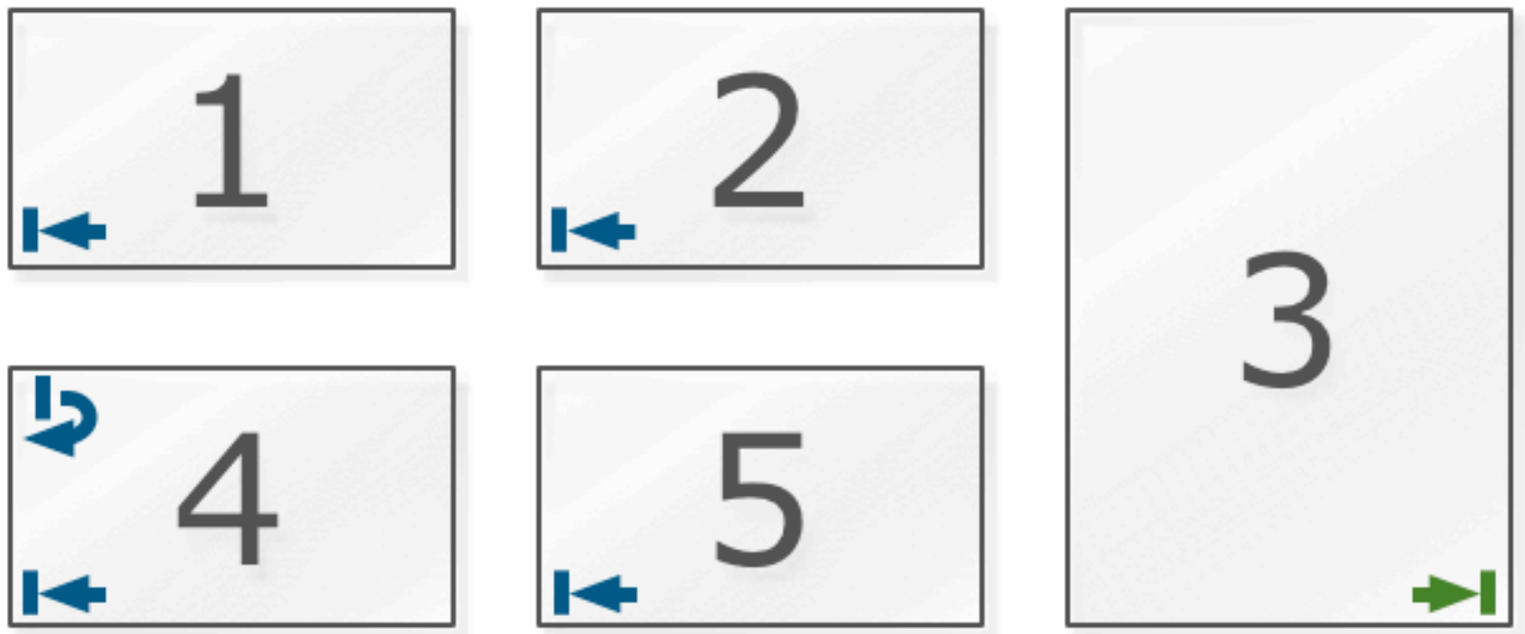
(But they can be re-arranged within the row.)

(To start a new row, add a clear to the first sibling.)

float: left; clear: left;

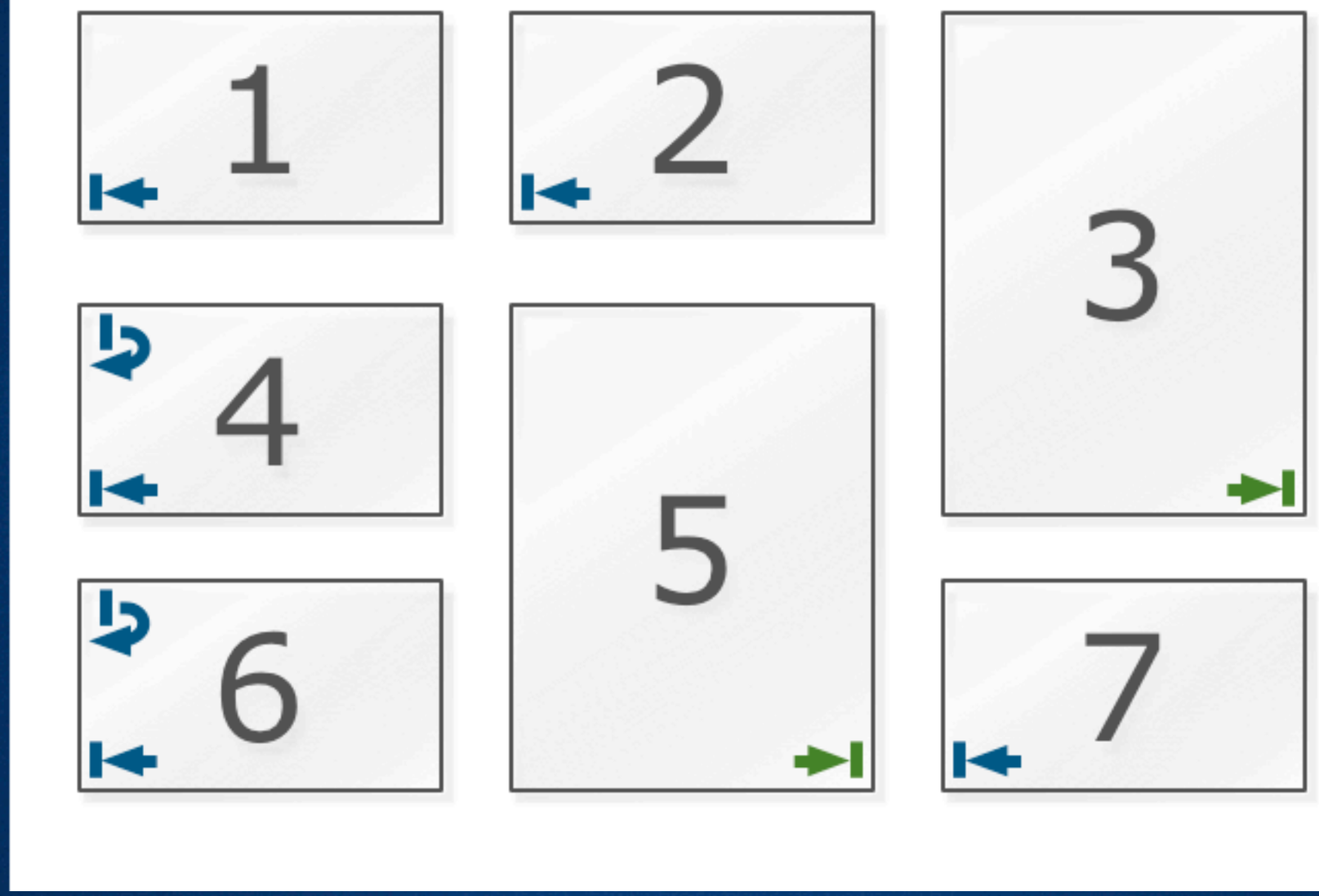
The Opposing Float

http://www.flickr.com/photos/50619629@N00/2009739521/



An element can span multiple rows if it floats in the opposite direction of its siblings.

float: left; clear: left; float: right;

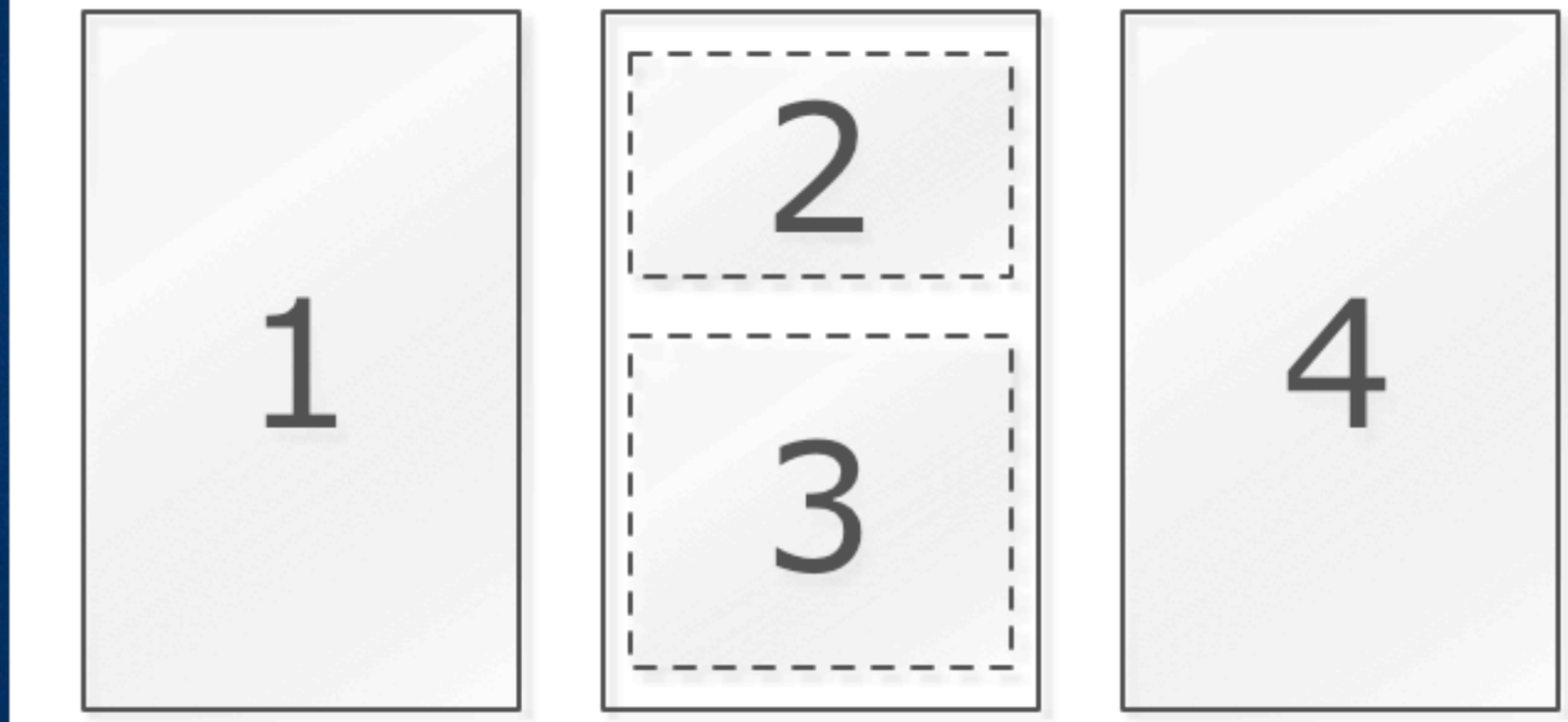


More complicated layouts are possible

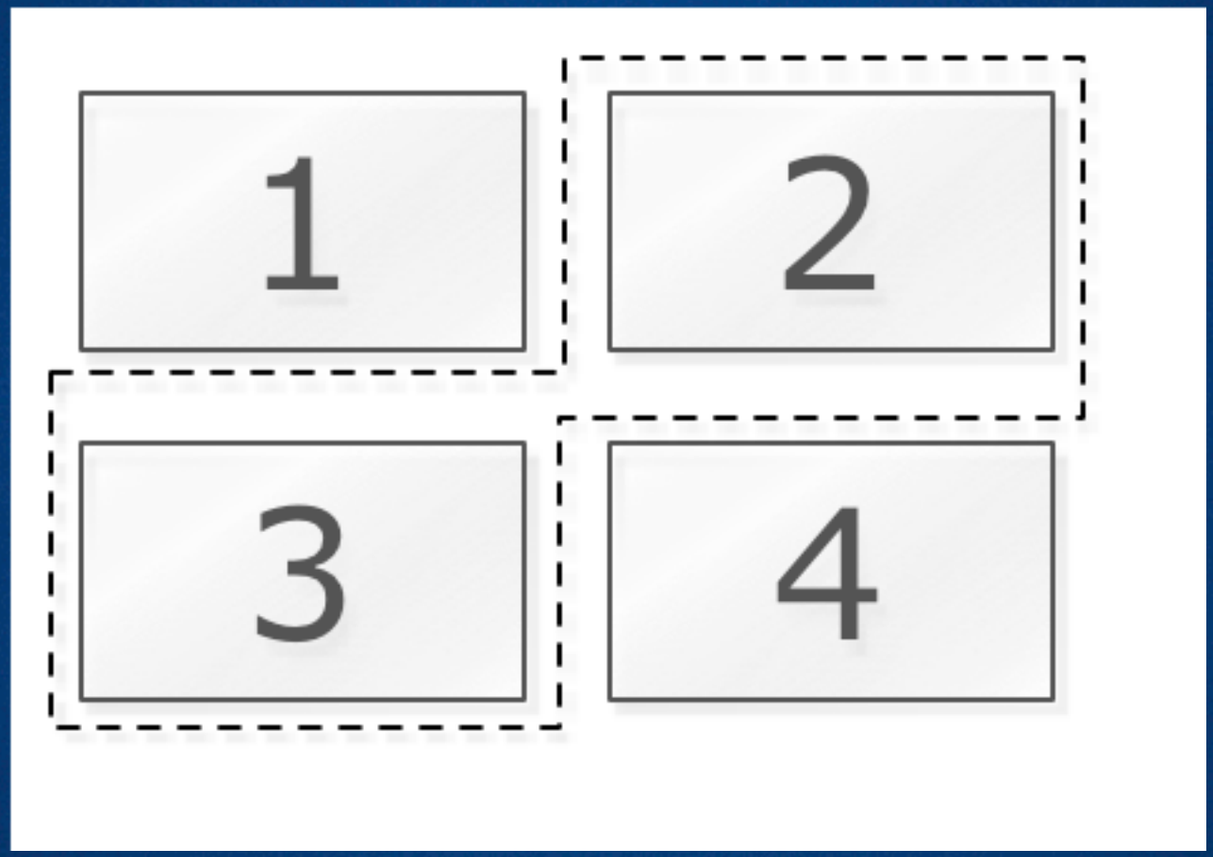
float: left; clear: left; float: right;

The Lasso

http://www.flickr.com/photos/90895678@N00/3533707743/



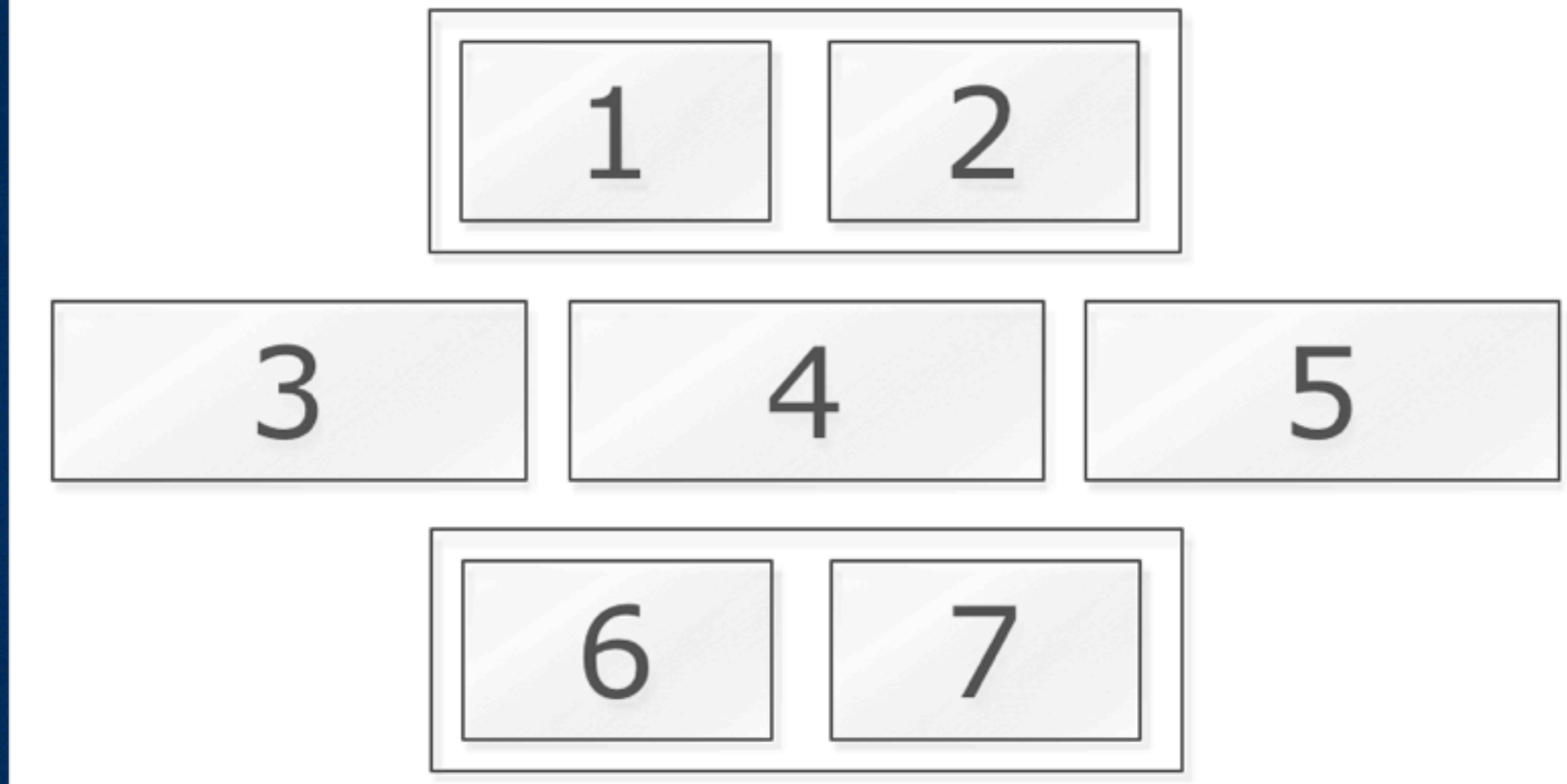
Sometimes the “lasso” is positioned…



Sometimes the “lasso” is positioned…

…and sometimes not.

The Corset Varient



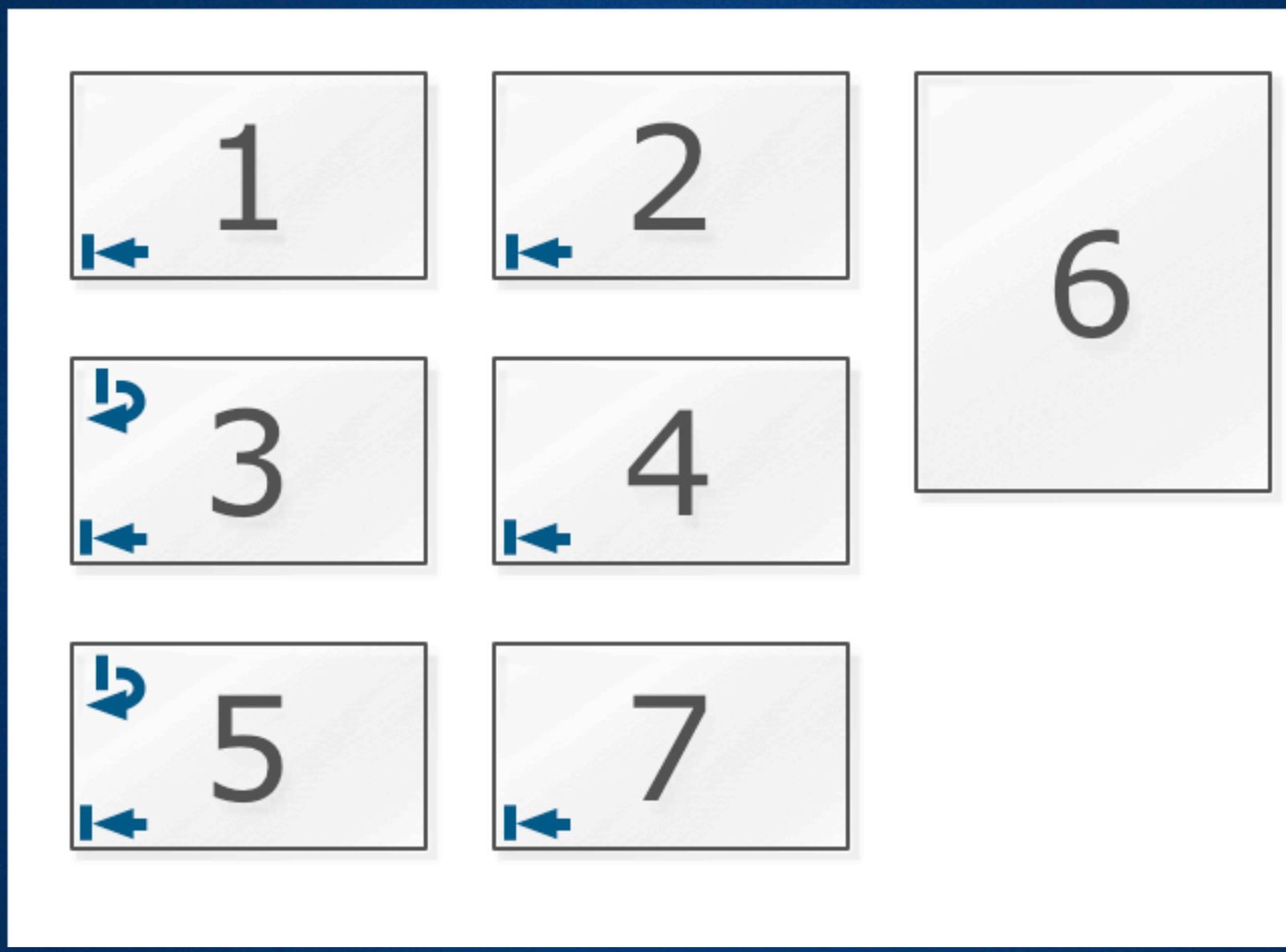
Two “lassos” make up the corset.

The un-lassoed content is
the “wardrobe malfunction”.

The Absolute Exception

(to the Adjacent Sibling rule)

http://www.flickr.com/photos/35201330@N04/3963369547/

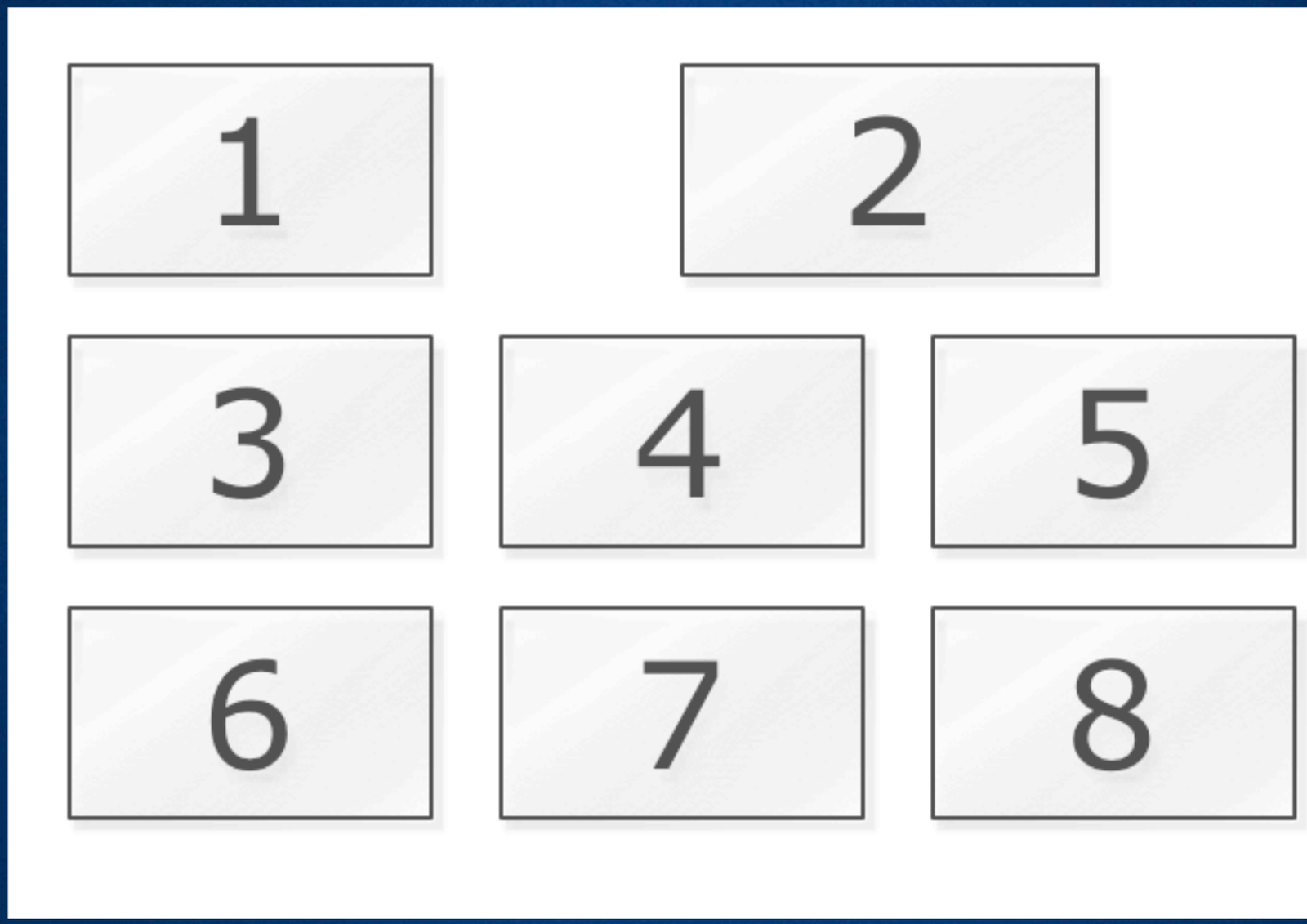


If you leave space below and
can be sure no other content will overlap,
you can apply position: absolute;

One more thing…

The Violator

http://www.flickr.com/photos/93374685@N00/4079138888/



Violate the grid judiciously.

DRUPALCON
DENVER

What did you think?

Locate this session on the
DrupalCon Denver website

http://denver2012.drupal.org/program

Click the “Take the Survey” link.

Thank You!