



Learn by doing: less theory, more results

Drupal 7 Development by Example

Follow the creation of a Drupal website to learn... by example.

Drupal 7 Development by Example

Beginner's Guide

Kurt Madel



Drupal 7 Development by Example

Beginner's Guide

www.packtpub.com

wishkerman@hotmail.com)

Credits

Author

Project Coordinator

Reviewers

Proofreaders

Indexer

Acquisition Editor

Production Coordinator

Lead Technical Editor

Cover Work

Technical Editor

About the Author

Kurt Madel

Drupal.org

About the Reviewers

Nedo Laanen

- ◆ *The GIMP 2.6 Cookbook*
- ◆ *Drupal 7 – Social Networking*

Danny Pfeiffer

James Roughton

jr@gotsafety.net

Indiana

University of Pennsylvania IUP

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Drupal 7 Social Networking

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Preface

- ◆
- ◆

- ◆
- ◆
- ◆

- ◆
- ◆

What this book covers

Chapter 1 Getting Set up

Chapter 2 Custom Content Types and an Introduction to Module Development

Chapter 3 HTML5 Integration for Drupal 7 and More Module Development

Chapter 4 Introduction to Drupal 7 Theme Development

Chapter 5 Enhancing the Content Author's User Experience

Chapter 6 Adding Media to our Site

Chapter 7 How Does it Taste – Getting Feedback

Chapter 8 Recipe Lists and More with Views

Chapter 9 Rotating Banners and Project Promotion

Chapter 10 Test Your Code with SimpleTest

Chapter 11 Introduction to the Features Module and Configuration Management

What you need for this book

- ◆ [http://www.mamp.info/downloads/releases/
MAMP_MAMP_PRO_2.0.5.zip](http://www.mamp.info/downloads/releases/MAMP_MAMP_PRO_2.0.5.zip)
- ◆ [http://www.apachefriends.org/download.php?xampp-
win32-1.7.7-VC9.7z](http://www.apachefriends.org/download.php?xampp-win32-1.7.7-VC9.7z)
- ◆ <https://github.com/mxcl/homebrew/wiki/installation>
- ◆
- ◆ [http://code.google.com/p/msysgit/downloads/
detail?name=Git-1.7.9-preview20120201.exe&can=2&q=](http://code.google.com/p/msysgit/downloads/detail?name=Git-1.7.9-preview20120201.exe&can=2&q=)
- ◆



- ◆ ckeditor <http://ckeditor.com/download>
- ◆ colorbox <http://jacklmoore.com/colorbox/colorbox.zip>
- ◆ jquery.cycle <http://malsup.github.com/jquery.cycle.all.js>

Who this book is for

Conventions

Time for action – heading

- 1.
- 2.
- 3.

What just happened?

Pop quiz – heading

Have a go hero – heading

```
rm          Drush          del
```

```
# * Fine Tuning
#
key_buffer = 16M
key_buffer_size = 32M
max_allowed_packet = 16M
thread_stack = 512K
thread_cache_size = 8
max_connections = 300
```

```
# * Fine Tuning
#
key_buffer = 16M
key_buffer_size = 32M
max_allowed_packet = 16M
thread_stack = 512K
thread_cache_size = 8
max_connections = 300
```

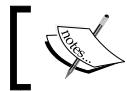
```
cd /ProgramData/Propeople
rm -r Drush
git clone --branch master http://git.drupal.org/project/drush.git
```

New terms important words

Location

Next

Select Destination



Reader feedback

feedback@packtpub.com

www.packtpub.com/authors

Customer support

Downloading the example code

<http://www.packtpub.com>

<http://www.packtpub.com/support>

Errata

<http://www.packtpub.com/support>
errata submission form

Piracy

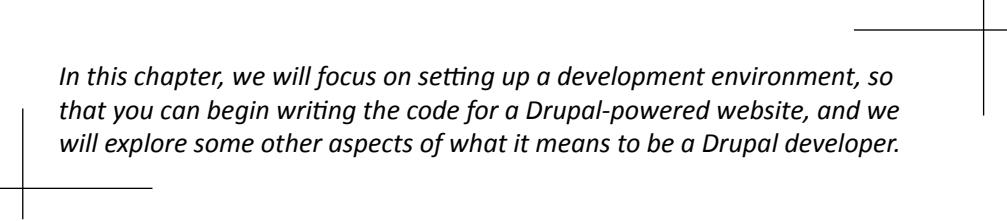
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Questions

questions@packtpub.com

1

Getting Set up



In this chapter, we will focus on setting up a development environment, so that you can begin writing the code for a Drupal-powered website, and we will explore some other aspects of what it means to be a Drupal developer.

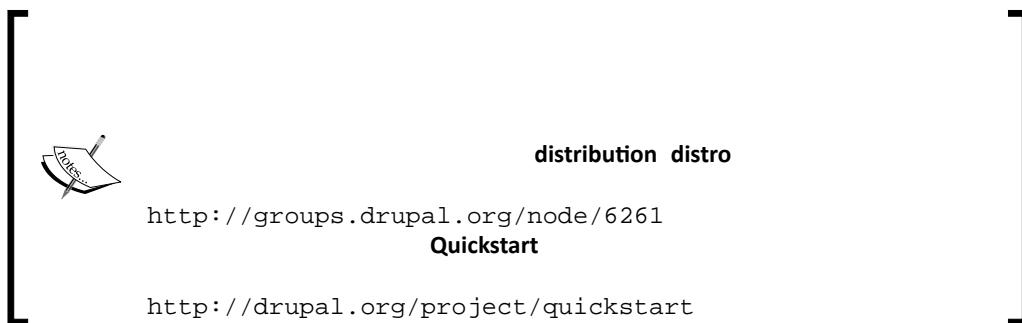
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆ <http://drupal.org/>

Installing an Apache, MySQL, and PHP stack

*AMP

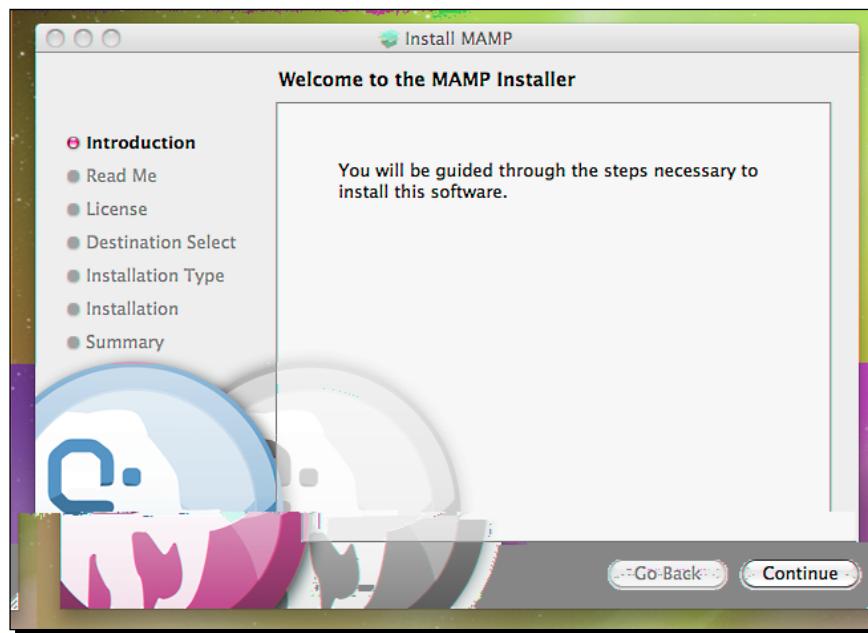
Mac OS X AMP stack

MAMP



Time for action – downloading the latest version of MAMP

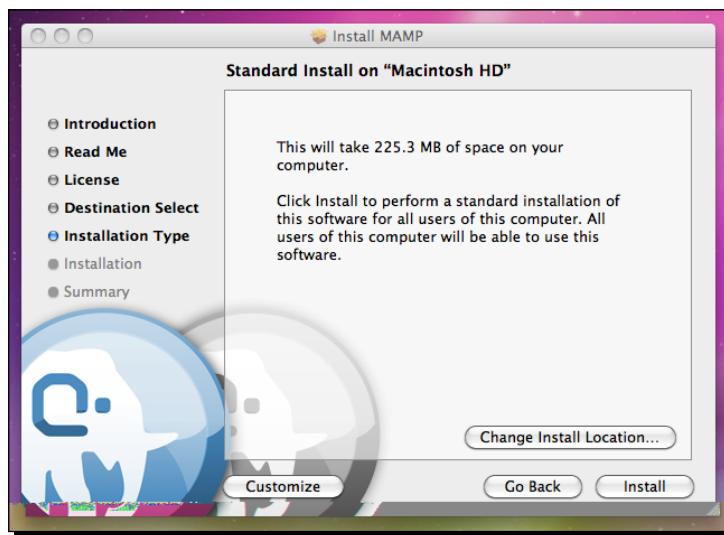
1. <http://www.mamp.info/en/downloads/index.html> MAMP.pkg



2.

Continue
Agree
Continue
Customize
MAMP Pro 2.0.1

Continue



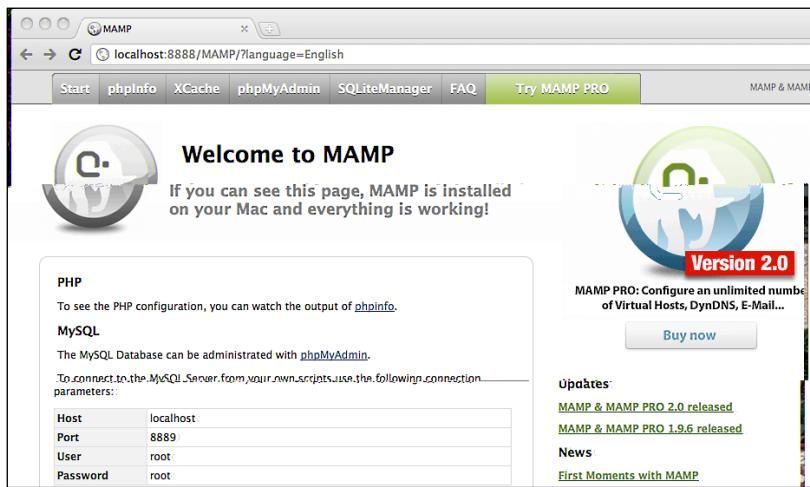
3.

Install
Applications

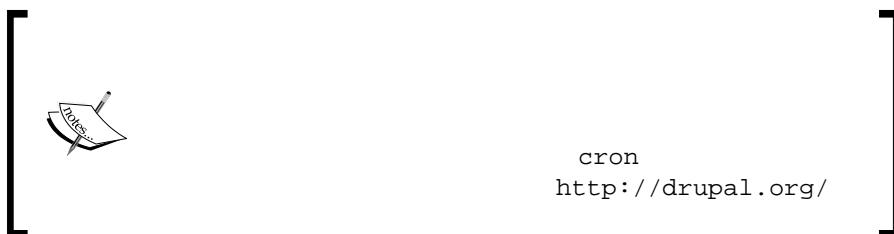
MAMP

Close

MAMP



Windows AMP stack



Time for action – downloading the latest version of XAMPP

- 1.** [http://www.apachefriends.org/en/
XAMPP](http://www.apachefriends.org/en/xampp-windows.html)
xampp-windows.html
for Windows
1.7.4-VC6.zip
Extract All... C:\
Zip xampp-win32-
Extract

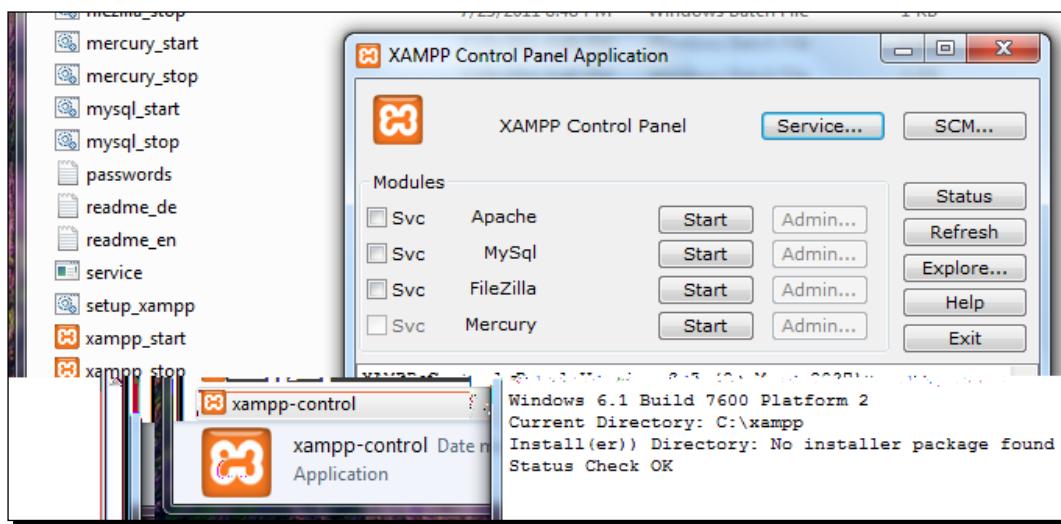


2.

C:\xampp

xampp-control

XAMPP Control Panel Application



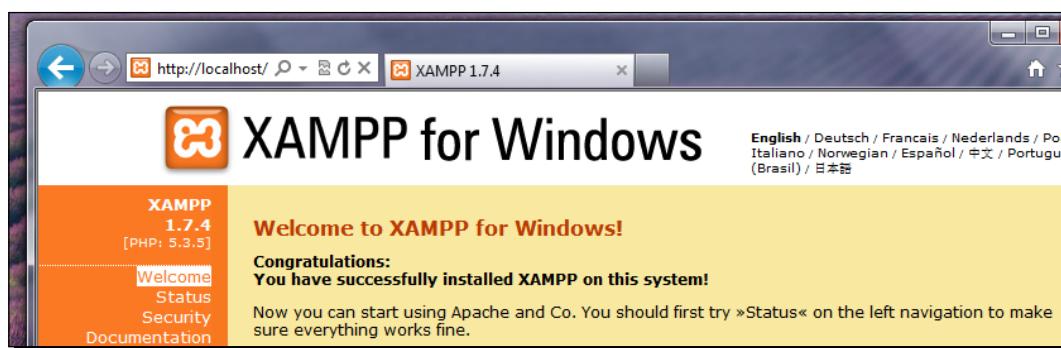
3.

XAMPP Control Panel Application

Start

localhost

http://

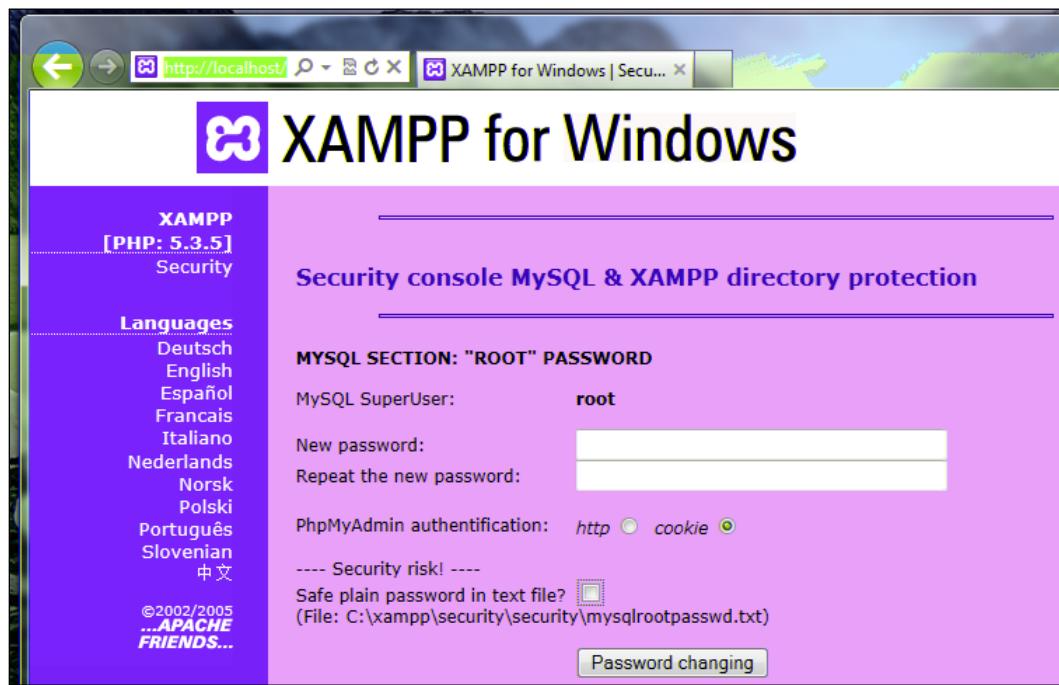


4.

admin

<http://localhost/>

security/index.php



5.

root ,

Password changing

The root password was successfully changed. Please restart MySQL for loading these changes!

What just happened?

PHP configuration

Time for action – modifying php.ini settings

Mac OS X php.ini /Applications/
MAMP/bin/php/php5.3.6/confTextEdit
smultron/ Smultron http://www.peterborgapps.com/
TextMate http://macromates.com/ Coda http://
panic.com/coda/

Resource Limits

```
max_execution_time = 60;  
max_input_time = 120;  
memory_limit = 128M;  
error_reporting = E_ALL & ~E_NOTICE
```

php.ini

MySQL configuration

Time for action – modifying the MySQL my.cnf settings

Mac OS X my.cnf
/Applications/MAMP/Library/support-files/my-medium.cnf to /
Applications/MAMP/conf/my.cnf

Windows my.ini C:\xampp\mysql\bin

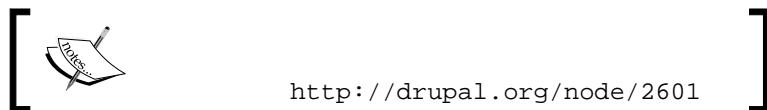


```
my.cnf/my.ini

# * Fine Tuning
#
key_buffer = 16M
key_buffer_size = 32M
max_allowed_packet = 16M
thread_stack = 512K
thread_cache_size = 8
max_connections = 300

max_allowed_packet
```

server <http://drupal.org/requirements#database> **Database**



<http://drupal.org/node/2601>

Time for action – creating an empty MySQL database

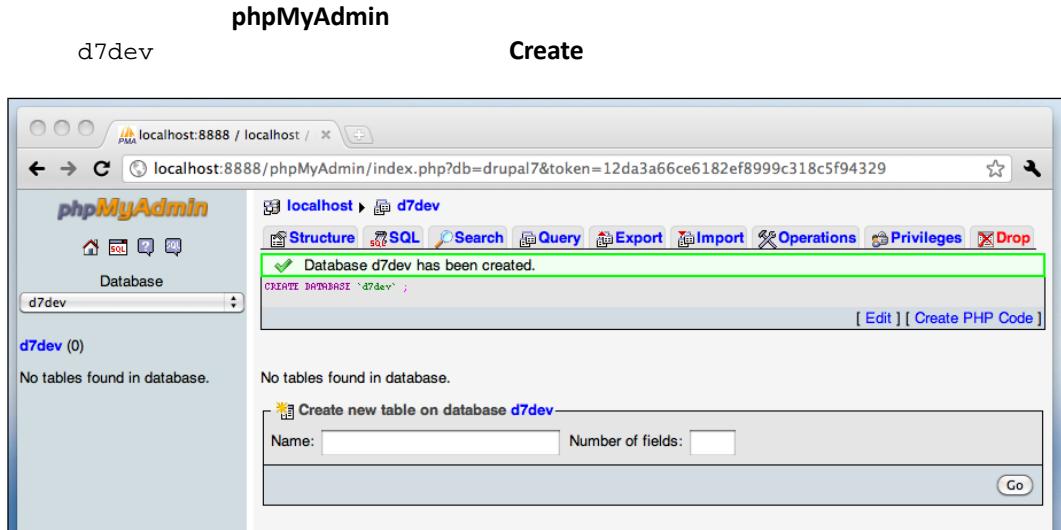
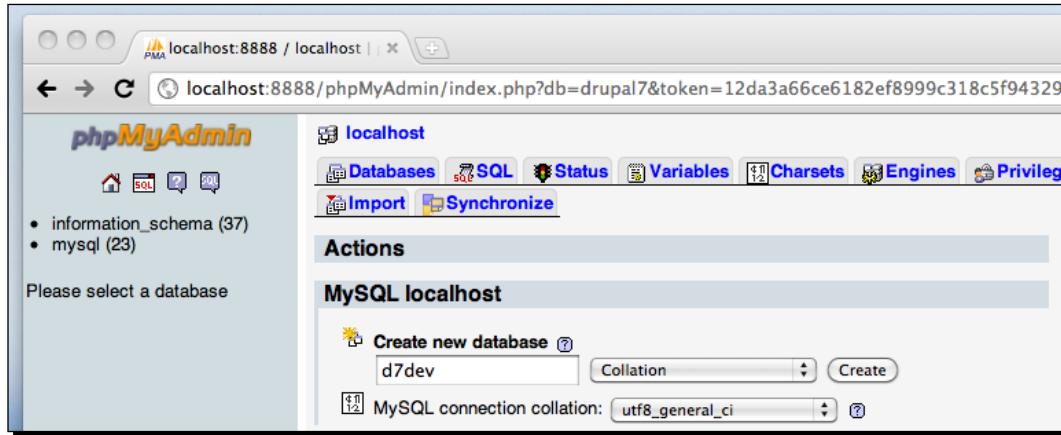
phpMyAdmin
phpMyAdmin

Mac OS X

<http://localhost:8888/phpMyAdmin>

Windows

<http://localhost/phpmyadmin/>



What just happened?

Installing Git

Git

drupal.org

drupal.org

Time for action – installing Git for Mac OS X

<https://github.com/mxcl/homebrew/wiki/installation>

1.

the Terminal Applications/Utilities

`brew install Git`

2.

`Git version`

Downloading the example code



com/support

<http://www.packtpub.com>
<http://www.packtpub.com/support>

Time for action – installing Git for Windows

msysgit http://code.google.com/p/
msysgit/downloads/list

1.

Git-1.7.6-preview20110708.exe
file **downloaded**



2.

Next Next

GNU General Public License

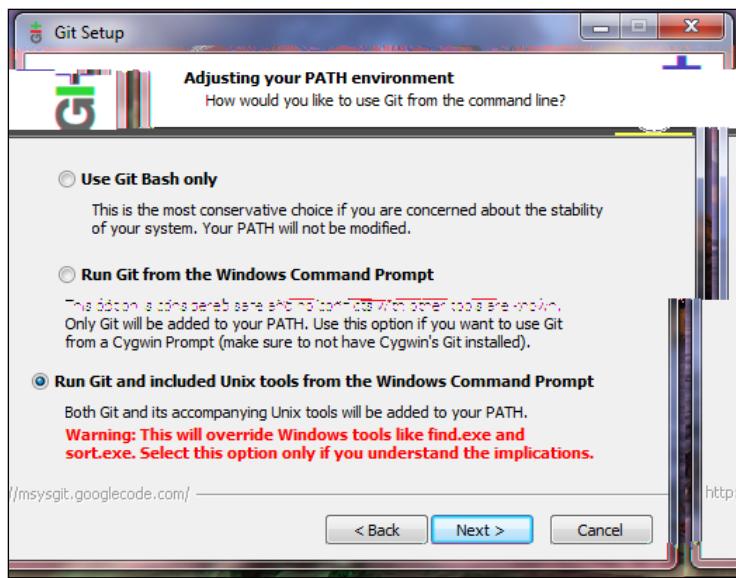
3.

Select Destination Location

Next

- 4.** Select Components [Next](#)

5. Adjusting your PATH Environment [Run Git and included Unix tools from the Windows Command Prompt](#)



What just happened?

Drupal.org

Installing Drush

Drush

Terminal

Command Prompt
drupal.org

```
drush dl modulename  
drush en -y modulename
```

Time for action – installing Drush for Mac OS X

Terminal

Applications/Utilities

```
brew install drush
```

Time for action – installing Drush for Windows

<http://drush.ws/sites/default/files/attachments/Drush%20Installation%20Guide.pdf>

1.

installer

Custom Setup

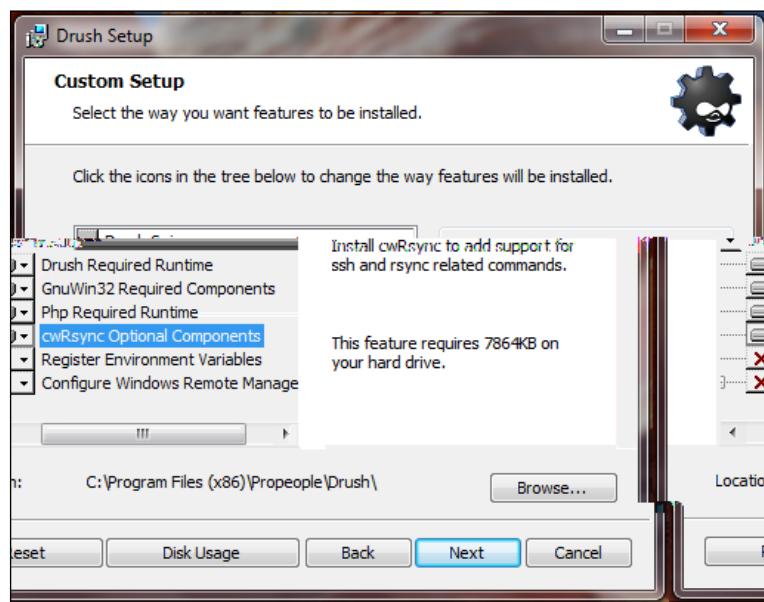
Optional Components

http://drush.ws/drush_windows_

Drush Installation Guide PDF

cwRsync

Register Environment Variables



2.

```
cd /ProgramData/Propeople  
rm -r Drush  
git clone --branch master http://git.drupal.org/project/drush.git
```



3.

```
git status
```

What just happened?

Installing Drupal 7

Time for action – installing Drupal 7

1. Mac OS X Terminal

```
cd /Applications/MAMP/htdocs
```

Windows

```
cd /xampp/htdocs
```

2.

d7dev

```
$ git clone http://git.drupal.org/project/drupal.git d7dev
Cloning into d7dev...
remote: Counting objects: 131301, done.
remote: Compressing objects: 100% (36527/36527), done.
remote: Total 131301 (delta 98528), reused 119725 (delta 88369)
Receiving objects: 100% (131301/131301), 38.73 MiB | 554 KiB/s,
done.
Resolving deltas: 100% (98528/98528), done.
$ cd d7dev
```

3.

```
$ git tag -l 7.*
7.0
~
7.1
7.10
7.11
7.12
7.2
7.3
7.4
7.5
7.6
7.7
7.8
7.9
```

4.

alpha rc

7.12

```
$ git checkout 7.12
Note: checking out '7.12'.
```

```
You are in 'detached HEAD' state. You can look around, make
experimental
changes and commit them, and you can discard any commits you make
in this
state without impacting any branches by performing another
checkout.
```

```
If you want to create a new branch to retain commits you create,
you may
do so (now or later) by using -b with the checkout command again.
Example:
```

```
git checkout -b new_branch_name
```

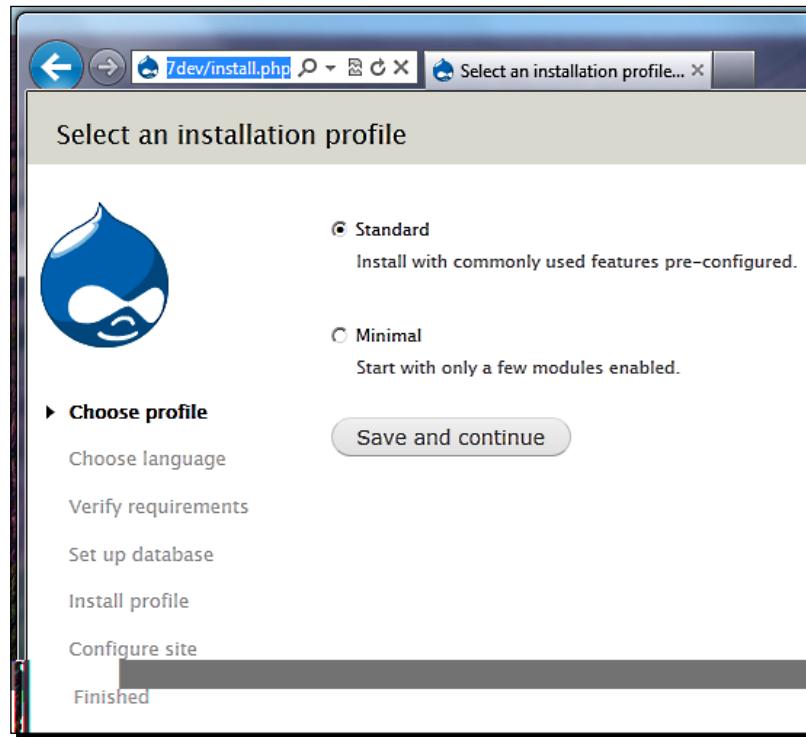
```
HEAD is now at 4d4080b... Oops. Not yet. ;)
Revert "Back to 7.13-
dev."
```



5.

Mac OS X <http://localhost:8888/d7dev/>

Windows <http://localhost/d7dev/>



- 6.** Standard **Save and Continue**
- 7.** Choose language **Save**
and Continue
- 8.** Database configuration MySQL d7dev
root
Save and Continue

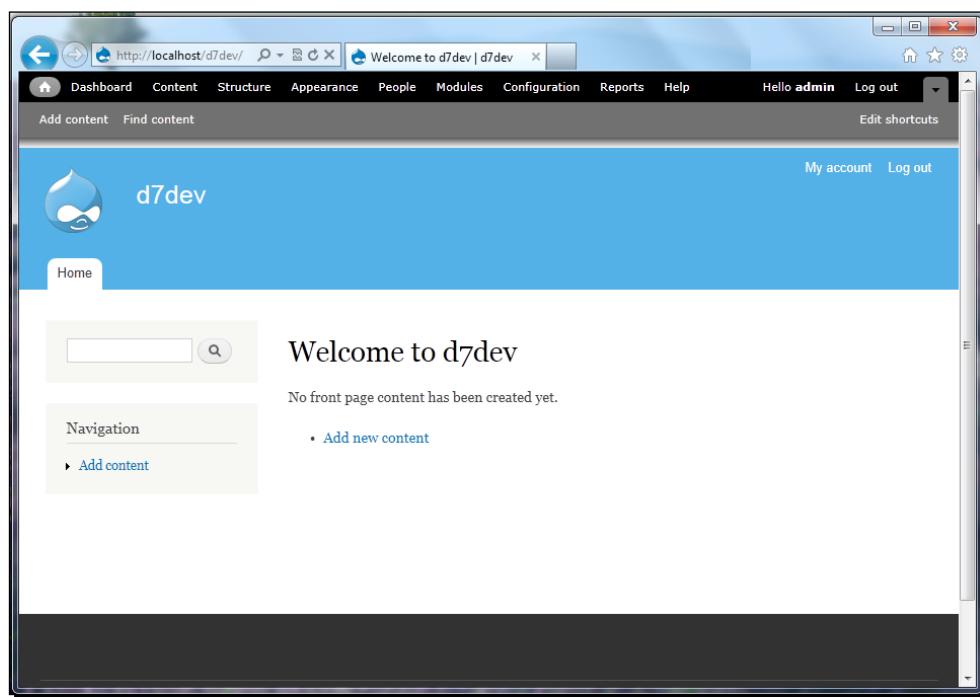


9. Configure site

- Site name** d7dev
- Site e-mail address**
- Username** admin
- E-mail address** Site e-mail
- Password** Confirm password admin

10.

Save and continue
Visit your new site



What just happened?

Installing the Aptana Studio IDE

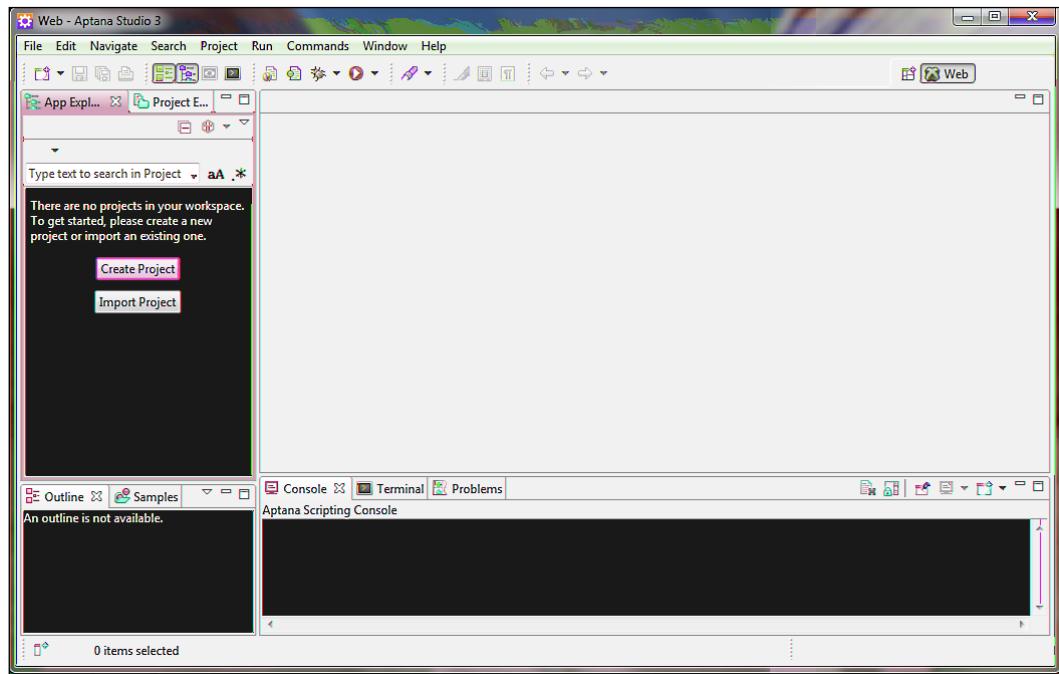
Aptana Studio Integrated Development Environment IDE

Time for action – installing the Aptana IDE

<http://www.aptana.com/products/studio3/download>



Time for action – creating a new Aptana Studio PHP project



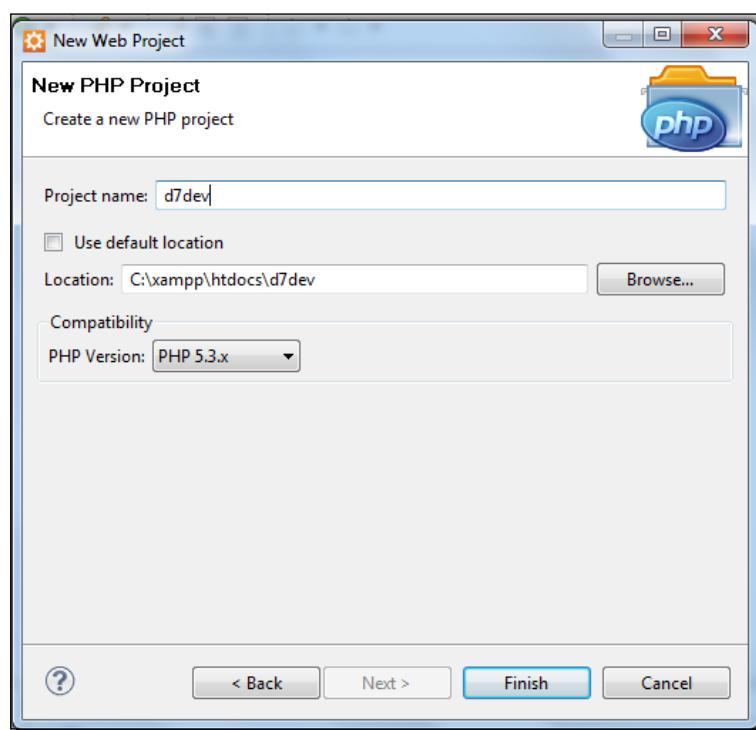
1.

Create Project

PHP Project

Next

New PHP Project



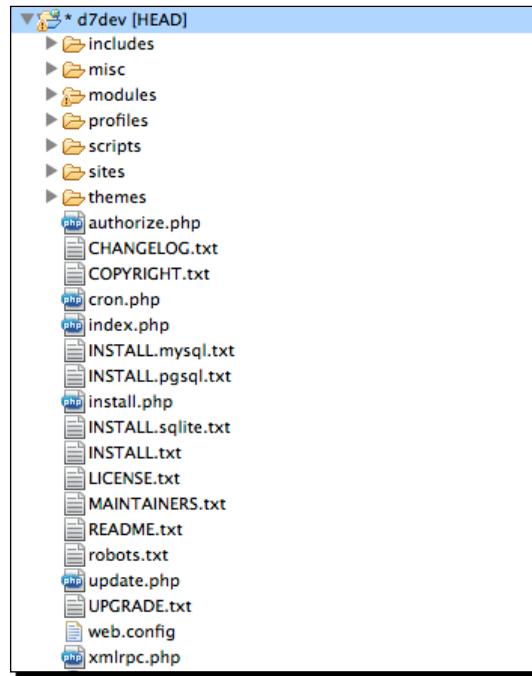
2.

Use default location

C:\xampp\htdocs\d7dev

/Applications/MAMP/htdocs/d7dev

Finish



What just happened?

Drupalize Aptana Studio

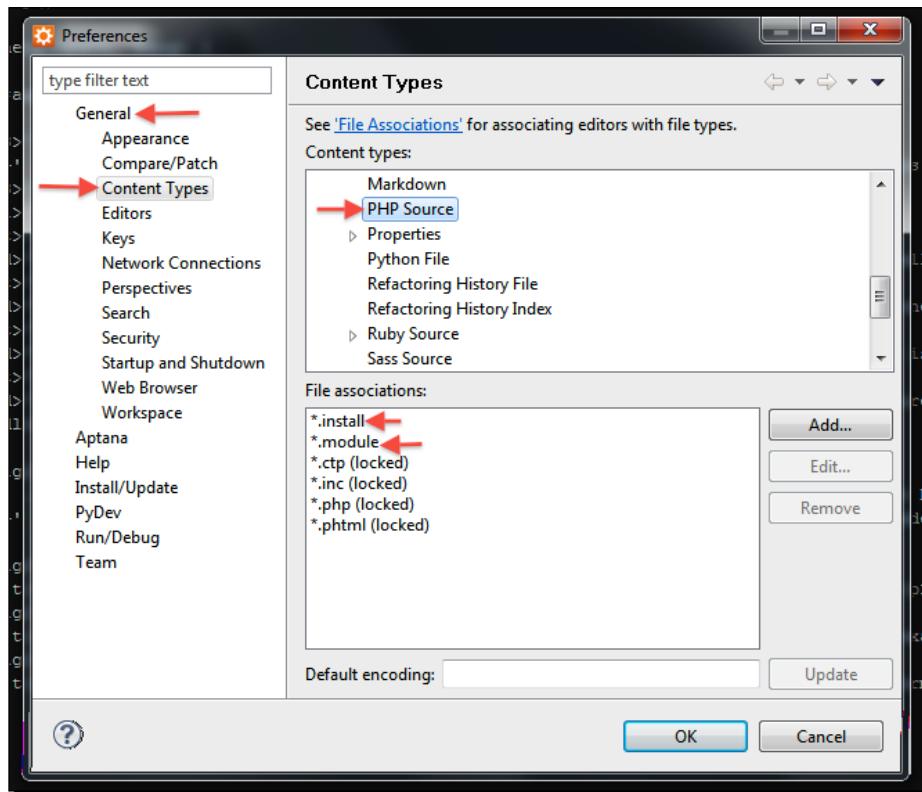
```
d7dev  
project           modules/aggregator  
the aggregator.module    aggregator.pages.inc  
aggregator.module          aggregator.  
pages.inc  
*.module     *.install  
http://drupal.org/  
coding-standards
```

Time for action – setting up the Drupal content type associations

			.inc	.install	.php
			.module		
1.		Preferences			Window
		Preferences		Aptana Studio 3 Preferences	
		to General Content Types			
2.	Text		Content types		PHP Source
3.		Add...			
4.	*.install		Content type		OK

5. steps 4 5 * .module Content
type

6.



Time for action – installing the Drupal-specific Aptana formatter profile

Aptana formatter profile

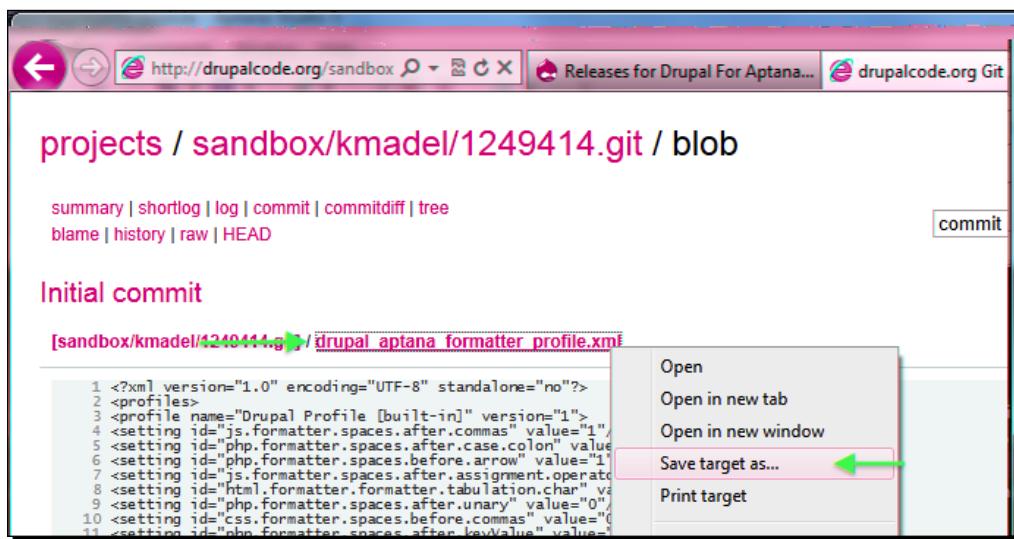
<http://drupal.org/coding-standards>

1.

http://drupalcode.org/sandbox/kmadel/1249414.git/blob/HEAD:/drupal_aptana_formatter_profile.xml

Save as... or Save link as...

Save



2.

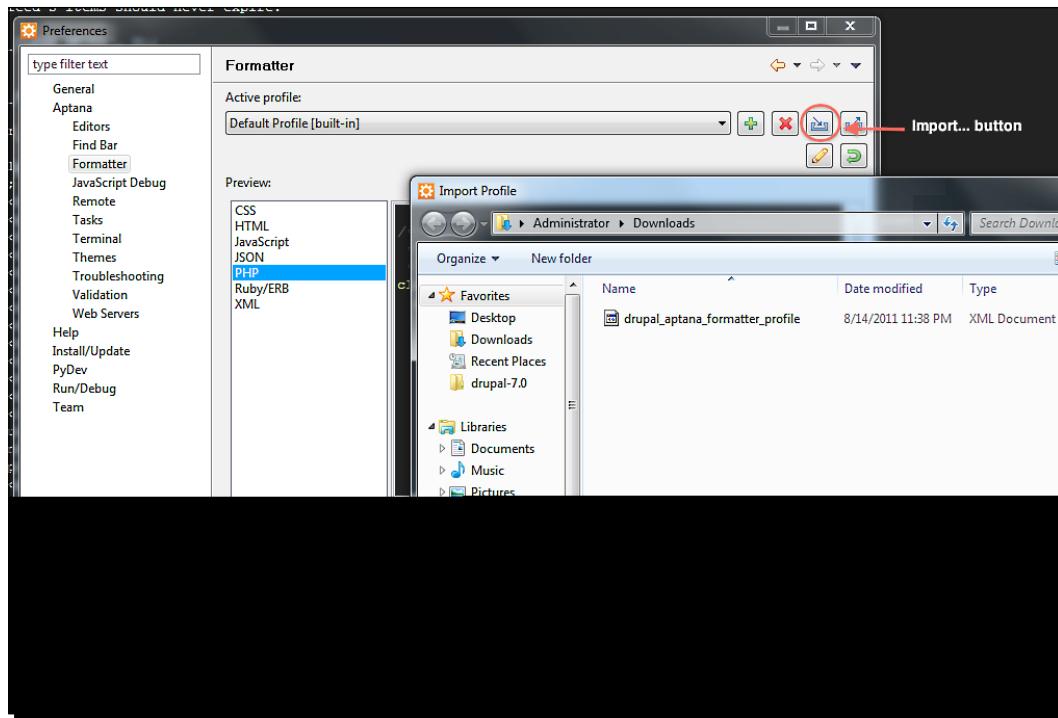
Preferences

Aptana | Formatter

3.

Import...

Open



4. Active profile:

OK

5.

What just happened?

Drupal.org from a developer's perspective

Drupal.org

drupal.org

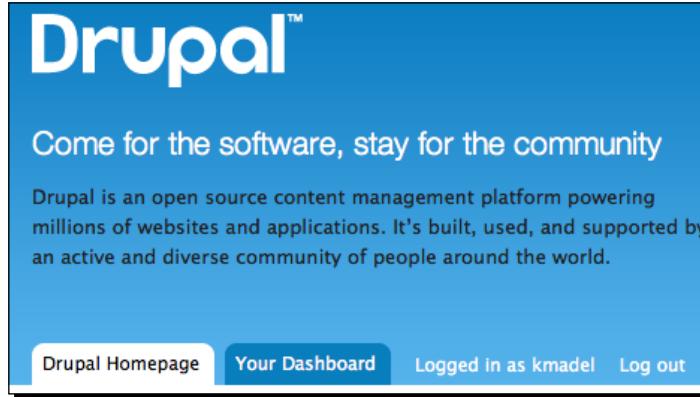
<http://drupal.org/user/register>

drupal.org

drupal.org

Drupal Homepage

Your Dashboard



drupal.org

The screenshot shows a Drupal.org page for a module named 'Colorbox File'. At the top, there's a navigation bar with links for 'Drupal Homepage', 'Your Dashboard', 'Logged in as kmadel', 'Log out', a search bar, and a 'Search' button. Below the navigation, there's a 'Download & Extend' section with tabs for 'Download & Extend Home', 'Drupal Core', 'Modules' (which is selected), 'Themes', 'Translations', and 'Installation Profiles'. A message 'Add Issues for Colorbox File to dashboard +' is visible. The main content area has a title 'kmadel's sandbox: Colorbox File' and a sub-section 'Experimental Project' with a note about it being a 'sandbox project'. There are tabs for 'View', 'Version control', 'Edit', and 'Maintainers'. On the right side, there's a sidebar titled 'Maintainers for Colorbox File' showing activity from 'kmadel' and links to 'View all committers' and 'View commits'. Another sidebar titled 'Issues for Colorbox File' is also present.

Pop quiz – PHP and MySQL configuration for Drupal

```
max_connections to 300  
max_allowed_packet to 16M  
innodb_buffer_pool_size to 300M
```

Summary

2

Custom Content Types and an Introduction to Module Development

The ability to easily define custom content types is a core feature of Drupal, and what makes Drupal a great system for managing web content. However, prior to Drupal 7, the contributed CCK module was required to create custom fields on content types. Now, field-able content types are baked right into Drupal 7core.

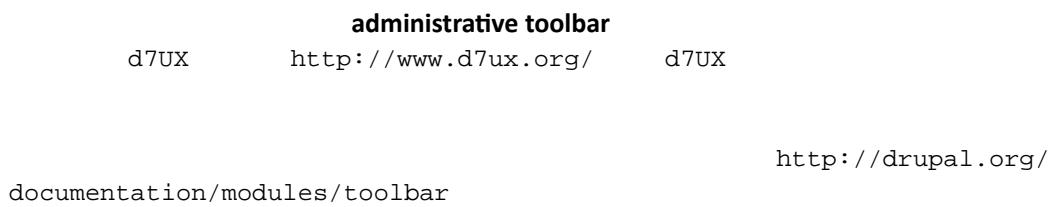
Views

Devel

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

- ◆
- ◆
- ◆
- ◆

Creating custom Recipe content type



Time for action – creating a custom Recipe content type

1. Structure Content types

A screenshot of the 'Structure' page in Drupal. The top navigation bar has tabs for Home, Dashboard, Content, Structure, Appearance, People, Modules, Configuration, Reports, and Help. The 'Structure' tab is highlighted. Below the navigation is a search bar with 'Add content' and 'Find content' buttons. The main content area is titled 'Structure' with a plus sign icon. It shows a breadcrumb trail: Home > Administration. Under 'Blocks', there is a link to 'Content types'. A red arrow points to the 'Content types' link. The page footer says 'd7dev'.

2. Content types Add content type

3. Recipe Name

- 4.** A simple recipe content type based on the schema.org base HTML5 Microdata schema for Recipes at: <http://schema.org/Recipe/>.
- Description**

- 5.** For the Title name



Name *
 Machine name: recipe [\[Edit\]](#)

The human-readable name of this content type. This text will be displayed as part of the list on the *Add new content* page. It is recommended that this name be unique.

Description

Describe this content type. The text will be displayed on the *Add new content* page.

Submission form settings name	Title field label * name
Publishing options Published Promoted to front page	

- 6.** Save and add fields

7.

Body
delete

Delete

The screenshot shows the 'Content types' administration page for a 'Recipe' content type. At the top, there are tabs for EDIT, MANAGE FIELDS, MANAGE DISPLAY, COMMENT FIELDS, and COMMENT DISPLAY. A success message box says 'The content type Recipe has been added.' Below it, a table lists fields: 'name' (label), 'title' (name), 'Node module element' (field), and 'body' (label), 'body' (name), 'Long text and summary' (field). There are 'edit' and 'delete' links next to the body field row. A red arrow points to the 'edit' link, and another red arrow points to the 'delete' link.

8.

http://schema.org/Recipe/ description Add new
description field_prefix Name
description Long text Select a field type Text area
(multiple rows) Save
Save field settings

The screenshot shows the 'Manage fields' page for the 'description' field of the 'Recipe' content type. It includes a 'FIELD SETTINGS' section with a note about applying settings to all instances of the field. A message states that 'description' has no field settings. A 'Save field settings' button is at the bottom, with a red arrow pointing to it.

9. RECIPE SETTINGS A short description of the item.
Help text **Save settings**

10. Add existing field image Label
Image: field_image (Image) Field to share
Save



11. Save field settings FIELD
SETTINGS

12. Save settings
RECIPE SETTINGS IMAGE FIELD SETTINGS

13. datePublished author Properties from
CreativeWork

14. For the cookTime cookTime
field_cooktime Integer Text field

15. Save
Save field settings

16. The time it takes to actually cook the dish in
minutes. Help text minute|minutes Suffix RECIPE
SETTINGS Save settings

17. cookingMethod nutrition recipeCategory
recipeCuisine totalTime

- 18.** For the ingredients
- | | | | |
|-------------------|----------------------------|------------|----------------|
| field_ingredients | Text | Text field | ingredients |
| Save | | | 255 |
| length | Save field settings | | Maximum |
- 19.** **RECIPE SETTINGS** An ingredient used in the recipe.
- | | | | |
|---------------|-----------|----------------------|--|
| the Help text | Unlimited | Number of values | |
| | | Save settings | |
- 20.** For the prepTime
- | | | | |
|-----------------------------------|------------------------|------------|---------------------------------|
| field_prepTime | Integer | Text field | prepTime |
| Save | | | Save |
| field settings | | | The length of time it takes |
| to prepare the recipe in minutes. | | | Help text minute minutes |
| Suffix | RECIPE SETTINGS | | Save settings |
- 21.** For the recipeInstructions
- | | | | |
|--------------------|----------------------------|------------------------|-----------------------|
| recipeInstructions | field_recipeInstructions | Long text | Text area |
| | | Save | |
| | Save field settings | | The steps to make the |
| dish. | Help text | RECIPE SETTINGS | Save |
| settings | | | |
- 22.** For the recipeYield
- | | | | |
|-------------------|----------------------------|------------|----------------|
| field_recipeyield | Text | Text field | recipeYield |
| Save | | | 255 |
| length | Save field settings | | Maximum |
- 23.** **RECIPE SETTINGS** The quantity produced by the recipe
(for example, number of people served, number of servings, and so
on). **Help text**
- | | | | |
|-----------------|--|--|-------------|
| settings | | | Save |
|-----------------|--|--|-------------|

24.**Manage Fields**

LABEL	NAME	FIELD	WIDGET	OPERATIONS
name	title	Node module element		
description	field_description	Long text	Text area (multiple rows)	edit delete
image	field_image	Image	Image	edit delete
cookTime	field_cooktime	Integer	Text field	edit delete
ingredients	field_ingredients	Text	Text field	edit delete
prepTime	field_prepetime	Integer	Text field	edit delete
recipeInstructions	field_recipeinstructions	Long text	Text area (multiple rows)	edit delete
recipeYield	field_recipeyield	Text	Text field	edit delete

What just happened?

Add content
Awesome Sauce

- ◆ Name
- ◆ Description

◆ **Ingredients**

-
-
-
-
-
-
-
-
-

◆ **recipeInstructions**

- ◆ **Yield**
- ◆ **prepTime**
- ◆ **cookTime**

Awesome Sauce

[View](#) [Edit](#)

Submitted by **admin** on Sun, 02/26/2012 - 13:52

description:
A deliciously sweet and spicy sauce that makes everything you put it on that much awesomer. A little goes a long way...

cookTime:
30minutes

ingredients:
1 ghost pepper (optional)
2 habanero pepers
3 Thai peppers
4 jalapeno peppers
4 clv garlic
3 cp rice vinegar
1 tsp fish sauce
1 cp sugar

prepTime:
10minutes

recipeInstructions:
Remove the stems from the peppers. Add the peppers and garlic to a food processor and blend until ~~smooth~~. Add vinegar, sugar, fish sauce, and puree to a small saucepan and bring to a simmer over low

What just happened?

Developing a custom module

cookTime prepTime

cookTime prepTime

core

contrib or contributed

<http://drupal.org/download>

custom

sites

the sites/all/modules
sites/{name_of_
site}/modules

◆ **The .info file**

◆ **The .module file**

hook

field.module

[http://api.](http://api.drupal.org/api/drupal/modules--field--field.api.php/7)

drupal.org/api/drupal/modules--field--field.api.php/7

field.module

hook_field_formatter_info

hook_field_formatter_view

Time for action – developing a custom module

d7dev

1. Aptana Studio

2. sites/all/modules
d7dev
sites/all/modules/d7dev.module
custom

3. d7dev
d7dev.module
New file
d7dev.info
d7dev
d7dev.info
name description core package

name = d7dev
description = Custom module for misc custom functionality.
core = 7.x
package = Custom

files[] = d7dev.module

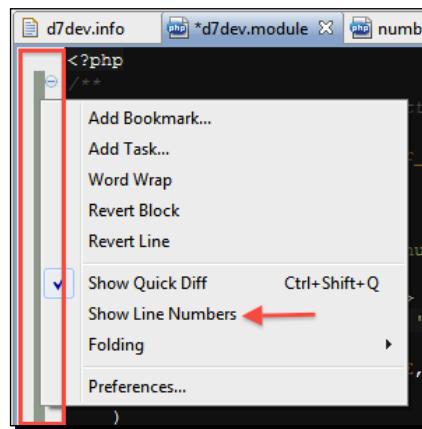


4. *line 16*

Aptana Studio

Show Line

Numbers



5.

6.

7. settings

8. Default to Duration

9. number_integer to d7dev_integer_
duration

```
<?php
/**
 * Implements hook_field_formatter_info().
 */
function d7dev_field_formatter_info() {
  return array(
    'd7dev_integer_duration' => array(
      'label' => t('Duration'),
      'field types' => array('number_integer'),
    )
  );
}
```

```
1.      number_field_formatter_view           number.module
        d7dev_field_formatter_info

2.

3.      switch                         case       number_integer
number_decimal

4.      case   number_unformatted
d7dev_integer_duration

5.          foreach
//some simple math to covert the duration minutes to hours and the
//remainder as minutes
$hours = floor($item['value']/60); //divide by minutes in 1 hour
//and get floor

$minutes = $item['value']%60; //use the modulus to get the //
remainder of minutes

6.

60
//simple helper function to get gcd of minutes
function gcd($a, $b) {
  $b = ( $a == 0 )? 0 : $b;
  return ( $a % $b )? gcd($b, abs($a - $b)) : $b;
}

7.

//get greatest common denominator of minutes to convert to //
fraction of hours
$minutes_gcd = gcd($minutes, 60);

//&frasl; is the html entity for the fraction separator, and we //
use the sup and sub html element to give
//the appearance of a fraction
```

```
$minutes_fraction = '<sup>' . $minutes/$minutes_gcd .  
'</sup>&frasl;<sub>' . 60/$minutes_gcd . '</sub>';  
  
$markup = $hours > 0 ? $hours . ' and ' . $minutes_fraction . '  
hours' : $minutes_fraction . ' hours';  
  
//finally, return our formatted value as the markup for this field  
//formatter  
$element[$delta] = array('#markup' => $markup);
```

8. d7dev_field_formatter_view

```
/**  
 * Implements hook_field_formatter_view().  
 */  
function d7dev_field_formatter_view($entity_type, $entity, $field,  
$instance, $langcode, $items, $display) {  
$element = array();  
$settings = $display['settings'];  
  
switch ($display['type']) {  
  
case 'd7dev_integer_duration':  
foreach ($items as $delta => $item) {  
//some simple math to convert the duration minutes to hours  
//and the remainder as minutes  
  
//divide by minutes in 1 hour and get floor  
$hours = floor($item['value']/60);  
  
//use the modulus to get the remainder of minutes  
$minutes = $item['value']%60;  
  
//get greatest common denominator of minutes to convert to  
fraction of hours  
$minutes_gcd = gcd($minutes, 60);  
  
//&frasl; is the html entity for the fraction separator, and we //  
use the sup and sub html element to give the appearance of a //  
fraction  
$minutes_fraction = '<sup>' . $minutes/$minutes_gcd .  
'</sup>&frasl;<sub>' . 60/$minutes_gcd . '</sub>';
```

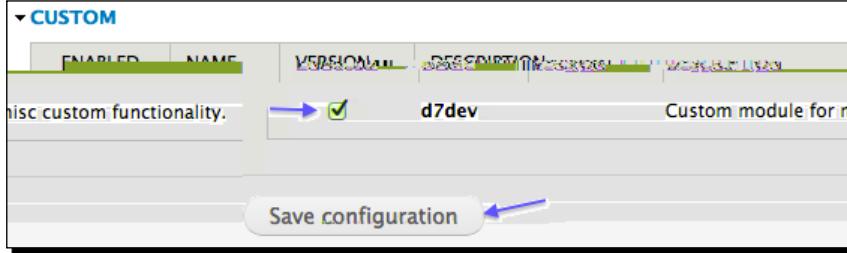
```

$markup = $hours > 0 ? $hours . ' and ' . $minutes_
fraction . ' hours' : $minutes_fraction . ' hours';

//finally, return our formatted value as the markup for this field
//formatter
    $element[$delta] = array('#markup' => $markup);
}
break;
}

return $element;
}

```

- Modules Admin
1. Modules Custom
the **ENABLED** d7dev
 2. Configuration Admin Performance
DEVELOPMENT Clear all caches
 3. Structure
Content Types
 4. Content types manage display

5.

FORMAT	SAVE	Duration
cookTime	Above	Duration
ingredients	Above	Default
prepTime	Above	Duration
recipeInstructions	Above	Default
recipeYield	Above	Default
Hidden		
No field is hidden.		
CUSTOM DISPLAY SETTINGS		
Save ←		

6.

Awesome Sauce

[View](#) [Edit](#)

Submitted by [admin](#) on Sun, 02/26/2012 - 13:52

description:
A deliciously sweet and spicy sauce that makes everything you put it on that much awesomer. A little goes a long way...

cookTime:

ingredients:
1 ghost pepper (optional)
2 habanero peppers
3 Thai peppers
4 jalapeno peppers
4 clv garlic
3 cp rice vinegar
1 tsp fish sauce
1 cp sugar

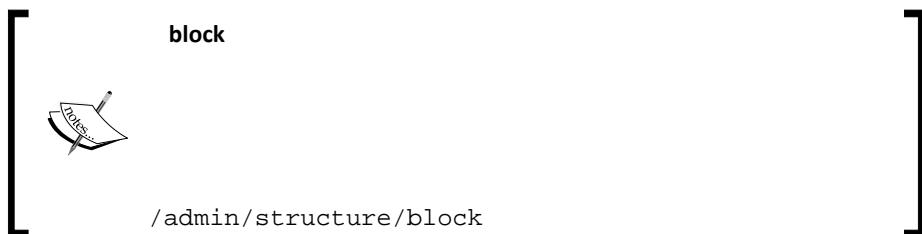
prepTime:

recipeInstructions:
Remove the stems from the peppers. Add the peppers and garlic to a food processor and blend until pureed. Add vinegar, sugar, fish sauce, and puree to a small saucepan and bring to a simmer over low

What just happened?

Quick introduction to Views

Views

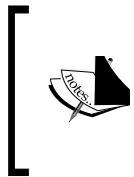


Time for action – installing the Views module

Drush

d7dev

```
C:\xampp\htdocs\d7dev>drush dl views
Project views (7.x-3.3) downloaded to [success]
C:/xampp/htdocs/d7dev/sites/all/modules/views.
Project views contains 2 modules: views, views_ui.
```



```
          views      views_ui  
          Drush           views_ui  
  
          views      ctools  
Y       Enter  
  
C:\xampp\htdocs\d7dev>drush en views_ui  
The following projects have unmet dependencies:  
views_ui requires ctools  
Would you like to download them? (y/n): y  
Project ctools (7.x-1.0-rc1) downloaded to           [success]  
C:/xampp/htdocs/d7dev/sites/all/modules/ctools.  
The following extensions will be enabled: views_ui, ctools, views  
Do you really want to continue? (y/n): y  
ctools was enabled successfully.                  [ok]  
views_ui was enabled successfully.                [ok]  
views was enabled successfully.                  [ok]
```

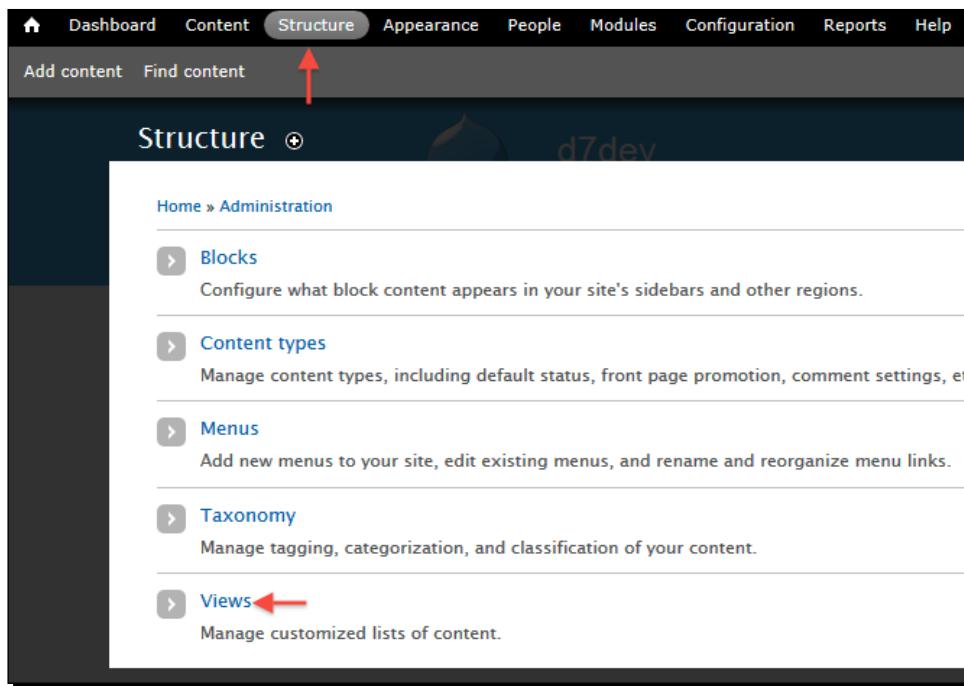
Time for action – creating a recipe block listing with Views

1.

Admin
Structure

admin
Views

Structure



- 2.** Views [Add new view](#)
- 3.** the **View name** [Recipe List](#)
- 4.** Recipe **of type**
- 5.** **Create a page**
- 6.** Check the **Create a block**

7.

Save &

exit

Add new view 

d7dev

Home » Administration » Structure » Views

View name *
Recipe List Machine name: recipe_list [Edit]

Description

Show Content of type Recipe sorted by Newest first

Create a page

Create a block

Block title Recipe List

Display format Unformatted list of titles (linked)

Items per page 5

 **Save & exit** **Continue & edit** **Cancel**

d7dev

1.

Structure

Admin

Blocks

2.

View: Recipe List block

3.

Block

4.

REGION SETTINGS
theme)

Sidebar second

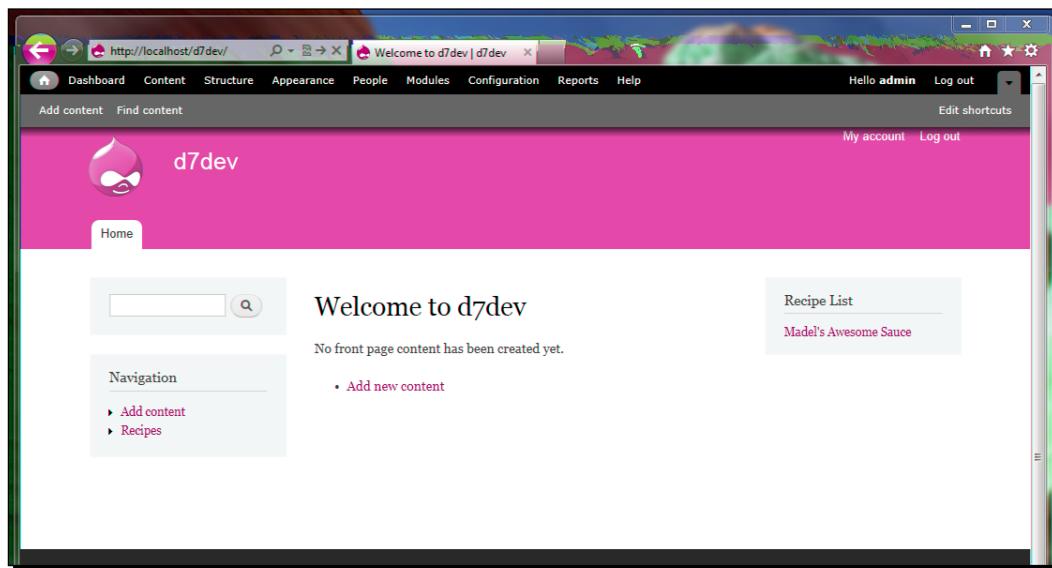
Bartik (default

- | | | | |
|-----------|----------------------------|-------------------------------|------------------------------|
| 5. | Visibility settings | Pages | Only the listed pages |
| | | Show block on specific | |

What just happened?

`http://localhost/d7dev/`

`d7dev`
Recipe List



Introducing the Devel module

Items per page

5

`http://drupal.org/project/devel`

`devel_generate`

Time for action – installing the Devel Generate content module

`devel_generate`

```
C:\xampp\htdocs\d7dev>drush dl devel
Project devel (7.x-1.2) downloaded to [success]
C:/xampp/htdocs/d7dev/sites/all/modules/devel.
Project devel contains 3 modules: devel_generate, devel, devel_node_
access.

C:\xampp\htdocs\d7dev>drush en devel_generate
The following extensions will be enabled: devel_generate, devel
Do you really want to continue? (y/n): y
devel_generate was enabled successfully. [ok]
devel was enabled successfully. [ok]

devel_generate
```

Time for action – generating content with the devel_generate module

devel_generate

1. Configuration
Generate content DEVELOPMENT
2. Generate content Content types

The screenshot shows a web interface titled "Generate content". The URL in the address bar is "d7dev/admin/config/development/generate". The main content area is titled "Content types". It lists several content types with checkboxes:

- Article. Comments: Open (unchecked)
- Basic page. Comments: Hidden (unchecked)
- Recipe. Comments: Open (checked, indicated by a red arrow pointing to it)

A checkbox at the bottom left says "Delete all content in these content types before generating new content." A text input field at the bottom right asks "How many nodes would you like to generate?".

3.

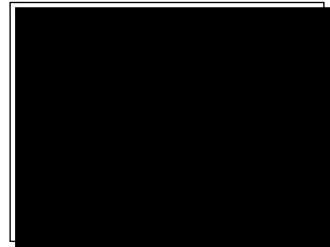
Generate

4.

What just happened?

devel_generate

devel_generate



Summary

3

HTML5 Integration for Drupal 7 and More Module Development

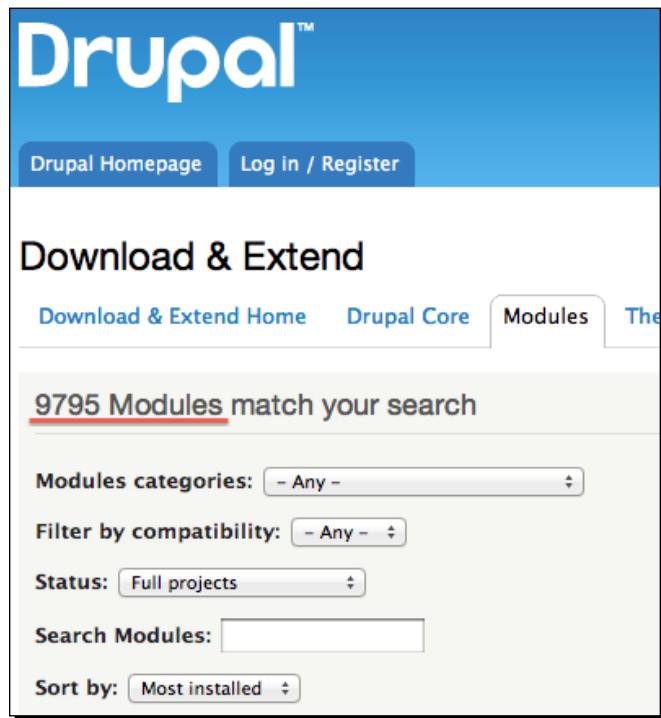
HTML5 is not exactly new on the technology scene. If you have done any mobile web development, then you will certainly know how prevalent HTML5 is becoming. Even though there is an active initiative around HTML5 for Drupal 8 (<http://drupal.org/community-initiatives/drupal-core/html5>), the adoption of HTML5 was not far enough along to be included as part of Drupal 7 core.

HTML5 is one of the main ingredients of many of the upcoming development examples in this book.

d7dev

Modules

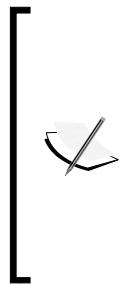
<http://drupal.org/project/modules/>



First things first—changing our DOCTYPE

DOCTYPE

DOCTYPE



Time for action – installing the HTML5 Tools module

http://drupal.org/projects/html5_tools
DOCTYPE

```
C:\xampp\htdocs\d7dev>drush dl html5_tools
Project html5_tools (7.x-1.1) downloaded to [success]
C:/xampp/htdocs/d7dev/sites/all/modules/html5_tools.
```

```
C:\xampp\htdocs\d7dev>drush en html5_tools
The following projects have unmet dependencies:
html5_tools requires elements
Would you like to download them? (y/n): y
Project elements (7.x-1.2) downloaded to [success]
C:/xampp/htdocs/d7dev/sites/all/modules/elements.
The following extensions will be enabled: html5_tools, elements
Do you really want to continue? (y/n): y
elements was enabled successfully. [ok]
html5_tools was enabled successfully. [ok]
```

DOCTYPE

http://drupal.org/projects/elements

- ◆
- ◆ head style javascript
- meta
- ◆ time

Configuration **Admin**
Markup

HTML5 Tools
HTML5 Tools

HTML5 Tools

Home > Administration > Configuration > Markup

HTML5 simplifies many things about HTML. Some of these new standards are a bit tricky to implement hardcoded into Drupal core. You can alter some of them by using theme override functions in your theme, but this module provides tools for accomplishing these changes more easily.

OVERRIDE DRUPAL'S FORMS WITH THEIR HTML5 COUNTERPARTS

- Site information
Modify the site configuration email textfield to an email field.
- Search block
Modify the search block textfield to a search field.
- Search form
Modify the search form textfield to a search field.
- User registration
Modify the user registration textfield to an email field.
- Contact forms
Modify contact form's textfields to email fields.

SIMPLIFY <HEAD> MARKUP

- Simplify doctype and add html5shiv
Replaces html.tpl.php with a custom html.tpl.php which has the proper html5 doctype. This will affect all pages on your site.

HTML5, RDFa, and Microdata

RDFa

<http://dev.w3.org/html5/md/>

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

d7dev

<http://schema.org/Recipe>



Time for action – installing the Microdata module

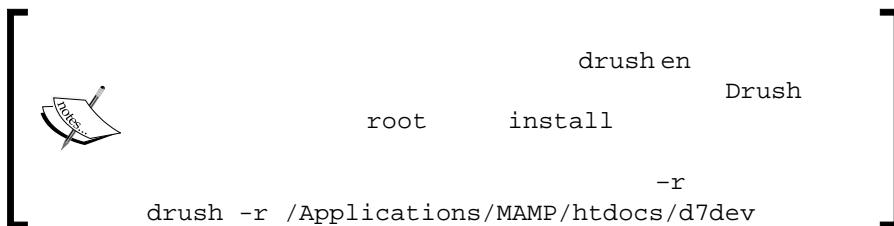
d7dev

```
C:\xampp\htdocs\d7dev>drush dl microdata
There is no recommended release for project microdata.
Choose one of the available releases:
[0]   : Cancel
[1]   : 7.x-1.x-dev      - 2012-Feb-24  - Development
[2]   : 7.x-1.0-alpha4   - 2012-Feb-22  - Supported
```

2

```
Project microdata (7.x-1.0-alpha4) downloaded to      [success]
C:/xampp/htdocs/d7dev/sites/all/modules/microdata.

C:\xampp\htdocs\d7dev>drush en microdata
The following projects have unmet dependencies:
microdata requires entity
Would you like to download them? (y/n): y
Project entity (7.x-1.0-rc1) downloaded to      [success]
C:/xampp/htdocs/d7dev/sites/all/modules/entity.
The following extensions will be enabled: microdata, entity
Do you really want to continue? (y/n): y
entity was enabled successfully.                  [ok]
microdata was enabled successfully.             [ok]
```



What just happened?

Time for action – configuring Microdata for our Recipe content type

1. Structure | Content Types edit

2. Recipe content type edit Microdata settings Field property(s)

Submission form settings
name

Publishing options
Published , Promoted to front page

Display settings
Display author and date information.

Comment settings
Open, Threading , 50 comments per page

Menu settings

Microdata settings

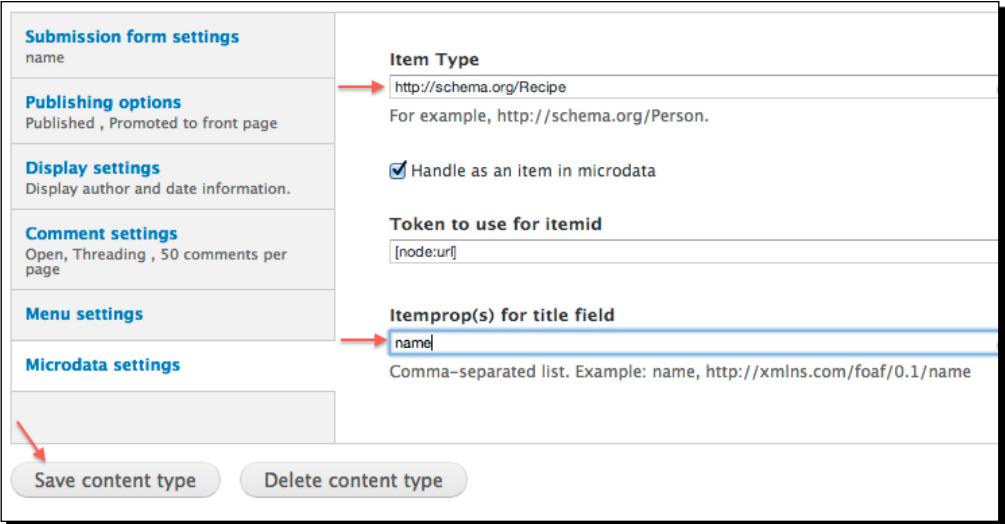
Item Type http://schema.org/Recipe
For example, http://schema.org/Person.

Handle as an item in microdata

Token to use for itemid [node:url]

Itemprop(s) for title field name
Comma-separated list. Example: name, http://xmlns.com/foaf/0.1/name

Save content type Delete content type



3. http://schema.org/Recipe Item Type Save
name Itemprop(s) for title field
content type

4. Home Admin

5. View source (IE) or
View Page Source

6.

line 182

```
itemscope itemtype
DIV
<div id="node-51" class="node node-recipe node-promoted node-full
clearfix" itemid="/d7dev/node/51" itemscope=""
itemtype="http://schema.org/Recipe">.
```

7.

```
DIV description
<div class="field field-name-field-description field-type-text-
long field-label-above">
```

8.

itemProp	Admin
Structure Content types	manage fields

9.

edit	description	Description
Microdata Mapping	description field edit	Field property(s)
http://schema.org/Recipe to description		

DESCRIPTION MICRODATA MAPPING

Recipe uses the itemtype <http://schema.org/Recipe>.

Field property(s)

description

Comma-separated list of itemprop for this text. Example: name, http://xmlns.com/foaf/0.1/name

Save settings ←



node id
DIV

- 10.** Save settings
description

11. Field property of each Description Microdata
Mapping

12. Home Admin

13. recipe item View source (IE) or
View Page Source

14. line 191

```
<div class="field field-name-field-description  
    field-type-text-long field-label-above">  
  <div class="field-label">  
description:&nbsp;  
</div>  
<div class="field-items">  
  <div class="field-item even" itemprop="description">
```

What just happened?

```
number_integer                                prepTime  
cookTime  
  
                                cookTime    prepTime  
hook_field_info_alter
```

7.x-1.0-alpha4

d7dev

The screenshot shows the Eclipse IDE interface with the following details:

- Top Bar:** Shows "App Explorer", "Project Explorer", "Outline", and other tabs.
- Outline View:** Displays a list of PHP functions from the "d7dev.module" file, with "microdata_field_info_alter" highlighted by a red arrow.
- Code Editor:** Shows the source code for "d7dev.module". The function "microdata_field_info_alter" is highlighted with a red box.

```
78     foreach (array('node', 'field', 'user_profile',  
79       $key = array_search('rdf_preprocess_' . $hook,  
80       if (!empty($key)) {  
81         unset($theme_registry[$hook]['preprocess fun  
82       }  
83     }  
84  
85     // This is required to place the itemprop attrib  
86     $theme_registry['image_formatter']['theme path'] =  
87     $theme_registry['image_formatter']['function'] =  
88  
89   }  
90  
91  /**  
92   * Implements hook_field_info_alter().  
93  */  
94  function microdata_field_info_alter(&$info) {  
95   $info['image']['microdata'] = TRUE;  
96   $info['text']['microdata'] = TRUE;  
97   $info['text_long']['microdata'] = TRUE;  
98   $info['text_with_summary']['microdata'] = TRUE;  
99 }
```

```
    number_integer  
field_info_alter  
                                hook_  
                                number_integer
```

```
/**  
 * Implements hook_field_info_alter().  
 */  
function d7dev_field_info_alter(&$info) {  
    $info['number_integer']['microdata'] = TRUE;  
}  
} // end of anonymous function (�
```

Drupal Shortcut Bar

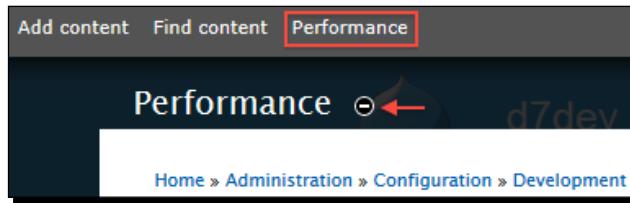
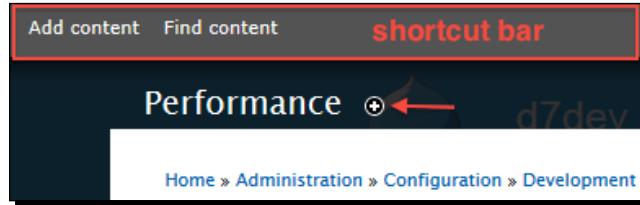
`hook_field_info_alter`

Performance administrative

the **shortcut bar**

Performance settings

the **Performance**



Drupal development and the Drupal community

Chapter 1 Getting Set up

<http://drupal.org/project/issues/microdata>

Time for action – creating issues in Contrib modules' issue queues

1. http://drupal.org
org/project/issues/microdata
2. Create new issue Issues for Microdata
3. Create Issue form

Microdata

Create Issue

[Learn how to report an issue.](#) Use the [issue summary template](#) to summarize the issue in the Description field below. Others can also change the summary. Editing the summary does not subscribe you to the issue or notify subscribers, so add a comment describing your changes after any significant edit.

~~Security issues should not be reported here. Instead, follow the [procedure for reporting security issues](#).~~

Project information

Project: Version: * Component: *

Microdata 7.x-1.x-dev Code

Issue information

Category: * Priority: Assigned: Status:

feature request normal Unassigned active

Descriptions of the [Priority](#) and [Status](#) values can be found in the [Issue queue handbook](#).

Issue details

Title: *

Add Support for Core Number Field

Description: *

Just wanted to know if there was a specific reason why this module supports the text and image fields, but not the core number field. I wanted to add Microdata for the prepTime and cookTime properties as specified at <http://schema.org/Recipe> and was using a number_integer field. I wrote a simple hook_field_info_alter to add support for this field type and it seems to be working just fine:

```
<code>
/**
 * Implements hook_field_info_alter().
 */
function d7dev_field_info_alter(&$info) {
  $info['number_integer']['microdata'] = TRUE;
}
</code>
```

I would be happy to submit a patch if this is a desired feature.

4. Save

What just happened?

<http://drupal.org/node/1291634>

Issue Summary

Just wanted to know if there was a specific reason why this module supports the text and image field types but not number_integer fields. I would like to add Microdata for the prepTime and cookTime properties as specified at <http://schema.org/Recipe>. I have created a simple hook_field_info_alter to add support for this field type and it seems to be working just fine.

```
/** * Implements hook_field_info_alter(). */ function d7dev_field_info_alter(&$info) { $info['number_integer']['microdata'] = TRUE; }
```

I would be happy to submit a patch if this is a desired feature.

[Login](#) or [register](#) to post comments

Comments

#1 Posted by [linclark](#) on September 26, 2011 at 11:20pm

→ That would be great! IIRC, the only reason I hadn't added it yet is because I haven't written tests for number fields to the SimpleTest for core fields, then this would be ready to go. I'm not sure need it.

#2 Posted by [linclark](#) on December 21, 2011 at 3:02pm

Status: active → fixed

→ This is fixed with commit <http://drupalcode.org/project/microdata.git/commit/414cdea>.

Time for action – adding Microdata mappings for Recipe number_integer fields

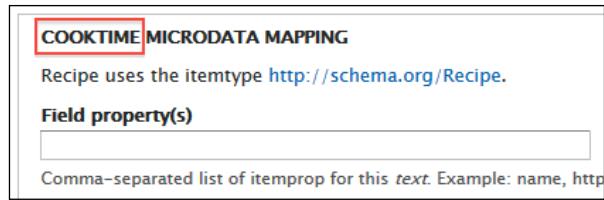
number_integer
number_integer

1.

field settings
Field property(s)

cookTime

cookTime



2.

```
cookTime  
<div class="field field-name-field-cooktime field-type-number-  
integer field-label-above">  
  <div class="field-label">cookTime: </div>  
  <div class="field-items">  
    <div class="field-item even" itemprop="cookTime">  
      84 and  
      <sup>14</sup>&frasl;  
      <sub>15</sub> hours  
    </div>  
  </div>  
</div>
```

3.

```
prepTime
```

What just happened?

number_integer

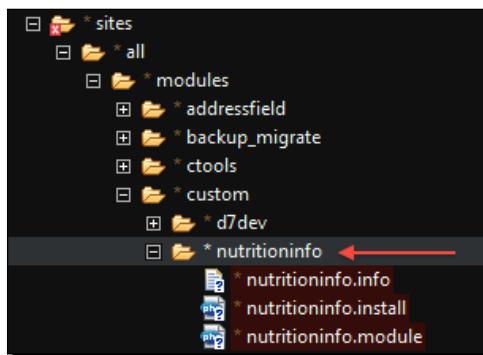
cookTime prepTime

NutritionInformation module

```
http://schema.org/Recipe  
          NutritionInformation  
          NutritionInformation          itemType     http://  
schema.org  
          NutritionInformation  
  
http://schema.org/NutritionInformation
```

Time for action – developing a custom module for a compound NutritionInformation field

1. Aptana Studio nutritioninfo /sites/all/modules/custom
 2. Create the .module info .install nutritioninfo



- 3.** [nutrtnioninfo.info](#)

```
name = Nutrition Information Field
description = Defines a nutrition information field type based on
the Microdata spec at http://schema.org/NutritionInformation
core = 7.x
package = Fields
```

4.

Address Field module

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



```
C:\xampp\htdocs\d7dev>drush dl addressfield-7.x-1.0-beta2
Project addressfield (7.x-1.0-beta2) downloaded to [success]
C:/xampp/htdocs/d7dev/sites/all/modules/addressfield.
Project addressfield contains 2 modules: addressfield_example,
addressfield.
```

5.

Aptana Studio addressfield.module addressfield.
install /sites/all/modules/addressfield

6.

```
addressfield.install  
nutritioninfo.install
```

<?php

```
/***
 * Implements hook_field_schema()
 */
function addressfield_field_schema() {
  $columns = array(
    'country' => array(
      'description' => 'Two letter ISO country code of this
address.',
      'type' => 'varchar',
      'length' => 2,
      'not null' => FALSE,
      'default' => '',
    ),
  );
}
```

z.

nutritioninfo_field_schema

hook_field_schema

<?php

```
/***
 * Implements hook_field_schema()
 */
function nutritioninfo_field_schema() {
  $columns = array(
    'country' => array(
      'description' => 'Two letter ISO
address.',
      'type' => 'varchar',
      'length' => 2,
    ),
  );
  return $columns;
}
```

```
        'not null' => FALSE,
        'default' => '',
    ),
);

return array(
    'columns' => $columns,
);
}
```

8. hook_field_schema http://api.drupal.org/api/drupal/modules--field--field.api.php/function/hook_field_schema/7

```
install
country
addressfield_field_schema
http://schema.org/NutritionInformation

9.
NutritionInformation
nutritioninfo_field_schema

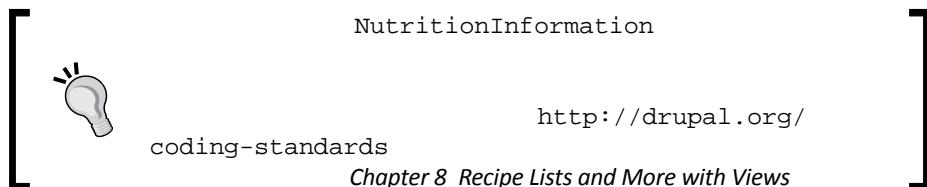
/***
 * Implements hook_field_schema()
 */
function nutritioninfo_field_schema() {
    $columns = array(
        'calories' => array(
            'description' => 'The number of calories.',
            'type' => 'varchar',
            'length' => 255,
            'not null' => FALSE,
            'default' => '',
        ),
        'carbohydrate_content' => array(
            'description' => 'The number of grams of carbohydrates.',
            'type' => 'varchar',
            'length' => 255,
            'not null' => FALSE,
            'default' => '',
        ),
        'cholesterol_content' => array(
            'description' => 'The number of milligrams of cholesterol.',
            'type' => 'varchar',
        ),
    );
}
```

```
'length' => 255,
'not null' => FALSE,
'default' => '',
),
'fat_content' => array(
'description' => 'The number of grams of fat.',
'type' => 'varchar',
'length' => 255,
'not null' => FALSE,
'default' => '',
),
'fiber_content' => array(
'description' => 'The number of grams of fiber.',
'type' => 'varchar',
'length' => 255,
'not null' => FALSE,
'default' => '',
),
'protein_content' => array(
'description' => 'The number of grams of protein.',
'type' => 'varchar',
'length' => 255,
'not null' => FALSE,
'default' => '',
),
'saturated_fat_content' => array(
'description' => 'The number of grams of saturated fat.',
'type' => 'varchar',
'length' => 255,
'not null' => FALSE,
'default' => '',
),
'serving_size' => array(
'description' => 'The serving size, in terms of the number
of volume or mass.',
'type' => 'varchar',
'length' => 255,
'not null' => FALSE,
'default' => '',
),
'sodium_content' => array(
'description' => 'The number of milligrams of sodium.',
```

```
        'type' => 'varchar',
        'length' => 255,
        'not null' => FALSE,
        'default' => '',
    ),
    'sugar_content' => array(
        'description' => 'The number of grams of sugar.',
        'type' => 'varchar',
        'length' => 255,
        'not null' => FALSE,
        'default' => '',
    ),
    'trans_fat_content' => array(
        'description' => 'The number of grams of trans fat.',
        'type' => 'varchar',
        'length' => 255,
        'not null' => FALSE,
        'default' => '',
    ),
    'unsaturated_fat_content' => array(
        'description' => 'The number of grams of unsaturated fat.',
        'type' => 'varchar',
        'length' => 255,
        'not null' => FALSE,
        'default' => '',
    ),
),
);

return array(
    'columns' => $columns,
);
}
}


```



10.

```
/***
 * Implements hook_field_info()
 */
function nutritioninfo_field_info() {
  $fields = array();

  $fields['nutritioninfo'] = array(
    'label' => t('Nutrition Information'),
    'description' => t('A field type used for storing nutrition
information as defined by the Microdata spec at http://schema.org/
NutritionInformation.'),
    'settings' => array(),
    'instance_settings' => array(),
    'default_widget' => 'nutritioninfo_standard',
    'default_formatter' => 'nutritioninfo_default',  );

  return $fields;
}
```

11.

```
hook_field_validate  hook_field_is_empty

/***
 * Implements hook_field_validate().
 */
function nutritioninfo_field_validate($entity_type, $entity,
$field, $instance, $langcode, $items, &$errors) {
  //at this point we will not validate anything, but will revisit
}

/***
 * Implements hook_field_is_empty().
 */
function nutritioninfo_field_is_empty($item, $field) {
  //the nutrition field is empty if all of its properties are
empty
  return empty($item['calories'])
    && empty($item['carbohydrate_content'])
```

```
&& empty($item['cholesterol_content'])
&& empty($item['fat_content'])
&& empty($item['fiber_content'])
&& empty($item['protein_content'])
&& empty($item['saturated_fat_content'])
&& empty($item['serving_size'])
&& empty($item['sodium_content'])
&& empty($item['sugar_content'])
&& empty($item['trans_fat_content'])
&& empty($item['unsaturated_fat_content']);
}
```

12.

```
hook_field_widget_info
hook_field_widget_form

/**
 * Implements hook_field_widget_info()
 */
function nutritioninfo_field_widget_info() {
  $widgets = array();

  $widgets['nutritioninfo_standard'] = array(
    'label' => t('Nutrition Information form'),
    'field types' => array('nutritioninfo'),      ),
  );

  return $widgets;
}

/**
 * Implements hook_field_widget_form()
 */
function nutritioninfo_field_widget_form(&$form, &$form_state,
$field, $instance, $langcode, $items, $delta, $element) {
  $settings = $form_state['field'][$instance['field_name']]
[$langcode]['field']['settings'];

$fields = array(
  'calories' => t('Calories'),
  'carbohydrate_content' => t('Carbohydrate Content'),
  'cholesterol_content' => t('Cholesterol Content'),
```

```

'fat_content' => t('Fat Content'),
'fiber_content' => t('Fiber Content'),
'protein_content' => t('Protein Content'),
'saturated_fat_content' => t('Saturated Fat Content'),
'serving_size' => t('Serving Size'),
'sodium_content' => t('Sodium Content'),
'sugar_content' => t('Sugar Content'),
'trans_fat_content' => t('Trans Fat Content'),
'unsaturated_fat_content' => t('Unsaturated Fat Content'),
);

foreach ($fields as $key => $label) {
    $value = isset($items[$delta][$key]) ? $items[$delta][$key] :
    '';
    $element[$key] = array(
        '#attributes' => array('class' => array('edit-nutrition-
field')), 'title' => t('')),
        '#type' => 'textfield',
        '#size' => 3,
        '#maxlength' => 3,
        '#title' => $label,
        '#default_value' => $value,
        '#prefix' => '&lt;div class="nutrition-field nutrition-' .
$key . '-field">',
        '#suffix' => '&lt;/div>',
    );
}
return $element;
}

```

13.

```

hook_
field_formatter_info    hook_field_formatter_view
/***
 * Implements hook_field_formatter_info()
 */
function nutritioninfo_field_formatter_info() {
    return array(
        'nutritioninfo_default' => array(
            'label' => t('Default'),
            'field types' => array('nutritioninfo'),
        ),
    );
}

```

```
        );
    }

/***
 * Implements hook_field_formatter_view().
 */
function nutritioninfo_field_formatter_view($entity_type, $entity,
$field, $instance, $langcode, $items, $display) {
  $element = array();

  switch ($display['type']) {
    case 'nutritioninfo_default':
      $headers = array(
        t('Calories'),
        t('Carbohydrate Content'),
        t('Cholesterol Content'),
        t('Fat Content'),
        t('Fiber Content'),
        t('Protein Content'),
        t('Saturated Fat Content'),
        t('Serving Size'),
        t('Sodium Content'),
        t('Sugar Content'),
        t('Trans Fat Content'),
        t('Unsaturated Fat Content'),
      );
      $element[0]['#markup'] = theme('table', array('header' =>
$headers, 'rows' => $items));
      break;
    }
  return $element;
}


```

14.

| Field | Fields | Modules | d7dev | Admin | Nutrition Info |
|-------|--------|---------|-------|-------|----------------|
|-------|--------|---------|-------|-------|----------------|

The screenshot shows the Drupal admin interface with the 'Configuration' tab highlighted. Under the 'FIELDS' section, there is a table with columns: ENABLED, NAME, VERSION, and DESCRIPTION. Two rows are visible: 'Address Field' (disabled) and 'Nutrition Information Field' (enabled). A red arrow points to the checkbox next to 'Nutrition Information Field'.

15.

Save configuration

What just happened?

Time for action – updating the Recipe content type to use the NutritionInformation field

nutritioninfo NutrionInformation
http://schema.org/Recipe

1. Manage Fields

<http://localhost/d7dev/#overlay=admin/structure/types/manage/recipe/fields>

2.

nutrition Nutrition Information
field_nutrition_information Nutrition Information form
Nutrition Information form Save

The screenshot shows the 'Manage Fields' page for the 'Recipe' content type. It lists existing fields like 'recipeYield' and allows adding new fields. A new field named 'nutrition' is being added, with its type set to 'Nutrition Information'. A red arrow points to the 'Save' button at the bottom left of the form.

- 3.** **Field Settings** **Save field settings**
 Recipe Settings Nutrition information about
 the recipe **Help text** **Save**
- 4.** **Find content** **Shortcuts** **Edit**
- 5.**

Summary

d7dev

NutritionInformation <http://schema.org/>

4

Introduction to Drupal 7 Theme Development

With regards to a recipe for food, good presentation provides a very important foundation for good taste. It is no different with a website; visitors are not going to want to explore more if they are put off by the initial presentation of the site.

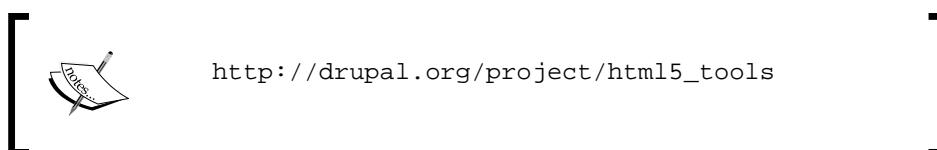
*Making a Drupal-based website look good starts with the theme you use. But, there is no need to build a theme completely from scratch. There are over 280 themes for Drupal 7 available on <http://drupal.org/project/themes>. You could very well just download a theme that you thought looked nice, tweak it here and there, and be done with it. However, there are a number of themes that offer features beyond the immediate look and feel, and are intended to be sub-themed. These types of themes are referred to as **base themes**.*

`hook_preprocess_node`

Creating a sub-theme

JavaScript CSS template.php
http://drupal.
org/project/themes

AdaptiveTheme http://drupal.org/project/
adaptivetheme **Omega** http://drupal.org/project/omega



Time for action – installing a base theme

1.

```
C:\xampp\htdocs\d7dev>drush dl omega
```

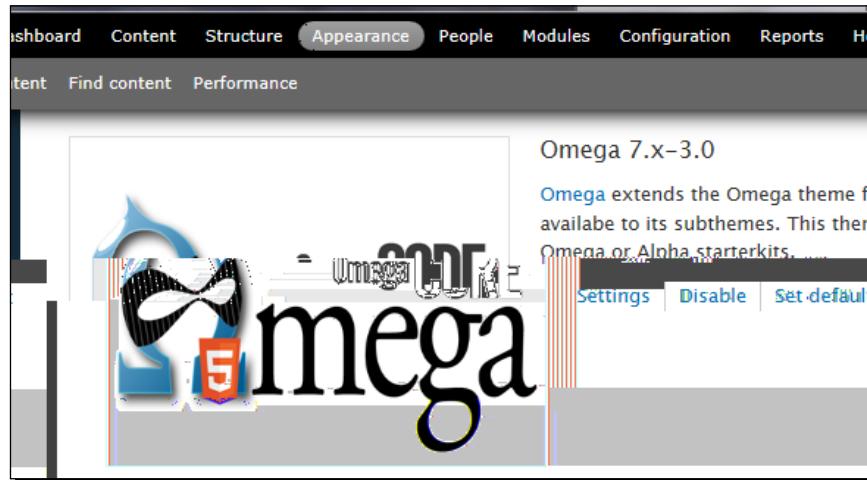
```
Project omega (7.x-3.0) downloaded to [success]
```

```
C:/xampp/htdocs/d7dev/sites/all/themes/omega.  
Project omega contains 5 themes: starterkit_omega_xhtml,  
starterkit_omega_html5,  
starterkit_alpha_xhtml, omega, alpha.
```

```
C:\xampp\htdocs\d7dev>drush en omega  
The following extensions will be enabled: omega  
Do you really want to continue? (y/n): y  
omega was enabled successfully. [ok]
```

```
C:\xampp\htdocs\d7dev>
```

2. Appearance
d7dev Appearance administrative
Admin



Time for action – creating a sub-theme and setting it as our default theme

1.

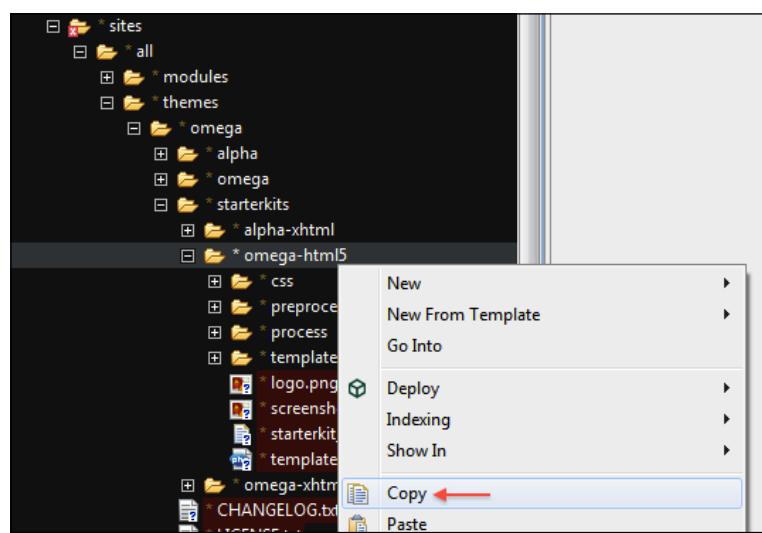
Aptana Studio

starterkits
/sites/all/themes/omega/

2.

omega-html5
omega-html5

Copy



3.

/sites/all/themes

Paste

4.

/sites/all/themes/omega-html5
Rename d7dev_theme

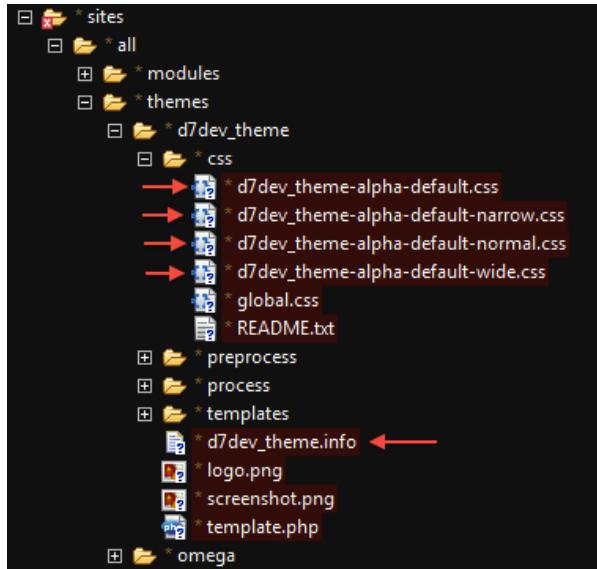
5.

starterkit_omega_html5.info d7dev_theme.info

6.

YOURTHEMENAME

```
/sites/all/themes/d7dev_theme/css  
YOURTHEMENAME      d7dev_theme      d7dev_theme
```



7.

d7dev_theme.info

```
name = D7Dev Theme  
description = A sub-theme based on the Omega base theme to use as  
theme-related development examples.  
core = 7.x  
engine = phptemplate  
screenshot = screenshot.png  
base theme = omega
```

8.

d7dev_theme.info

```
; IMPORTANT: DELETE THESE TWO LINES IN YOUR SUBTHEME  
  
hidden = TRUE  
starterkit = TRUE
```

9.

d7dev_theme.info

```
; Information added by drupal.org packaging script on 2011-08-23
version = "7.x-3.0"
core = "7.x"
project = "omega"
datestamp = "1314088930"
```

10.

d7dev

Admin
the **Enable and set default**

Appearance

DISABLE THEMES
D7Dev Theme

The screenshot shows the Drupal 7 Admin interface with the 'Appearance' tab selected. The 'DISABLE THEMES' section is visible, and the 'D7Dev Theme' is listed as the active theme. Below this, two themes are shown: 'Alpha 7.x-3.0' and 'D7Dev Theme'. The 'D7Dev Theme' card includes a description, an 'Enable' button, an 'Enable and set default' button (which is highlighted with a blue border), an 'Edit' button, and a 'Download' button. A red arrow points to the 'DISABLE THEMES' heading, and a blue arrow points to the 'Enable and set default' button for the D7Dev theme.

What just happened?

d7dev

*Why did we walk through
the manual process of creating a sub-theme?*



| Drush 3 | Drush 4 |
|--------------------|-------------------------------------|
| theme-enable | pm-enable |
| theme-disable | pm-disable |
| theme-info | pm-info |
| theme-list | pm-list -type=theme |
| theme-list-enabled | pm-list -type=theme -status=enabled |
| theme-set-default | vset theme_default |
| theme-set-admin | vset admin_theme |
| theme-status | status theme |

Time for action – creating a sub-theme and setting as default theme with Drush

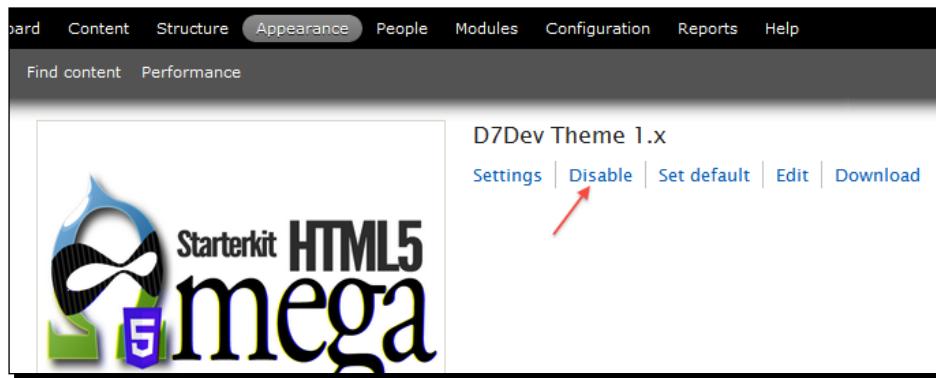
1.

```
d7dev_theme /sites/  
all/themes/d7dev_theme
```

2.

| d7dev | Appearance | Admin |
|--|------------|-------|
| Set default link for the Bartik | | |
| D7Dev | | |

3. **D7Dev**
Disable



4. **Aptana Studio** /sites/all/themes
d7dev_theme **Delete**

5.

```
C:\xampp\htdocs\d7dev>drush dl omega_tools
Project omega_tools (7.x-3.0-rc3) downloaded to
[success]
```

```
C:/xampp/htdocs/d7dev/sites/all/modules/omega_tools.
```

```
C:\xampp\htdocs\d7dev>drush en omega_tools
```

```
The following extensions will be enabled: omega_tools
Do you really want to continue? (y/n): y
omega_tools was enabled successfully. [ok]
```

6.

```
C:\xampp\htdocs\d7dev>drush omega-subtheme "D7Dev Theme"
--starterkit=starterkit_omega_html5
You have successfully created the theme D7Dev Theme. [status]
```

7.

```
C:\xampp\htdocs\d7dev>drush en d7dev_theme  
The following extensions will be enabled: d7dev_theme  
Do you really want to continue? (y/n): y  
d7dev_theme was enabled successfully. [ok]
```

8.

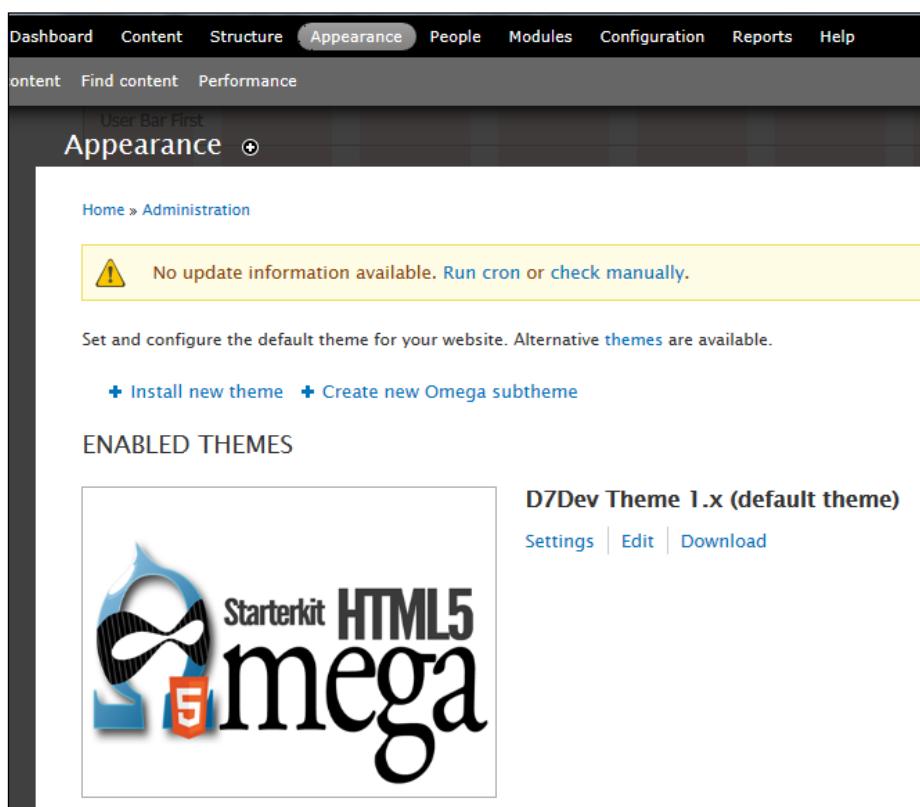
D7Dev

```
C:\xampp\htdocs\d7dev>drush vset theme_default d7dev_theme  
theme_default was set to d7dev_theme. [success]
```

9.

Appearance

D7Dev Theme



What just happened?

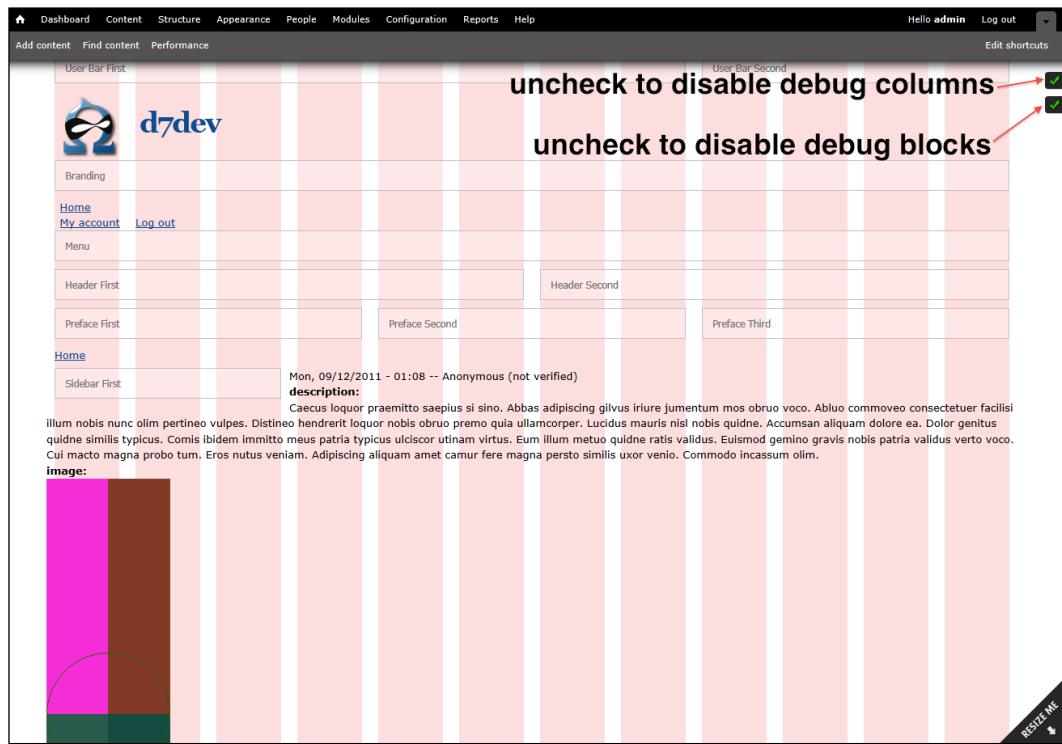
d7dev

Time for action – configuring our Omega-based sub-theme

Appearance

<http://960.gs/>

RESIZE ME



1. Appearance Admin
2. Appearance Settings
D7Dev
3. Debugging
debugging (placeholder) block for the selected roles. Enable the
for the selected roles. Enable the grid overlay

The screenshot shows the 'Appearance' configuration page for the 'D7Dev' theme. The URL is [Home > Administration > Appearance > Settings](#). The page title is 'Appearance'. The main content area is titled 'Layout configuration'. It contains three sections: 'Grid settings' (with a red arrow pointing to the checkbox), 'Zone and region configuration' (with a red arrow pointing to the checkbox), and 'Debugging' (with a red arrow pointing to the link). Below these sections is a note: '... Roles that may use the grid overlay and debugging blocks'. At the bottom, there is a checkbox for 'anonymous user' which is checked. A 'Save configuration' button is located at the bottom right.

4. Save configuration

What just happened?

d7dev

Manage the display for a content type

Manage Display

Time for action – using the Manage Display page to update the display of our custom Recipe content type

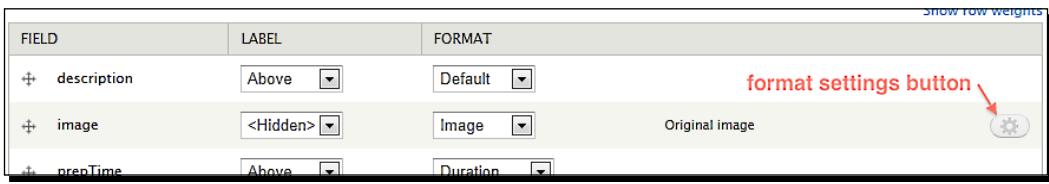
1. Structure Admin Content types

2. manage display

3. Label <Hidden>

4. format settings format settings Image style
medium Update

format settings button



The screenshot shows a table with three columns: FIELD, LABEL, and FORMAT. The 'image' field has its LABEL set to '<Hidden>' and its FORMAT set to 'Image'. A red arrow points to the 'format settings' button (a gear icon) located next to the 'Original image' label.

Image style



The 'format settings' dialog for the 'image' field is open. It shows the 'Format settings: Image' section with the 'Image style' dropdown menu open, displaying 'medium' as the selected option. A red arrow points to the 'medium' option in the dropdown. Other options shown include 'Default', 'Small', 'Large', and 'Very Large'. Below the dropdown are 'Link image to' and 'Nothing' options, and 'Update' and 'Cancel' buttons.

1. prepTime cookTime recipeYield

cookTime

- 2.** **Inline** **Label** **prepTime** **cookTime**
the **recipeYield**
- 3.** **Manage Display**

| FIELD | LABEL | FORMAT |
|----------------------------|----------|------------------------------|
| description | Above | Default |
| image | <Hidden> | Image
Image style: medium |
| prepTime | Inline | Duration |
| cookTime | Inline | Duration |
| recipeYield* | Inline | Default |
| ingredients | Above | Default |
| recipeInstructions | Above | Default |
| nutrition | Above | Default |
| Hidden | | |
| <i>No field is hidden.</i> | | |

- 4.** **Save** **Manage Display**

What just happened?
Content types manage display

Drupal 7 Render Arrays

recipeYield
manage display

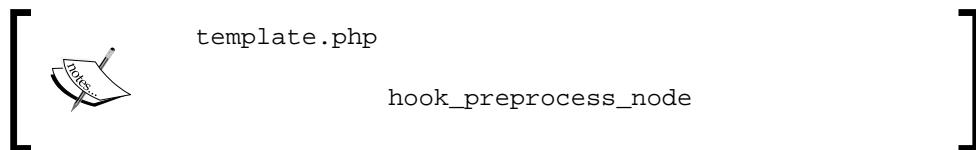
prepTime cookTime
image

Render Arrays are a

html

Time for action – implementing hook_preprocess_node

hook_preprocess_node
d7dev_theme



1. Aptana Studio template.php /sites/all/themes/
d7dev_theme

2. template.php

3. /sites/all/themes/d7dev_theme/preprocess
New File

4. preprocess-node.inc

5. preprocess-node.inc

<?php

```
/**  
 * Implements hook_preprocess_node().  
 */  
function d7dev_theme_alpha_preprocess_node(&$vars) {  
    // custom functionality here  
}
```

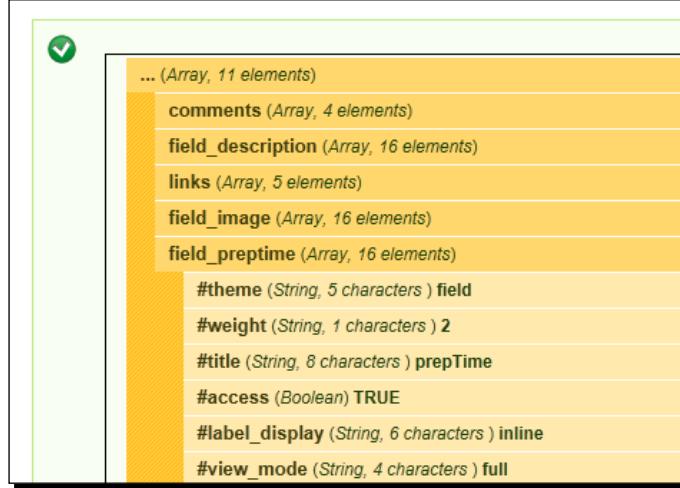
6.

devel dpm() \$var

```
d7dev_  
theme_alpha_preprocess_node  
dpm($vars['content']);
```

dpm()

1. d7dev
Shortcut Performance
Clear all caches
 2. dpm()



- ```
3.

4. #prefix field_preptime #suffix to the
field_recipeyield
node
<?php

/**
 * Implements hook_preprocess_node().
 */
function d7dev_theme_alpha_preprocess_node(&$vars) {
 //add a prefix to first field to be part of the box
 $vars['content'][0]['field_preptime']['#prefix'] =
 '<div class="time-yield-wrapper">';
}
```

```
//close the box by adding a suffix to the last field to be part
//of the box
$vars['content']['field_recipeyield']['#suffix'] = '</div>';
}
```

## 5.

the div

```
<div class="time-yield-wrapper">

<div class="field field-name-field-preptime field-type-number-
integer field-label-inline clearfix">
 <div class="field-label">prepTime: </div>
 <div class="field-items">
 <div class="field-item even">
 111 and ⁷⁄₁₂ hours
 </div>
 </div>
</div>

<div class="field field-name-field-cooktime field-type-number-
integer field-label-inline clearfix">
 <div class="field-label">cookTime: </div>
 <div class="field-items">
 <div class="field-item even" itemprop="cookTime">
 84 and ¹⁴⁄₁₅ hours
 </div>
 </div>
</div>

<div class="field field-name-field-recipeyield field-type-text
field-label-inline clearfix">
 <div class="field-label">recipeYield: </div>
 <div class="field-items">
 <div class="field-item even" itemprop="recipeYield">
 wU2t7ZsYijSHvCToof6Qd...
 </div>
 </div>
</div>
</div>
```

6.

Aptana Studio global.css  
/sites/all/themes/d7dev\_theme/css

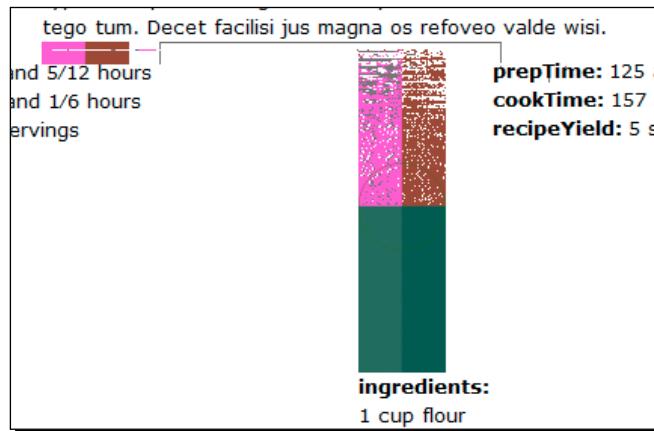
7.

```
/* styles for Recipe content type */
body.node-type-recipe div.field-name-field-image{
 float:left;
}

body.node-type-recipe div.time-yield-wrapper{
 float:left;
 margin-left: 20px;
 border: 1px solid #777;
 padding: 10px;
}

body.node-type-recipe div.field-name-field-ingredients{
 clear:left;
}
```

8.



## ***What just happened?***

## hook\_preprocess\_node

## An introduction to the Drupal 7 field group module

**field group module** [http://drupal.org/project/field\\_group](http://drupal.org/project/field_group)  
**Content Construction Kit**

## hook\_preprocess\_node

## Time for action – creating the wrapper with display suite

## hook\_preprocess\_node

1. **Aptana Studio** preprocess-node.inc /sites/all/themes/d7dev\_theme/preprocess
  2. /\* d7dev\_theme\_alpha\_preprocess\_node \*/

**3.**

```
C:\xampp\htdocs\d7dev>drush dl field_group
Project field_group (7.x-1.1) downloaded to [success]
```

C:/xampp/htdocs/d7dev/sites/all/modules/field\_group.

```
C:\xampp\htdocs\d7dev>drush en field_group
The following extensions will be enabled: field_group
Do you really want to continue? (y/n): y
field_group was enabled successfully. [ok]
```

**4.**

**Structure**  
**Content types admin**

**Content types**  
**manage display**

**5.**

d7dev\_theme\_preprocess\_node

time\_yield  
**Add new group**  
Save

Add new group

Time Yield Wrapper

group\_ time\_yield

Label

Group name (a-z, 0-9, \_)

Div

**6.**

**Time Yield Wrapper**  
**prepTime cookTime**  
**Time Yield Wrapper**  
**Save**

**prepTime**

**recipeYield**

Time Yield Wrapper

prepTime cookTime

Time Yield Wrapper

Save

prepTime

recipeYield

Time Yield Wrapper

prepTime

cookTime

recipeYield

ingredients

format settings button

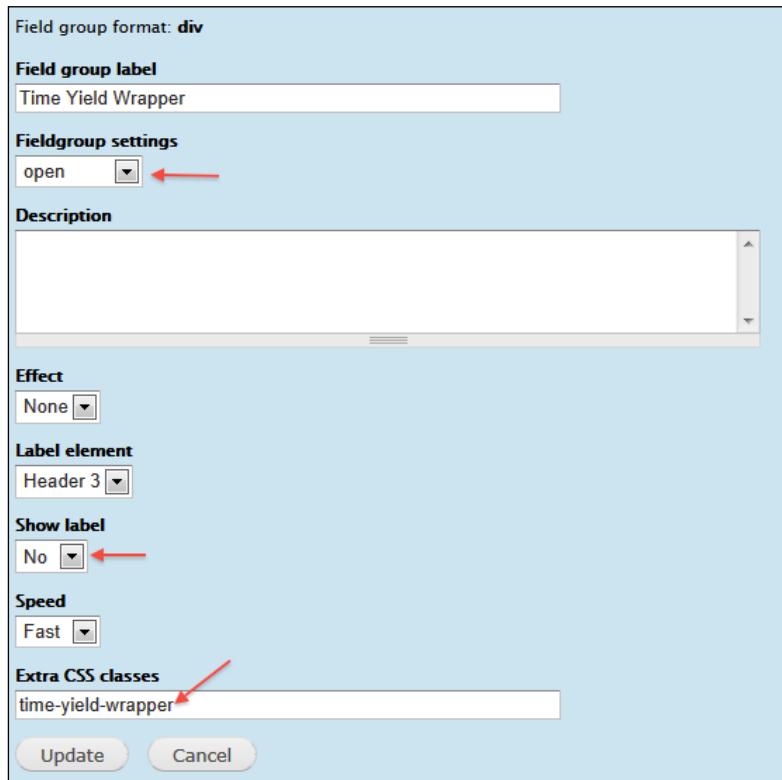
delete

div open  
class: time-yield-wrapper  
label: element Header 3  
effect: None  
speed: Fast

**7. format settings**

**FORMAT**  
**Time Yield Wrapper**

**Update**



**8.** d7dev\_theme\_

preprocess\_node                    time-yield-wrapper

```
<div class="field-group-format group_time_yield field-group-div
group-time-yield time-yield-wrapper speed-fast effect-none">
<div class="field field-name-field-preptime field-type-number-
integer field-label-inline clearfix">
<div class="field-label">prepTime: </div>
<div class="field-items">
<div class="field-item even">
```

```
125 and ⁵/₁₂ hours
</div>
</div>
</div>

<div class="field field-name-field-cooktime field-type-number-
integer field-label-inline clearfix">
<div class="field-label">cookTime: </div>
<div class="field-items">
<div class="field-item even" itemprop="cookTime">
157 and ¹/₆ hours
</div>
</div>
</div>

<div class="field field-name-field-recipeyield field-type-text
field-label-inline clearfix">
<div class="field-label">recipeYield: </div>
<div class="field-items">
<div class="field-item even" itemprop="recipeYield">
5 servings
</div>
</div>
</div>
</div>
```

## ***What just happened?***

## **Summary**

d7dev



# 5 Enhancing the Content Author's User Experience

The core admin and authoring UI in Drupal 7 is greatly improved from Drupal 6, but there are still a number of enhancements that could really improve the user experience (UX) for content authors. This chapter will walk you through easy ways to enhance the content authoring UX to include an introduction to the fundamental Drupal construct known as **blocks**. Finally, the chapter will walk through the code for integrating a truly inline What You See Is What You Get or WYSIWYG editor through the HTML5 **contenteditable** attribute (<http://dev.w3.org/html5/spec/Overview.html#editing-0>), and explore some of the new JavaScript and AJAX paradigms for Drupal 7.

# Developing a custom block for adding content

## Add content

The screenshot shows a 'd7dev' interface with a dark header bar. Below it, a white content area titled 'Add content'. At the top left of this area is a 'Home' link. Below 'Home' are three items, each preceded by a grey arrow icon:

- Article**: Use *articles* for time-sensitive content like news, press releases or blog posts.
- Basic page**: Use *basic pages* for your static content, such as an 'About us' page.
- Recipe**: A simple recipe content type based on the schema.org base HTML5 Microdata schema for Recipes at: <http://schema.org/Recipe>.

**Add recipe**

**Recipe link**

**Add content**

d7dev\_admin

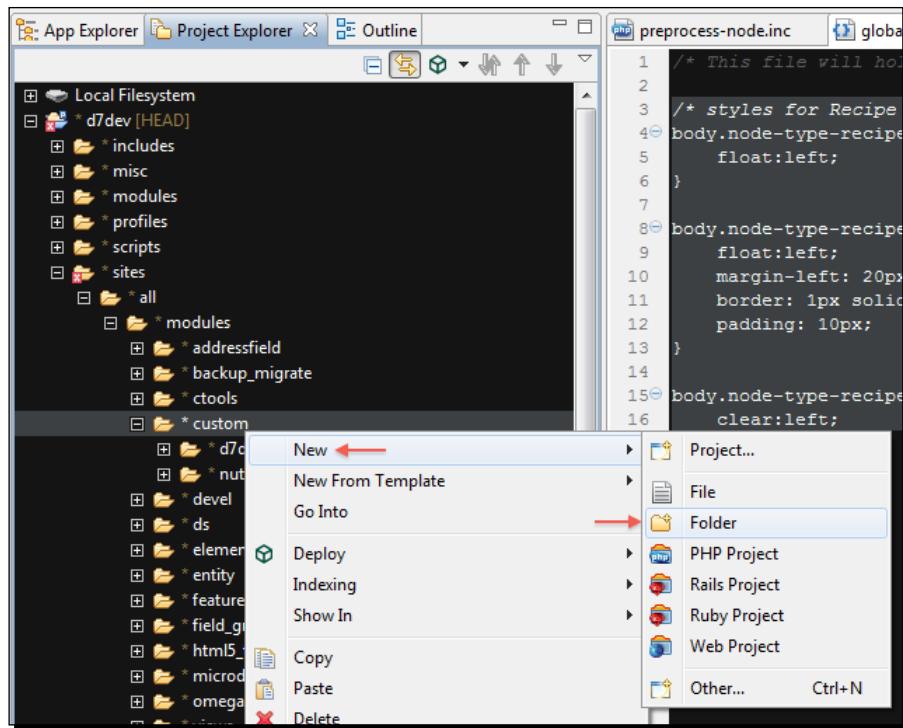
hook\_block\_view()

hook\_block\_info() and

## Time for action – developing a custom block for adding recipes

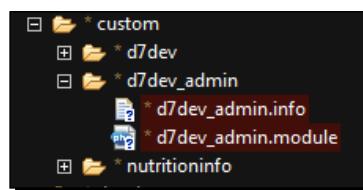
1.

/sites/all/modules/custom  
Project Explorer      New      Folder  
d7dev\_admin      Finish  
custom



2.

d7dev\_admin  
**New**  
 | File d7dev\_admin.info  
 d7dev\_admin.module Finish  
 d7dev\_admin



**3.** the d7dev\_admin.info

- **name** d7dev Admin
- **description** Custom module for enhancing the content author UX
- **core** 7.x
- **package** Administration

**4.** d7dev\_admin.module

```
<?php

/**
 * @file
 * d7dev Admin module.
 *
 */
```

**5.** hook\_block\_info()

```
http://api.drupal.org/api/drupal/
modules--block--block.api.php/function/hook_block_info/7
/**
 * Implements hook_block_info().
 *
 * Define all blocks provided by the module.
 */
function d7dev_admin_block_info() {
 //Define an associative array for each block, in this case just
 .//one:
 $blocks['add_recipe_content'] = array(
 // info: (required) The name of the block.
 'info' => t('Add Recipe Content'),
```

```

 // cache: (optional) Same for every user on every page where
 //it is visible.
 'cache' => DRUPAL_CACHE_GLOBAL,
);

return $blocks;
}

```

**6.**

```
hook_block_view()
```

```

/**
 * Implements hook_block_view().
 *
 * Return a rendered or renderable view of a block.
 */
function d7dev_admin_block_view($delta = '') {
 // $delta: what block to render as defined in hook_block_info.
 switch ($delta) {
 case 'add_recipe_content':
 // The default localized title of the block, in this case
 //NULL
 $block['subject'] = NULL;

 // The content of the block's body.
 $block['content'] = d7dev_admin_contents($delta);
 break;
 }
 return $block;
}

```

**7.**

```
d7dev_admin_contents
```

```
Create Recipe
```

```
add_recipe_content
```

```

/**
 * Function that generates the content for d7dev_admin blocks.
 */
function d7dev_admin_contents($delta = '') {
 //additional blocks may be added, so base this on the block
 $delta
 switch ($delta) {
 case 'add_recipe_content':
 //just a simple reander array with a link
 $add_recipe_link = array(

```

```
 '#theme' => 'link',
 '#text' => t('Add Recipe'),
 '#path' => 'node/add/recipe',
 '#options' => array(
 'attributes' => array(),
 //REQUIRED:
 'html' => FALSE,
),
);
 return $add_recipe_link;
}
}
```

**8.**

```
d7dev_admin
C:\xampp\htdocs\d7dev>drush en d7dev_admin
The following extensions will be enabled: d7dev_admin
Do you really want to continue? (y/n): y
d7dev_admin was enabled successfully. [ok]
```

**9.**

Add Recipe

Structure

Admin

Blocks

**10.**

Blocks administrative

configure

Add Recipe Content block

**11.**

Add Recipe Content block

Sidebar Second

D7Dev Theme (default theme)

REGION SETTINGS

Roles

authenticated user

Show block for

specific roles

Save block

'Add Recipe Content' block

Home » Administration » Structure » Blocks

**Block title**

Override the default title for the block. Use <none> to display no title, or leave blank to use the default block title.

**REGION SETTINGS**

Specify in which themes and regions this block is displayed.

D7Dev Theme (default theme)

Sidebar Second

**Visibility settings**

|                                        |                                                        |
|----------------------------------------|--------------------------------------------------------|
| <b>Pages</b><br>Not restricted         | <b>Show block for specific roles</b>                   |
| <b>Content types</b><br>Not restricted | <input type="checkbox"/> anonymous user                |
| <b>Roles</b><br>authenticated user     | <input checked="" type="checkbox"/> authenticated user |
| <b>Users</b><br>Not customizable       | <input type="checkbox"/> administrator                 |

Show this block only for the selected role(s). If you select no roles, the block will be visible to all users.

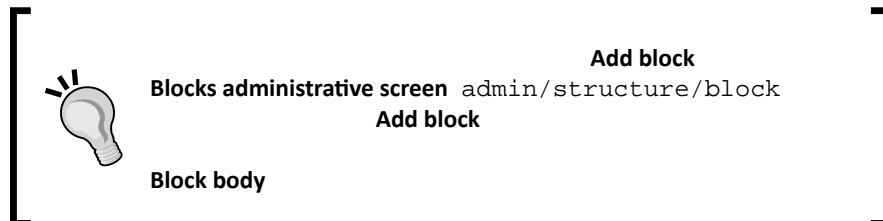
**Save block**

12. http://localhost/d7dev/

**Add Recipe**

The screenshot shows a web browser window with the URL <http://localhost/d7dev/> in the address bar. The page title is "d7dev". The navigation menu includes Dashboard, Content, Structure, Appearance, People, Modules, Configuration, Reports, Help, Hello admin, and Log out. Below the menu, there are links for Add content, Find content, and Performance. The main content area features a logo with a stylized 'S2' and the text "d7dev". It displays the message "Esse Melior Roto" and the date "Mon, 09/12/2011 - 01:08 -- Anonymous (not verified)". At the bottom, there are links for "read more" and "add new comment". A red arrow points to the "Add Recipe" link in the top right corner of the page.

## **What just happened?**



## **Introduction to the WYSIWYG module**

[Create Recipe](#)

[http://drupal.org/  
project/wysiwyg](http://drupal.org/project/wysiwyg)

## **Time for action – installing and configuring the Wysiwyg module**

**1.**

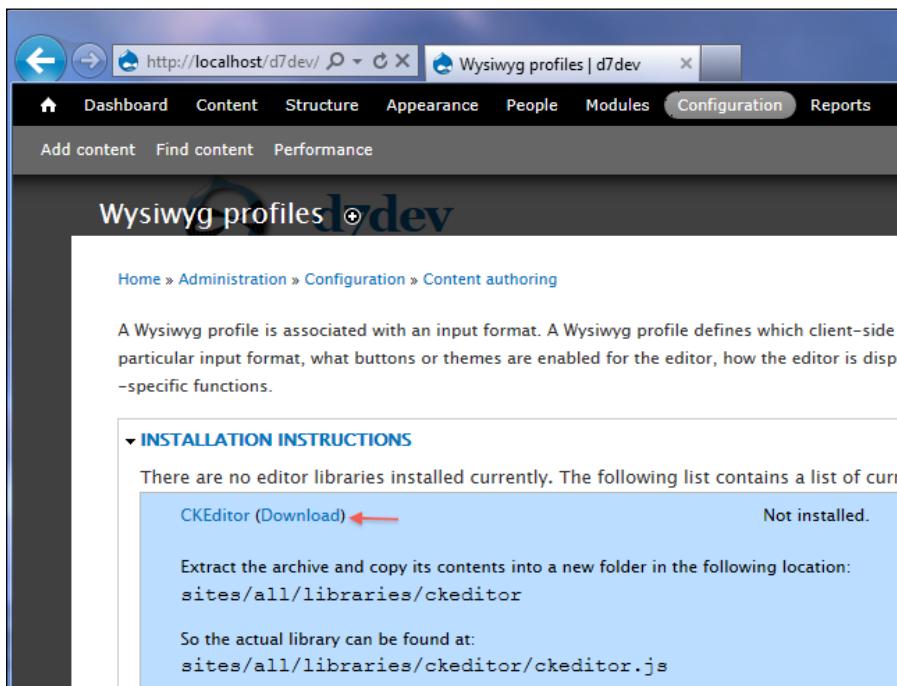
```
C:\xampp\htdocs\d7dev>drush dl wysiwyg
Project wysiwyg (7.x-2.1) downloaded to [success]

C:/xampp/htdocs/d7dev/sites/all/modules/wysiwyg.

C:\xampp\htdocs\d7dev>drush en wysiwyg
The following extensions will be enabled: wysiwyg
Do you really want to continue? (y/n): y
wysiwyg was enabled successfully. [ok]
```

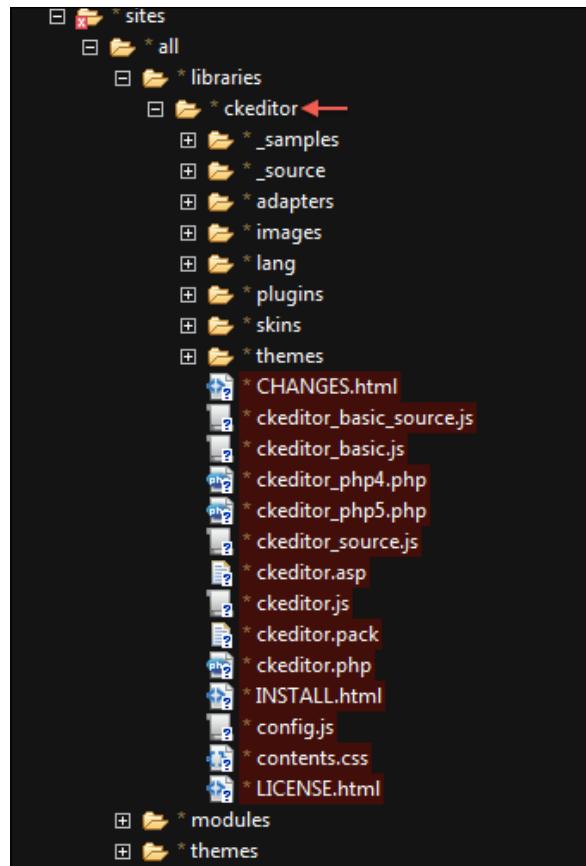
2. Configuration Admin  
 Wysiwyg profiles CONTENT AUTHORING
3. Wysiwyg profiles INSTALLATION  
 INSTRUCTIONS

Download CKEditor Open in a new tab



4. CKEditor Download Download zip
5. /sites/all/ folder  
 libraries name New | Folder  
 name Finish

- 6.** ckeditor  
at C:\xampp\htdocs\d7dev\sites\all\libraries\



- 7.** Wysiwyg profiles
- |          |        |           |          |
|----------|--------|-----------|----------|
| 3.x.x... | EDITOR | Full HTML | CKEditor |
| FORMAT   | Save   |           | INPUT    |

**Wysiwyg profiles**

Home » Administration » Configuration » Content authoring

A Wysiwyg profile is associated with an input format. A Wysiwyg profile defines which client-side editor is loaded for a particular input format, what buttons or themes are enabled for the editor, how the editor is displayed, and a number of other editor-specific functions.

| INPUT FORMAT       | EDITOR              | OPERATIONS  |
|--------------------|---------------------|-------------|
| Filtered HTML      | No editor           |             |
| Full HTML          | CKEditor 3.6.2.7275 | Edit Delete |
| Plain text         | No editor           |             |
| Display Suite code | No editor           |             |

To assign a different editor to a text format, click "delete" to remove the existing first.

**Save**

8. **INPUT FORMAT** **Full HTML** **Buttons and Plugins** **CKEditor profile for Full HTML** **Save**

**CKEditor profile for Full HTML**

Home » Administration » Configuration » Content authoring » Wysiwyg profiles » List

**BASIC SETUP**

**BUTTONS AND PLUGINS**

|                                                   |                                                |                                                  |
|---------------------------------------------------|------------------------------------------------|--------------------------------------------------|
| <input checked="" type="checkbox"/> Bold          | <input checked="" type="checkbox"/> Italic     | <input checked="" type="checkbox"/> Underline    |
| <input type="checkbox"/> Strike-through           | <input checked="" type="checkbox"/> Align left | <input checked="" type="checkbox"/> Align center |
| <input checked="" type="checkbox"/> Align right   | <input type="checkbox"/> Justify               | <input checked="" type="checkbox"/> Bullet list  |
| <input checked="" type="checkbox"/> Numbered list | <input type="checkbox"/> Outdent               | <input type="checkbox"/> Indent                  |
| <input type="checkbox"/> Undo                     | <input type="checkbox"/> Redo                  | <input type="checkbox"/> Link                    |
| <input type="checkbox"/> Unlink                   | <input type="checkbox"/> Anchor                | <input type="checkbox"/> Image                   |
| <input type="checkbox"/> Forecolor                | <input type="checkbox"/> Backcolor             | <input type="checkbox"/> Superscript             |

**9.**

Configuration  
Wysiwyg profiles

Text formats

**10.**

Text formats  
Filtered HTML  
Full HTML

Full HTML

Save changes

| NAME                 | ROLES                                             | OPERATIONS                                        |
|----------------------|---------------------------------------------------|---------------------------------------------------|
| ⊕ Full HTML          | administrator                                     | <a href="#">configure</a> <a href="#">disable</a> |
| ⊕ Filtered HTML      | anonymous user, authenticated user, administrator | <a href="#">configure</a> <a href="#">disable</a> |
| ⊕ Plain text         | <i>All roles may use this format</i>              | <a href="#">configure</a>                         |
| ⊕ Display Suite code | No roles may use this format                      | <a href="#">configure</a> <a href="#">disable</a> |

[Save changes](#)

**11.**

configure

Full HTML

Roles

Save

configuration

Full HTML

**12.**

Structure

Admin

Content types

manage fields

**13.**

edit

the description field

OPERATIONS

description

Text processing

Filtered text (user selects text format)

Save settings

recipeInstructions

**14.**

the Find content

Shortcuts

edit

**15.**

description



## What just happened?

Pasting text into a WYSIWYG text area



```
<p></p>
<dir></dir>

<p dir="LTR" align="LEFT">

 Pasting Text into a WYSIWYG Text Area

</p>
```

```
<p>

 Pasting text from applications like
 Microsoft Word can wreak
 havoc on the markup that is saved in a
 WYSIWYG text area.

</p>
```



```
d7dev_admin.module
/**
 * Implementation of hook_wysiwyg_editor_
settings_alter().
 */
function d7dev_admin_wysiwyg_editor_settings_
alter(&$settings, &$context) {
 if($context['profile']->editor ==
 'ckeditor') {
 $settings['forcePasteAsPlainText'] = TRUE;
 }
}
```

```
<p>Pasting Text into a WYSIWYG Text Area

Pasting text from applications like Microsoft
Word can wreak havoc on the markup that is
saved in a WYSIWYG text area.</p>
```

## A new recipe

## Time for action – deleting all Devel-generated recipe content

1. Content Admin

2. SHOW ONLY ITEMS WHERE Recipe  
Filter

3. TITLE Delete selected content UPDATE OPTIONS  
Update

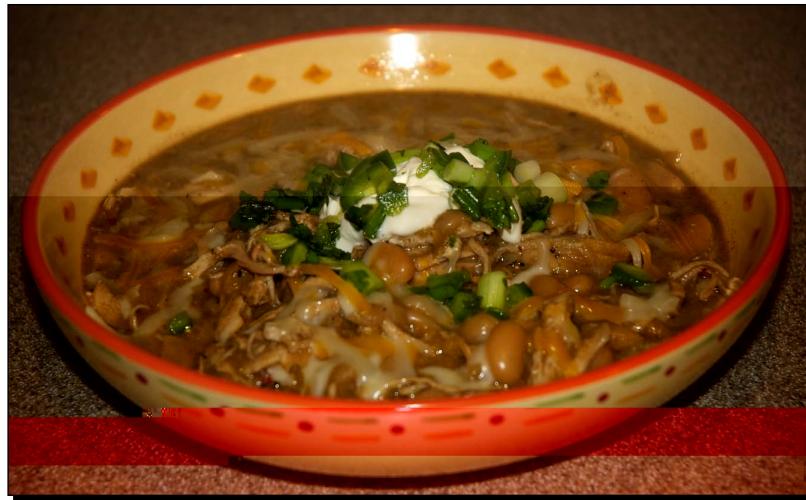
The screenshot shows a user interface for filtering items. At the top, there's a 'SHOW ONLY ITEMS WHERE' section with a dropdown menu set to 'any'. Below it is an 'UPDATE OPTIONS' section with a dropdown menu set to 'Delete selected content'. A red arrow points from the text 'Delete selected content' in the 'UPDATE OPTIONS' section down to a table below. The table has columns: #, TITLE, TYPE, AUTHOR, STATUS, and UPDATED. Two rows are visible: one for 'Esse Melior Roto' and another for 'Abdo Abigo'. Both rows have a checked checkbox in the first column.

| # | TITLE            | TYPE   | AUTHOR                   | STATUS    | UPDATED            |
|---|------------------|--------|--------------------------|-----------|--------------------|
| 1 | Esse Melior Roto | Recipe | Anonymous (not verified) | published | 11/03/2011 - 13:48 |
| 2 | Abdo Abigo       | Recipe | Anonymous (not verified) | published | 10/20/2011 - 23:54 |

4. Are you sure you want to delete these items  
Delete

5. Awesome Sauce

## Time for action – adding my Cannellini Cumin Chicken Chili recipe



1.

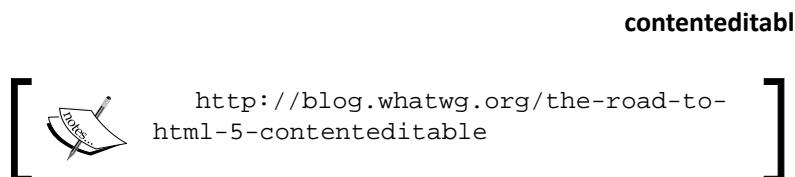
2. **Add Recipe**

- name
- description
  
- recipeYield
- prepTime
- cookTime
- ingredients

- instructions

**3.** **Save**

## **Developing a custom contenteditable module**



### **Time for action – developing an HTML5 contenteditable module**

- 1.**

|                      |                           |                       |
|----------------------|---------------------------|-----------------------|
| the Project Explorer | /sites/all/modules/custom |                       |
| New                  | Web perspective           | custom                |
|                      | Folder                    | html5_contenteditable |
|                      | Finish                    |                       |
- 2.** contenteditable.info contenteditable.module
- 3.** contenteditable.  
info
  - name
  - description
  - package
  - version

- ❑ dependencies[]
- ❑ core

**4.**

```
contenteditable.module
hook_field_
formatter_info
/**
 * Implementation of hook_field_formatter_info().
 */
function contenteditable_field_formatter_info() {
 return array(
 'contenteditable' => array(
 'label' => t('contentEditable'),
 'field types' =>
 array('text','text_long','text_with_summary','list_text'),
 'settings' => array(
 'fallback_format' => NULL,
),
),
);
}
```

**5.**

```
hook_field_
formatter_settings_form
/**
 * Implements hook_field_formatter_settings_form().
 */
function contenteditable_field_formatter_settings_form($field,
 $instance, $view_mode, $form, &$form_state) {
 //This gets the view_mode where our settings are stored
 $display = $instance['display'][$view_mode];
 //This gets the actual settings
 $settings = $display['settings'];
 $element = array();

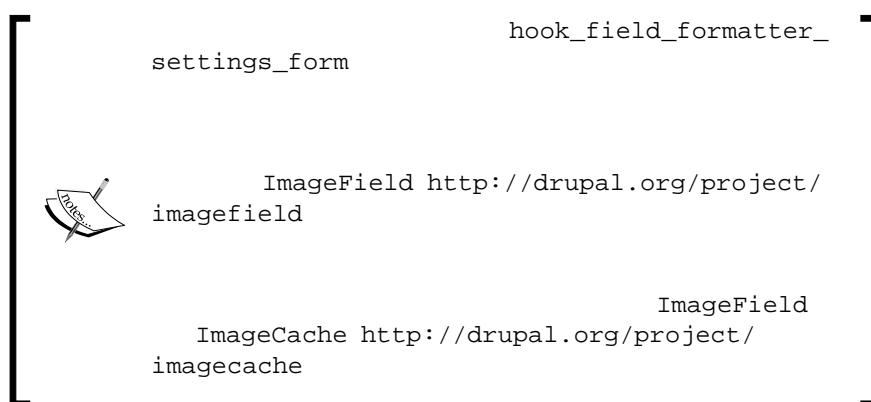
 //had an issue when using this formatter in a View, results in a
 //Fatal error: undefined function field_ui_formatter_options()
 if (!function_exists(field_ui_formatter_options)) {
 module_load_include('inc', 'field_ui', 'field_ui.admin');
 }

 //fallback formatter
```

```
// Get the list of formatters for this field type, and remove
//our own.
$formatters = field_ui_formatter_options($field['type']);
unset($formatters['contenteditable']);
$element['fallback_format'] = array(
 '#type' => 'select',
 '#title' => t('Fallback formatter'),
 '#options' => $formatters,
 '#description' => t('Select formatter to be used for users
that don\'t have permission to edit the field.'), //helper text
 '#default_value' => $settings['fallback_format'],
);
return $element;
}

field_formatter_settings_form

field_ui_formatter_options
```



**6.**

```
hook_field_
formatter_settings_summary
/**
 * Implements hook_field_formatter_settings_summary().
 */
```

```

function contenteditable_field_formatter_settings_summary($field,
 $instance, $view_mode) {
 $display = $instance['display'][$view_mode];
 $settings = $display['settings'];
 $formatter_type =
 field_info_formatter_types($settings['fallback_format']);
 //get label of fallback formater for summary info
 $summary = t('Fallback format: @fallback_format format (Select
 format to be used when not in edit mode.)', array(
 '@fallback_format' => $formatter_type['label'],
));
 // we use t() for translation and placeholders to guard against
 //attacks
 return $summary;
}

contenteditable_field_formatter_settings_summary

```

## 7.

```

hook_field_formatter_view
/**
 * Implements hook_field_formatter_view().
 */
function contenteditable_field_formatter_view($entity_type,
$entity, $field, $instance, $langcode, $items, $display) {
 // See if access to edit this field is restricted,
 //if so, use the default formatter.
 if (!entity_access('update', $entity_type, $entity) ||
 !field_access('edit', $field, $entity_type, $entity)) {
 // Can't edit.
 return contenteditable_fallback_formatter($entity_type,
 $entity, $field, $instance, $langcode, $items, $display);
 }
 $element = array();
 foreach ($items as $delta => $item) {
 $element[$delta] = array('#markup' => '<div
 contentEditable="true" data-tooltip="click to edit"
 data-nid="' . $entity->nid . '" data-fieldname="' .
 $field['field_name']. '">' .
 . $item['value'] . '</div>');
 }
 return $element;
}

```

**8.**

```
contentEditable true

contenteditable_fallback_formatter

/**
 * Format a field using the fallback formatter of the
contenteditable field.
 */
function contenteditable_fallback_formatter($entity_type, $entity,
$field, $instance, $langcode, $items, $display) {
 // Set the fallback formatter.
 $display['type'] = $display['settings']['fallback_format'];
 $formatter_type = field_info_formatter_types($display['type']);
 $display['module'] = $formatter_type['module'];

 // Clone the entity to avoid messing with it.
 $cloned_entity = clone $entity;

 return field_view_field($entity_type, $cloned_entity,
$field['field_name'], $display, $langcode);
}

contenteditable_fallback_formatter
 fallback_format
 field_view_field
```

**9.**

**Modules**

**Admin**

```
C:\xampp\htdocs\d7dev>drush en contenteditable
The following extensions will be enabled: contenteditable
Do you really want to continue? (y/n): y
wysiwyg was enabled successfully. [ok]
```

**10.**

**description**

**Admin**

**Structure**

**Content types**

**manage display**

**11. manage display configuration**

the **FORMAT**  
 contentEditable  
 contenteditable\_field\_formatter\_  
 settings\_form

**settings**  
 contentEditable  
 contenteditable\_field\_formatter\_

| FIELD       | LABEL | FORMAT                                                                                                                                         |
|-------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------|
| description | Above | Format settings: <b>contentEditable</b><br><b>Fallback formatter</b><br>Default<br><small>The format to be used when not in edit mode.</small> |

Output of the  
 contenteditable\_field\_formatter\_settings\_form  
 function

**12.**

**Fallback formatter**  
 Save

Default

Cancel

**13.**

Content

Admin

**14.**

chili is just the ticket on those first cool days for Fall  
 type

This spicy creamy white  
 for

## Cannellini Cumin Chicken Chili

View

Edit

Devel

This spicy, creamy white chili is just the ticket on those first cool days of Fall.



prepTime: 1/3 hours

cookTime: 2 and 1/2 hours

recipeYield: 6-1/2 servings

**ingredients:**

2 pounds boneless chicken breasts

**15.**

**16.**

contentEditable

contentEditable



contentEditable

contentEditable

**17.**

/sites/all/modules/custom/  
contenteditable.js

**18.**

the \$

\$

```
(function ($) {
})(jQuery);
```



```
$(document.ready(function(){}}); to
```

Drupal.Behaviors

19.

## Drupal.Behaviors

```
var self = Drupal.behaviors.contenteditable = {
};
```

20.

```
attach detach attach

attach: function (context) {
 // Make sure it was initialized.
 if (!self.initialized) {
 self.init();
 }
 // Bind handlers and prevent elements from being processed
 // again.
 $('div[contenteditable]', context)
 .once('contenteditable')
 .bind('focusin', self.focusin)
 .bind('focusout', self.focusout);
}
```

**once** **once** <http://plugins.jquery.com/project/once>

```
attach: function (context) {
 // Make sure it was initialized.
 if (!self.initialized) {
 self.init();
 }
 // Bind handlers and prevent elements from being processed
 // again.
 $('div[contenteditable]', context)
 .not('.contenteditable-processed')
 .addClass('contenteditable-processed')
 .bind('focusin', self.focusin)
 .bind('focusout', self.focusout);
}
```

## 21.

```
 self.init self.focusin self.focusout
 attach

 ,
init: function() {
 // Create controls, store reference and bind handlers.
 var $controls = self.constructControls().add('<button>', { 'id':
 'contenteditableCancel', 'text': Drupal.t('Cancel'), click:
 self.hideControls, 'data-tooltip': 'cancel edit'})

 .add('<button>', { 'id': 'contenteditableSave', 'text':
 Drupal.t('Save'), click: self.submitHandler, 'data-tooltip':
 'save changes'});

 self.controls = $('<div id="contenteditableButtons"
 class="contenteditable_buttons"></div>').append($controls)
 .appendTo('body');

 self.initialized = true;
 self.currentField = null;
},
focusin: function(e) {
 // Move the controls to right before the element we're editing,
 //but only when focusing in on a new field, otherwise do
 //nothing.
 if(self.currentField != $(this).data('fieldname')){
 self.active = $(this);
 $(this).addClass('contenteditableActive');
 self.currentField = self.active.data('fieldname');
 var $clone = self.controls.clone(true);
 self.controls.remove();
 self.controls = $clone;
 self.controls.hide().insertBefore(self.active).fadeIn('slow');
 }
},
focusout: function(e) {
 // TODO: handle removing the controls
}

init
contenteditable.module
```

```
focusin
 focusout

22. init self.
constructControls self.submitHandler.

',
constructControls: function() {
 if (!Drupal.settings || !Drupal.settings.contenteditableButtons)
 {
 throw new Error('Control settings not found.');
 }

 // Go over the settings object, construct the controls and
 // return them as 1 jQuery collection.
 var $buttons = $();
 $.each(Drupal.settings.contenteditableButtons, function(i, el) {
 var $el = $(el.wrapper, el.attributes).bind(el.event,
 el.handler ? eval('(' + el.handler + ')') :
 self.commandHandler);

 $buttons = $buttons.add($el);
 });
 return $buttons;
},
submitHandler: function(e) {
 // If they manage to press the button before an element was set
 // as active,
 // or there are no controls, throw an exception, otherwise, post
 // the data.
 if (!self.active) {
 throw new Error('Active element not found.');
 }
 if (!self.controls) {
 throw new Error('Failed to hide controls: reference not
 found.');
 }

 // Display a saving message indicator.
 $('<div id="contenteditableSaving"
 class="messages"></div>').insertBefore(self.active);
```

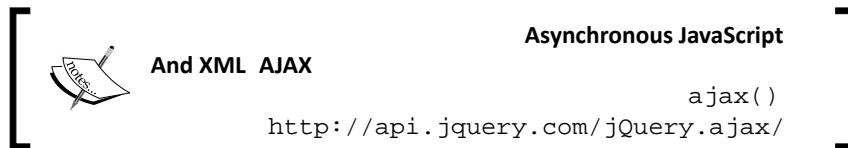
```
var $title;
var text = Drupal.t('Saving');
var dots = '';
$title = $('#contenteditableSaving').text(text);
var id = setInterval(function () {
 dots = (dots.length > 10) ? '' : dots + '.';
 $title.text(text + dots);
}, 500);

//disable contenteditable on active element until the ajax call
//is complete
self.active.attr('contenteditable', 'false');
// Hide the controls and trigger the hide helper
self.controls.slideUp('slow', self.hideControls);
var ajax_data = {
 'field_value': self.active.html(),
 'nid': self.active.data('nid'),
 'fieldname': self.active.data('fieldname')
}
$.ajax({
 type: 'POST',
 url: Drupal.settings.basePath + 'contenteditable/ajax',
 dataType: 'json',
 data: ajax_data,
 success: self.successHandler
}) ;
}

constructControls commandHandler

submitHandler
contenteditable

ajax to POST
contenteditable/ajax
```



**23.**

contenteditable.module  
constructControls

```

/**
 * Hook and helper function to add the controls to Drupal.settings
 */
function _contenteditable_add_controls() {
 $buttons = array(
 'bold' => array(
 'wrapper' => '<button>',
 'event' => 'click',
 'attributes' => array(
 'html' => 'B',
 'data-command' => 'bold',
 'alt' => 'bold',
 'data-tooltip' => t('bold'),
),
),
 'italic' => array(
 'wrapper' => '<button>',
 'event' => 'click',
 'attributes' => array(
 'html' => '<i>i</i>',
 'data-command' => 'italic',
 'alt' => 'italic',
 'data-tooltip' => t('italic'),
),
),
 'underline' => array(
 'wrapper' => '<button>',
 'event' => 'click',
 'attributes' => array(
 'html' => '<u>u</u>',
 'data-command' => 'underline',
 'alt' => 'underline',
 'data-tooltip' => t('underline selected text'),
),
),
);
 //hook to add controls
 $additional_controls =
 module_invoke_all('contenteditable_add_controls');
 if (is_array($additional_controls)) {
 $buttons = array_merge($buttons, $additional_controls);
 }
 return $buttons;
}

```

```
$buttons
the constructControls
 module_invoke_all
 hook_contenteditable_add_
controls
 _contenteditable_add_controls
 contenteditable.js
```

**24.** hook\_menu  
contenteditable/ajax  
submitHandler  
/\*\*  
 \* Implementation of hook\_menu().  
 \*/  
function contenteditable\_menu() {  
  
 \$items['contenteditable/ajax'] = array(  
 'title' => t('contenteditable AJAX'),  
 'type' => MENU\_CALLBACK,  
 'page callback' => 'contenteditable\_ajax',  
 'access arguments' => array('access content'),  
 );  
  
 return \$items;  
}

**25.** hook\_menu  
  
submitHandler contenteditable.js  
contenteditable\_ajax  
/\*\*  
 \* Callback for the contenteditable\_menu hook
 \*/
function contenteditable\_ajax () {
 // Retrieve the slider value
 \$field\_value = \$\_POST['field\_value'];
 \$nid = (int)\$\_POST['nid'];
 \$field\_name = \$\_POST['fieldname'];
 \$node = node\_load(\$nid);
 \$node->{\$field\_name} =
 array('und'=>array(array('value'=>\$field\_value)));
 node\_save(\$node);
 // Return json

```

$json_output = array();
$json_output['nid'] = $nid;
$json_output['fieldname'] = $field_name;
$json_output['msg'] = t('The field value has been updated.');
drupal_json_output($json_output);
}

contenteditable_ajax
POST type $.ajax submitHandler
 contenteditable

array()
to the drupal_json_output

26. self.commandHandler
constructControls

'
commandHandler: function(e) {
// Executes commands attached to the controls.
var $this = $(this),
cmd = $this.data('command')
cmdValue = $this.attr('cmdValue') || null,
returnValue = document.execCommand(cmd, false, cmdValue);
if (returnValue) {
return returnValue;
}
}

commandHandler
document.execCommand
http://dev.w3.org/html5/
spec/Overview.html#editing-apis

27. self.successHandler self.
hideContros submitHandler

'
successHandler: function(data, status, xhr) {
//remove saving indicator
$('#contenteditableSaving').remove();
// Highlight the edited element and show a status message.
var $el = $('div[data-nid="' + data['nid'] + '"]的数据-
fieldname="' + data['fieldname'] + '"'),
$success = $('<div id="contenteditableSuccess" class="messages-
status">' + data['msg'] + '</div>').insertBefore($el);

```

```
$el.effect('highlight', {}, 3000);
$success.delay(2000).slideUp('slow', function() {
 $(this).remove(); });

//re-enable contenteditable on active element so it may be re-
//edited
self.active.attr('contenteditable', 'true');
},
hideControls: function() {
 // Move the controls back to the end of the body element.
 if (!self.controls) {
 throw new Error('Failed to hide controls: reference not
 found.');
 }
 self.active.removeClass('contenteditableActive');
 var $clone = self.controls
 .removeAttr('style').clone(true).appendTo('body');

 self.controls.remove();
 self.controls = $clone;
 //unset self.currentField so that the same field may be re
 //-edited
 self.currentField = null;
}

successHandler $.ajax
 hideControls
```

**28.**

```
contenteditable.js
the contenteditable_field_formatter_view
to the contenteditable.module
return $element contenteditable_
field_formatter_view
//use the #attached property to add the JavaScript and CSS
$path = drupal_get_path('module', 'contenteditable');
$element['#attached'] = array(
 'js' => array(
 $path . '/contenteditable.js' => array(),
 // JavaScript settings may use the 'data' key.
 array(
 'type' => 'setting',
```

```
'data' => array('contenteditableButtons' =>
 _contenteditable_add_controls(),
),
),
'css' => array(
 $path . '/contenteditable.css' => array(),
),
//add system library, used by the successHandler method of
//our JavaScript
'library' => array(
 array('system', 'effects.highlight'),
),
);
);

#attached
contenteditable.

js contenteditable.css
drupal_get_path
private _contenteditable_add_controls

contenteditable.css
[contenteditable]:hover {
 outline: 1px dotted #CCC;
}

div.contenteditable-processed.contenteditableActive{
 box-shadow: 0 0 5px rgba(81, 203, 238, 1);
}

/*buttons css*/
div.contenteditable_buttons{
 display: none;
 -webkit-appearance: none;
 -moz-border-radius: 11px;
 -webkit-border-radius: 11px;
 -moz-background-clip: padding;
 -webkit-background-clip: padding;
 border-radius: 11px;
 background: #DDD url(images/button.png) repeat-x;
 background: -webkit-gradient(linear, left top, left bottom,
 color-stop(0, white), color-stop(1, #DDD));
}
```

```
background: -moz-linear-gradient(top center, white 0%, #DDD
100%);
border: 1px solid;
cursor: pointer;
color: #333;
font: bold 12px/1.2 Arial, sans-serif;
outline: 0;
overflow: visible;
padding: 3px 10px 4px;
text-shadow: white 0 1px 1px;
width: auto;
border-color: #DDD #BBB #999;
width:240px;
}

/*buttons for format plugin*/
#contenteditableSave,
#contenteditableCancel{
 float: right;
}

#contenteditableButtons button{
 margin: 0 2px;
}

/*override line height*/
#contenteditableButtons a:link, a:visited{
 line-height:0;
}

#contenteditableButtons button:hover:after{
 content: attr(data-tooltip);
 position: absolute;
 white-space: nowrap;
 background: -webkit-gradient(linear, left top, left bottom,
 color-stop(0, #FFFFCC), color-stop(0.9, #FFFFCC));
 background: -moz-linear-gradient(top center, #FFFFCC 0%, #FFFFCC
 90%);
 padding: 3px 7px;
 color: #777;
 border-radius: 3px; -moz-border-radius: 3px; -webkit-border-
 radius: 3px;
```

```
margin-left: -30px;
margin-top: -30px;
}

[contenteditable="true"]::not(.contenteditableActive):hover:after{
 content: attr(data-tooltip);
 position: relative;
 right:-100%;
 background: -webkit-gradient(linear, left top, left bottom,
 color-stop(0, #FFFFCC), color-stop(0.9, #FFFFCC));
 background: -moz-linear-gradient(top center, #FFFFCC 0%, #FFFFCC
 90%);
 padding: 3px 7px;
 color: #777;
}

#contenteditableSaving{
 background-color: #FFFCE5;
 color: #840;
 font-weight: bold;
 font-size: 16px;
 border-color: #ED5;
}
```

29.

Content

Admin

30.

for



**31.** for type of Save



### ***What just happened?***

contentEditable

hooks

### **Summary**

Media

lightbox

# 6

## Adding Media to our Site

A **text-only** site is not going hold the interest of visitors; a site needs some pizzazz and some spice. One way to add some pizzazz to your site is to add some multi-media content, such as images, video, audio, and so on. But, we don't just want to add a few images here and there; in fact, we want an immersive and compelling multi-media experience that is easy to manage, configure, and extend. The new **Media** (<http://drupal.org/projects/media>) module for Drupal 7 will enable us to easily add the multi-media content to our d7dev site. The **Media** module is quickly becoming the de facto contributed module for managing multi-media content in Drupal 7, and it offers a solid foundation for the future of multi-media in Drupal. In this chapter, we will discover how to integrate the **Media** module to add images to our d7dev site, and will explore compelling ways to present images to the users. This will include taking a look at the integration of a **lightbox** type UI element for displaying the **Media** module-managed images, and learning how we can leverage the Drupal development community to make improvements to the existing code.

- ◆
- ◆
- ◆
- ◆
- ◆

## Introduction to the Media module

**Image**

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

**ImageField**

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

**ImageCache**

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

**Insert**

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

## Working with dev versions of modules

**File Entity**      [http://drupal.org/project/file\\_entity](http://drupal.org/project/file_entity)

## Time for action – using Drush to install a dev version of the Media module

**1.**

**2.**

```
$ drush dl file_entity-7.x-2.x-dev
Project file_entity (7.x-2.x-dev) downloaded to /Users/kurt/
htdocs/d7dev/sites/all/modules/file_entity. [success]
$ drush en file_entity
The following extensions will be enabled: file_entity
Do you really want to continue? (y/n): y
file_entity was enabled successfully. [ok]
```

**3.**

```
$ drush rl media
----- RELEASES FOR 'MEDIA' PROJECT -----
 Release Date Status
 7.x-2.x-dev 2011-Nov-23 Development
 7.x-2.0-unstab 2011-Oct-12 Supported
 le2
 7.x-1.x-dev 2011-Nov-21 Development
 7.x-1.0-rc2 2011-Oct-12 Supported, Security, Recommended
```

**4.**

7.x-2.x-dev

```
$ drush dl media-7.x-2.x-dev
Project media (7.x-2.x-dev) downloaded to /Users/kurt/htdocs/
d7dev/sites/all/modules/media. [success]
Project media contains 3 modules: mediafield, media_internet,
media.

$ drush en media
The following extensions will be enabled: media
Do you really want to continue? (y/n): y
media was enabled successfully. [ok]
```

**5.**

***What just happened?***

## **Enhancing the Recipe content type with a Media field**

**Time for action – adding a Media field to our Recipe content type**

manage fields

**1.**

Admin

Structure

Content types

**2.****Content types****manage fields**

Content types Structure d7dev Dec 16

Home > Administration > Structure

+ Add content type

| NAME                                                                                                                                                                                                         | OPERATIONS                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Article (Machine name: article)<br>Use articles for time-sensitive content like news, press releases or blog posts.                                                                                          | edit manage fields manage display delete        |
| Basic page (Machine name: page)<br>Use basic pages for your static content, such as an About us page.                                                                                                        | edit manage fields manage display delete        |
| <b>Recipe (Machine name: recipe)</b><br>A simple recipe content type based on the schema.org base HTML5 Microdata schema for Recipes at: <a href="http://schema.org/Recipe/">http://schema.org/Recipe/</a> . | edit <b>manage fields</b> manage display delete |

**3.****Media****field\_****Select a field type****the Save****Name****Add new field****media****File****Media file selector****Save field settings**

+ nutrition field\_nutrition\_information Nutrition Information File

+ Add new field Media media File File selector

Label Field name (a-z, 0-9, \_)

Type of data to store.

Form element to edit the data.

+ Add existing field

**4.****RECIPE SETTINGS****recipe.****Help text****Enabled browser plugins****Associate multimedia files with the****Upload Library****View Library**

**5.**

jpg      png  
recipe/media

**Allowed file extensions for uploaded files**

**File directory**

**Save settings**

**Enabled browser plugins**

Upload  
 Library  
 View Library

If no plugins are selected, they will all be available.

**Allowed file extensions for uploaded files \***

jpg, png

Separate extensions with a space or comma and do not include the leading dot.

**Allowed URI schemes**

public:// (Public files)

URI schemes include public:// and private:// which are the Drupal file paths.

**File directory**

recipe/media

Optional subdirectory within the upload destination where files will be stored.

**File directory**

/sites/default/files

**6.**

**edit**

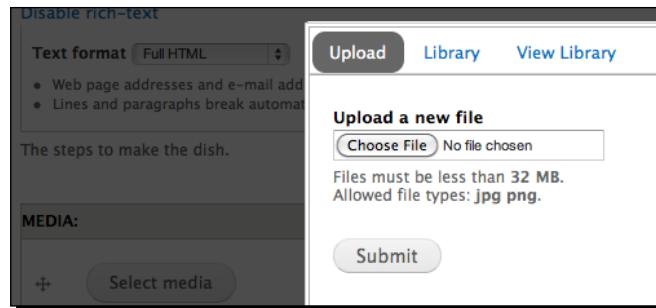
**Find content**

**Shortcuts**

**7.**

**media**

**Select**



8.

Library View Library

Upload

Choose File

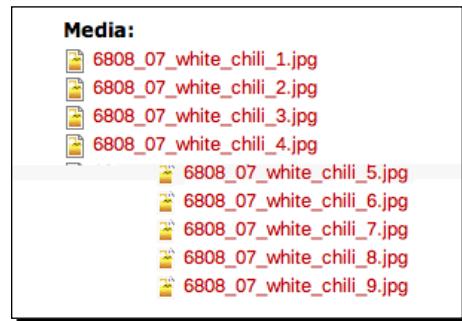
9.

Add another item

Media

Save

10.



11.

Structure  
the manage display

Admin

Content types

- 12.** **Media** **image** **image**
- Hidden**
- 13.** **<Hidden>** **LABEL** **Rendered file** **FORMAT**
- Media** **Rendered file** **FORMAT**
- FORMAT** **FORMAT settings**
- View mode** **Default to Preview** **FORMAT**
- the **Format settings** **Save** **Update**

| FIELD              | LABEL            | FORMAT          |                                                                                               |
|--------------------|------------------|-----------------|-----------------------------------------------------------------------------------------------|
| description        | <Hidden>         | contentEditable | Fallback format: Default form<br>(Select formatter to be used if no value is present)         |
| Media              | <Hidden>         | Rendered file   | View mode: Preview                                                                            |
| Time Yield Wrapper | group_time_yield | Div             | div open<br>classes time-yield-wrapper<br>label_element Header 3<br>effect None<br>speed Fast |
| prepTime           | Inline           | Duration        |                                                                                               |
| cookTime           | Inline           | Duration        |                                                                                               |
| recipeYield        | Inline           | Default         |                                                                                               |
| ingredients        | Above            | Default         |                                                                                               |
| recipeInstructions | Above            | Default         |                                                                                               |
| nutrition          | Above            | Default         |                                                                                               |
| Hidden             |                  |                 |                                                                                               |
| image              | <Hidden>         | <Hidden>        |                                                                                               |

- 14.**

```
article.node-
recipe div.field-name-field-image /sites/all/themes/d7dev/
css/global.css
article.node-recipe div.field-name-field-media div.file{
 float:left;
 margin: 0 5px 5px 0;
 box-shadow: 0 5px 5px -3px black;
}
```

15.

## Cannellini Cumin Chicken Chili

[View](#) [Edit](#) [Devel](#)

This spicy, creamy white chili is just the ticket on those first cool days of Fall.



***What just happened?***

## A new Recipe for our site

Thai Basil Chicken



- ◆ name
- ◆ description
- ◆ recipeYield
- ◆ prepTime
- ◆ cookTime
- ◆ ingredients
  - 
  - 
  - 
  - 
  - 
  - 
  -

- 
- 
- 
- 
- 
- 
- ◆ instructions

## **Custom image styles and inline Media for WYSIWYG**

## Creating a custom image style

Image Cache

Image Styles

thumbnail medium large square\_thumbnail

Image style

The screenshot shows the 'Image styles' administrative interface. At the top, there are four categories: 'Image Cache', 'Image Styles' (which is selected), 'Thumbnail', and 'Image style'. Below these are four buttons labeled 'thumbnail', 'medium', 'large', and 'square\_thumbnail'. The 'Image styles' section contains a table with four rows, each representing an image style. The columns are 'STYLE NAME', 'SETTINGS', and 'OPERATIONS'. The rows are:

| STYLE NAME       | SETTINGS | OPERATIONS           |
|------------------|----------|----------------------|
| thumbnail        | Default  | <a href="#">edit</a> |
| medium           | Default  | <a href="#">edit</a> |
| large            | Default  | <a href="#">edit</a> |
| square_thumbnail | Default  | <a href="#">edit</a> |

100x75

220x165

### Time for action – adding a custom image style through the image styles administrative page

#### Images styles

1.

Admin

Image

Media

- 2.** Image styles [Add style](#)

**3.** small Style name  
[Create new style](#)

Home » Administration » Configuration » Media » Image styles

**Style name \***



The name is used in URLs for generated images. Use only lowercase letters, numbers, underscores, and hyphens.

**Create new style**

- |           |                            |                   |
|-----------|----------------------------|-------------------|
| <b>4.</b> | <b>EFFECT</b>              |                   |
|           | <b>Scale from EFFECT</b>   | <b>Add</b>        |
| <b>5.</b> | <b>Add Scale effect</b>    | 160               |
|           | <b>the Allow Upscaling</b> | 120               |
|           |                            | <b>Add effect</b> |

**Add Scale effect** 

[d7dev](#) 

Home » Administration » Configuration » Media » Image styles »

Scaling will maintain the aspect-ratio of the original image.

**Width**

 pixels

**Height**

 pixels

Allow Upscaling

Let scale make images larger than their original size

**Add effect** **Cancel**

**6.**

**Update style**

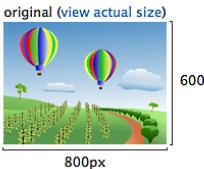
**Edit small style**

**Edit small style** 

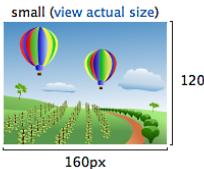
Home > Administration > Configuration > Media > Image styles

The image effect was successfully applied.

**Preview**

original (view actual size)  800px

600px

small (view actual size)  160px

120px

**Image style name \***  
small

The name is used in URLs for generated images. Use only lowercase alphanumeric characters, underscores (\_), and hyphens (-).

| EFFECT                                                    | OPERATIONS           |
|-----------------------------------------------------------|----------------------|
| ⊕ Scale 160x120                                           | <a href="#">edit</a> |
| ⊕ <a href="#">Select a new effect</a> <a href="#">Add</a> |                      |

[Update style](#)

***What just happened?***

## Time for action – creating a programmatic custom image style

1.

|       |              |                        |
|-------|--------------|------------------------|
| Admin | Image styles | Configuration<br>Media |
|-------|--------------|------------------------|

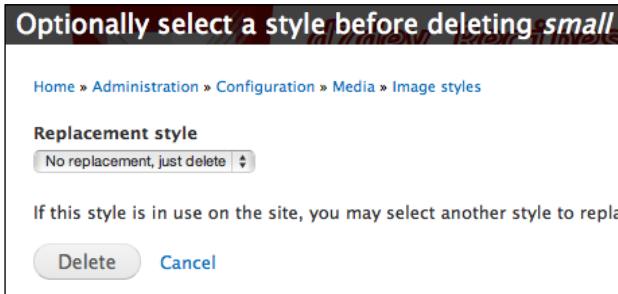
2.

|              |        |
|--------------|--------|
| Image styles | delete |
|--------------|--------|

3.

|                                                                      |                             |
|----------------------------------------------------------------------|-----------------------------|
| Optionally select a style before deleting small<br>Replacement style | No replacement, just delete |
|----------------------------------------------------------------------|-----------------------------|

**Delete**



4.

|              |                     |
|--------------|---------------------|
| d7dev.module | /sites/all/modules/ |
|--------------|---------------------|

d7dev

5.

```

hook_image_default_styles
image_default_styles hook d7dev.module
 d7dev_field_formatter_view

/**
 * Implements hook_image_default_styles().
 */
function d7dev_image_default_styles() {
}

```

**6.**

hook\_image\_default\_styles at [http://api.drupal.org/api/drupal/modules--image--image.api.php/function/hook\\_image\\_default\\_styles/7](http://api.drupal.org/api/drupal/modules--image--image.api.php/function/hook_image_default_styles/7)

**Code**

```
Code
modules/image/image.api.php, line 176

<?php
function hook_image_default_styles() {
 $styles = array();

 $styles['mymodule_preview'] = array(
 'effects' => array(
 array(
 'name' => 'image_scale',
 'data' => array(
 'width' => 400,
 'height' => 400,
 'upscale' => 1,
),
 'weight' => 0,
),
 array(
 'name' => 'image_desaturate',
 'data' => array(),
 'weight' => 1,
),
),
);
}

return $styles;
}
?>
```

**7.**

```
d7dev_image_default_styles
mymodule_preview to small
to 160 120 0 image_desaturate
final
/**
 * Implements hook_image_default_styles().
 */
function d7dev_image_default_styles() {
 $styles = array();

 $styles['small'] = array(
```

```

'effects' => array(
 array(
 'name' => 'image_scale',
 'data' => array(
 'width' => 160,
 'height' => 120,
 'upscale' => 0,
),
 'weight' => 0,
),
),
);
}

return $styles;
}

$styles

```

image\_scale

**8.** Configuration  
Clear all caches

**Performance**  
**Image styles**



**Image styles** d7dev Decines

Home > Administration > Configuration > Media

Image styles commonly provide thumbnail sizes by scaling and cropping images, but can also add various effects before an image is displayed. When an image is displayed with a style, a new file is created and the original image is left unchanged.

[+ Add style](#)

| STYLE NAME | SETTINGS | OPERATIONS           |
|------------|----------|----------------------|
| small      | Default  | <a href="#">edit</a> |
| thumbnail  | Default  | <a href="#">edit</a> |



d7dev\_image\_default\_styles

```
hook_image_default_
styles: image_scale image_desaturate
 /modules/image/image.effects.
inc
 image_image_effect_info
$effects
 image.effects.inc
```

| Effect name  | Effect data settings |
|--------------|----------------------|
| image_resize | width                |
|              | height               |
| image_scale  | width                |
|              | height               |
|              | upscale<br>1         |
|              | 0 or<br>1            |

| <b>Effect name</b>   | <b>Effect data settings</b>                                                                |
|----------------------|--------------------------------------------------------------------------------------------|
| image_scale_and_crop | width<br>height                                                                            |
| image_crop           | width<br>height                                                                            |
|                      | anchor<br>XOFFSET-<br>YOFFSET XOFFSET<br>left center right<br>YOFFSET<br>top center bottom |
| image_desaturate     |                                                                                            |
| image_rotate         | degrees                                                                                    |
|                      | random<br>0 or 1                                                                           |
|                      | degrees                                                                                    |
| bgcolor              | (#FFFFFF #000000                                                                           |

---

## Time for action – configuring Media-based images to use our custom small image style for our Recipe content type

1. the Admin Configuration  
File types Media
2. File types manage file display  
the Image file type
3. Manage File Display Small
4. small Image style  
Image Display Save configuration

The screenshot shows the 'File types' configuration page for the 'd7dev\_recipes' module. The 'Image' file type is selected. The 'Manage file display' tab is active. In the 'Enabled displays' section, 'Image' is checked. Under 'Display precedence order', 'Image' is listed. In the 'Display settings' section, 'Image' is enabled and its 'Image style' is set to 'small'. The 'Save configuration' button is at the bottom left.

- 5.

## Cannellini Cumin Chicken Chili

[View](#) [Edit](#) [Devel](#)

This spicy, creamy white chili is just the ticket on those first cool days of Fall.



**ingredients:**  
2 pounds boneless chicken breasts  
1 large sweet onion, diced

**prepTime:** 1/3 hours  
**cookTime:** 2 and 1/2 hours  
**recipeYield:** 8-10 servings

### What just happened?

Recipe Media

## Inline Media with WYSIWYG

### Time for action – configuring WYSIWYG inline Media for the basic page content type

1.

Admin  
Content authoring

Configuration

Wysiwyg profiles

2.

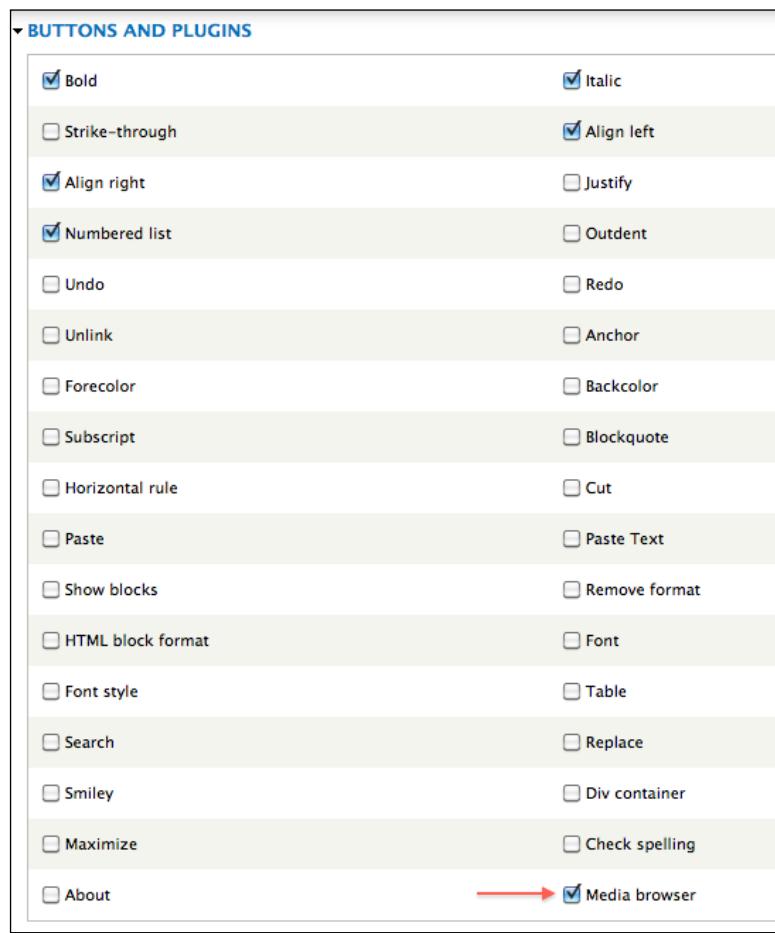
Wysiwyg profiles  
HTML INPUT FORMAT

Edit

Full

### 3. BUTTONS AND PLUGINS

Save



### 4. Basic page content item

Add content

Shortcuts

### 5.

About d7dev

Title

Body

The d7dev site is the companion website for the Drupal 7 Development by Example for Beginners book. The website will showcase recipes for Drupal development and recipes for your belly. And all of this is done within the context of creating an HTML5 Drupal 7 site.

6.

Add media

Media

Create Basic page d7dev Recipes

Home » Add content

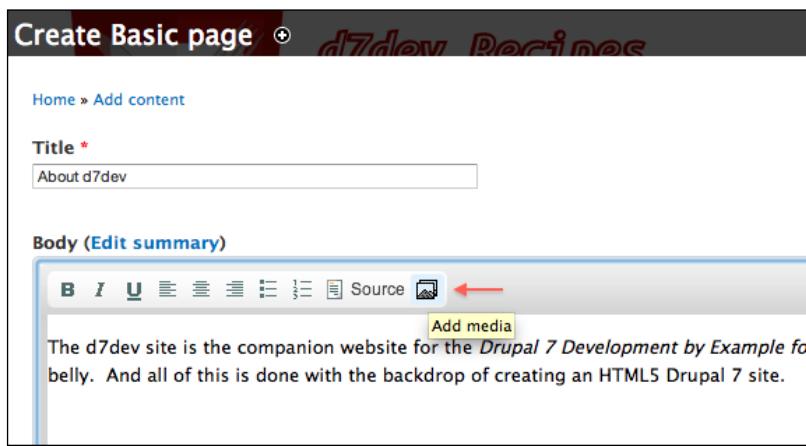
Title \*

About d7dev

Body (Edit summary)

The d7dev site is the companion website for the *Drupal 7 Development by Example* book. And all of this is done with the backdrop of creating an HTML5 Drupal 7 site.

Add media



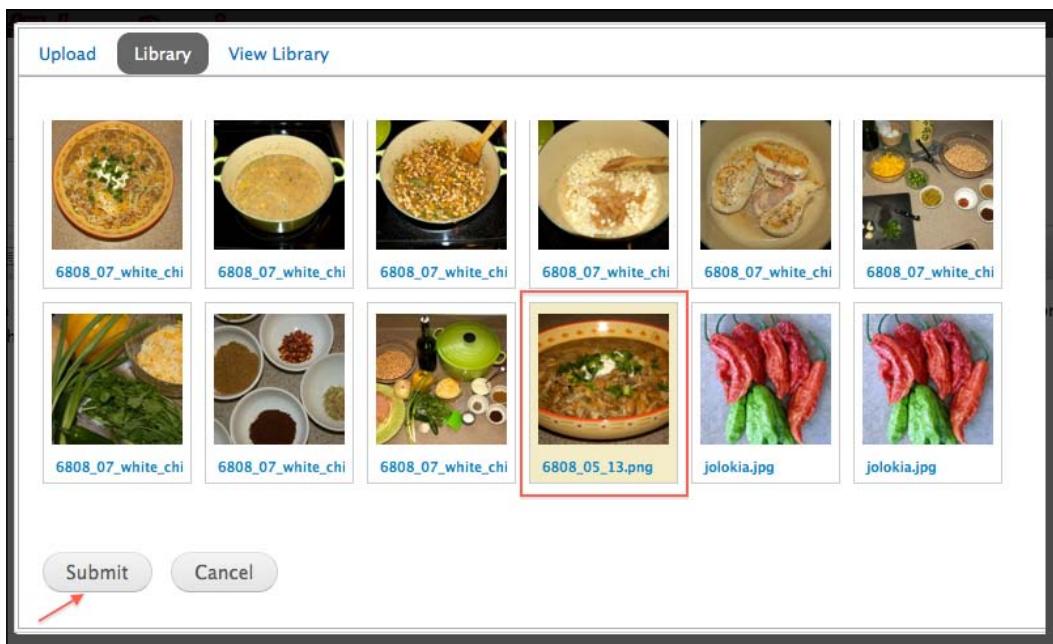
7.

Library

Media

Submit

Upload Library View Library

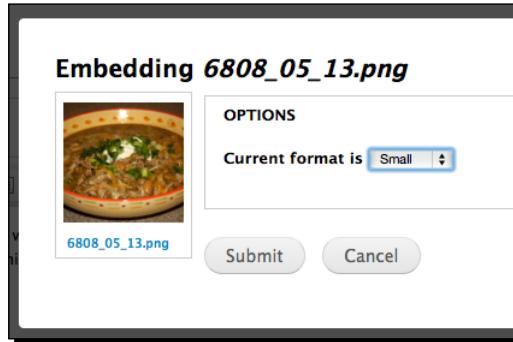


6808\_07\_white\_chi 6808\_07\_white\_chi 6808\_07\_white\_chi 6808\_07\_white\_chi 6808\_07\_white\_chi 6808\_07\_white\_chi

6808\_07\_white\_chi 6808\_07\_white\_chi 6808\_07\_white\_chi 6808\_05\_13.png jolokia.jpg jolokia.jpg

Submit Cancel

- 8.** Embedding the **Submit**



- 9.** Save **Create Basic page**

***What just happened?***

## Integrating the Colorbox and Media modules

Colorbox module

### Time for action – installing the Colorbox module

- 1.**

d7dev Mac: /Applications/MAMP/ or Windows C:\XAMPP\  
htdocs\d7dev

2.

```
http://drupal.org/project/colorbox
$ drush dl colorbox-7.x-1.x-dev
Project colorbox (7.x-1.x-dev) downloaded to [success]
/Users/kurt/htdocs/d7dev/sites/all/modules/colorbox.
$ drush en colorbox
The following extensions will be enabled: colorbox
Do you really want to continue? (y/n): y
colorbox was enabled successfully. [ok]
```

3.

```
http://jacklmoore.com/colorbox/
/sites/all/
libraries
$ drush colorbox-plugin
Colorbox plugin has been downloaded to sites/all/libraries
[success]
```

4.

Admin                      Content                      Structure  
                                manage display

5.

FORMAT

Colorbox

FORMAT

Colorbox

Media



***What just happened?***

**Introduction to the Colorbox File module and Drupal sandboxing**

**Drupal developer community: Drupal sandbox**

The screenshot shows a project page for 'kmaDEL's sandbox: Colorbox File' on the Drupal.org website. The page has a dark header with the title and a light gray body. At the top left, there are tabs for 'View', 'Version control', 'Edit', and 'Maintainers'. Below these, a message from the author states: 'Posted by kmaDEL on March 8, 2011 at 12:26pm'. A yellow box labeled 'Experimental Project' contains the text: 'This is a [sandbox project](#), which contains experimental code for developer use only.' To the right, under 'Maintainers', it says 'kmaDEL - 4 commits' with a note about commit history. Below that is a section for 'Issues for Colorbox File' with a search bar and links for 'Advanced search', 'All issues', and '7 open, 9 total'.

<http://drupal.org/node/1011196>

## Revisit the sandbox Colorbox File module

## Time for action – checking out the Colobrbox File sandbox project with Git, and testing it with the latest Media module

1.

control              View  
Colorbox File

Version

**Colorbox File**

[View](#) [Version control](#)

This page gives the essential Git commands for working with this project's source files.

Version to work from: \*

Update Notice: See [Git instructions updates](#) for a record of updates to these instructions.  
Last updated: May 12, 2011

**One-Time Only**

Setting up this repository locally for the first time

```
git clone --branch master http://git.drupal.org/sandbox/kmadel/1084984.git
colorbox_file
cd colorbox_file
```



```
git clone --branch master http://
git.drupal.org/sandbox/kmadel/1084984.git
colorbox_file
commit
```

```
git checkout -b colorboxFile
fa74c354432310befde64cle4e1b205c657d7c71
```

```
drush en colorbox_file
The following extensions will be enabled: colorbox_file
Do you really want to continue? (y/n): y
colorbox_file was enabled successfully. [ok]
```

3.

Admin      Content types      Structure

manage display

4.

FORMAT      Media  
Colorbox file



5.

cog      medium      Node image style      large  
Colorbox image style      Update



6.

Save

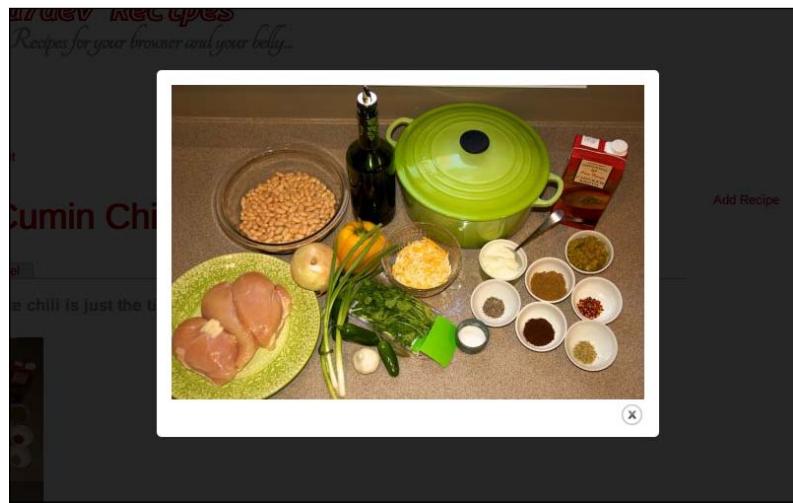
MANAGE DISPLAY

7.

Admin

Content

**8.**



***What just happened?***

## **Drupal issue queues and enhancing the Colorbox File module**

<http://drupal.org/project/issues/1084984?status>All&categories>All>

Image field gallery, per page/post/field options <http://drupal.org/node/1165198>

*Hey maybe it's me but the option doesn't work where it takes all images on the page to click through. Is that easy to implement? Thanks in advance. Keep up the good work!*

@sanderjp

@jide <http://drupal.org/user/146088>

*Hi, I just posted #1296186: Complete rewrite of the module (<http://drupal.org/node/1296186>), a complete rewrite of the module, you might want to have a look at it.*

@jide

@jide

<http://drupal.org/node/1296186#comment-5103976>

## Time for action – applying and testing the patch for the Colorbox File module

**1.** [http://drupal.org/files/colorbox\\_file\\_overhaul-2.patch](http://drupal.org/files/colorbox_file_overhaul-2.patch)  
d7dev/sites/all/modules/colorbox\_file

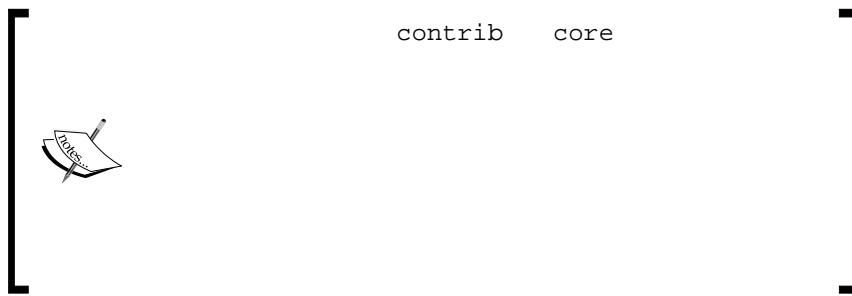
**2.**

```
$ git apply -p0 colorbox_file_overhaul-2.patch
colorbox_file_overhaul-2.patch:59: trailing whitespace.

colorbox_file_overhaul-2.patch:99: trailing whitespace.

colorbox_file_overhaul-2.patch:324: trailing whitespace.

warning: 3 lines add whitespace errors.
```



**3.**

`d7dev/sites/all/modules/colorbox_file`

**4.**

Shortcuts      **Performance**

Clear all caches

**5.**

Structure  
manage display

**Media**  
Content

**Admin**

**6.**

Colorbox file

FORMAT

Media



**7.**

**FORMAT settings**

FORMAT settings

Small

File view mode Large

Colorbox view mode

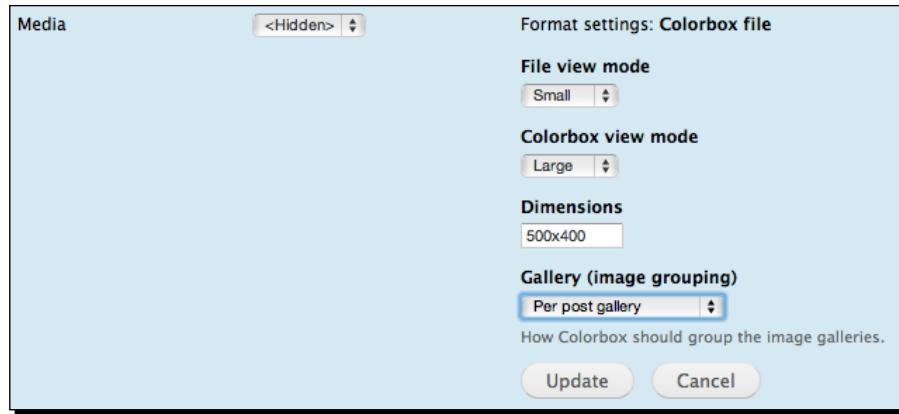
500x400

Dimensions

Per

post gallery      Gallery (image grouping)

Update

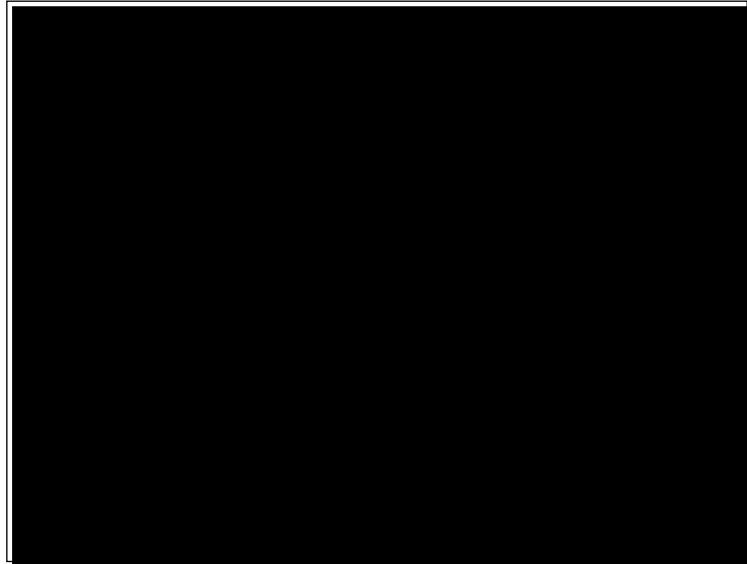


**8.**

Save

**MANAGE DISPLAY**

**9.**



***What just happened?***

## **Summary**

# 7

## How Does it Taste – Getting Feedback

*Up until this point, there haven't been any compelling or interesting ways for the users to interact with our d7dev site. This chapter will show you how to add a contact form, and how to set up and integrate the Fivestar module with the custom Recipe content type to include a custom Fivestar ratings widget.*

the **Webforms**

form

**Tools**

### Introduction to the Drupal contact form

## Time for action – enabling and configuring the core contact form

1.

```
C:\xampp\htdocs\d7dev>drush en contact
The following extensions will be enabled: contact
Do you really want to continue? (y/n): y
contact was enabled successfully. [ok]
```

2.

Admin

Modules  
Contact Core  
Permissions

the OPERATIONS

| ENABLED                             | NAME    | VERSION | DESCRIPTION                                                   | OPERATIONS                                                                 |
|-------------------------------------|---------|---------|---------------------------------------------------------------|----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Contact | 7.7     | Enables the use of both personal and site-wide contact forms. | <a href="#">Help</a> <a href="#">Permissions</a> <a href="#">Configure</a> |
|                                     | Content |         | Allows content to be translated into different languages.     |                                                                            |

3.

People | Permissions  
contact form  
ADMINISTRATOR  
ANONYMOUS AUTHENTICATED  
Save permissions

Use the side-wide

4.

<http://localhost/d7dev/contact>

Contact

Your name \*

Your e-mail address \*

Subject \*

Message \*

Send message

5.

id edit-mail

email

*Chapter 3 HTML5 Integration for Drupal and More*

*Module Development*

```
<input type="email" id="edit-mail" name="mail" value="" size="60"
 maxlength="255" class="form-text form-email required">
```

## **What just happened?**

*Chapter 3 HTML5 Integration*

*for Drupal 7 and More Module Development*

email

## Adding descriptive help text to our contact form

### Using custom code to add help text to the contact form

#### Time for action – adding help text to our site contact form

dpm  
**Devel**  
hook\_form\_FORM\_ID\_alter hook to alter the  
template.php  
d7dev\_theme

1. template.php /sites/  
all/themes/d7dev\_theme

2. form

3. template.php FORM\_ID  
form id step 2

```
/**
 * Implements hook_form_FORM_ID_alter ().
 */
function d7dev_theme_form_contact_site_form_alter(&$form,
 &$form_state, $form_id) {
 $form['#prefix'] = t("Please fill out the following form if you
 have any questions about the d7dev site.");
}
```

[

4.

Please fill out the following form if you have any questions about the d7dev site.

Your name \*

### **What just happened?**

hook\_form\_FORM\_ID\_alter

## **Adding contact help text with no code**

**Webform** <http://drupal.org/project/webform>

## **Time for action – creating a contact form with help text, with the Webform module**

1.

2.

```
$ drush dl webform
Project webform (7.x-3.15) downloaded to /Applications/MAMP/
htdocs/d7dev/sites/all/modules/webform. [success]
$ drush en webform
The following extensions will be enabled: webform
Do you really want to continue? (y/n): y
webform was enabled successfully. [ok]
```

- 3.** **Add content**
- Shortcuts**      **Webform**
- 4.** **Contact Form**      **Title**  
**Body** Please fill out the following form if you have any  
 questions about the d7dev site      **Save**
- 5.** **Save**      **Form**  
**components**      **Contact Form**

The screenshot shows a web-based form builder interface. At the top, there's a navigation bar with tabs: VIEW, EDIT, WEBFORM, FORM COMPONENTS, and E-MAILS. The current tab is WEBFORM. Below the navigation, the title 'Contact Form' is displayed, along with a small icon and a link to 'd7dev Decines'. The main area contains a success message: '• Webform Contact Form has been created.' and '• The new webform Contact Form has been created. Add new fields to your webform with the form below.' Below this message, there's a table header with columns: LABEL, TYPE, VALUE, MANDATORY, and OPERATIONS. A note says 'No Components, add a component below.' Below the table, there's a text input field labeled 'New component name' with a dropdown menu set to 'Textfield'. To the right of the input field is an 'Add' button. At the bottom of the interface, a note reads 'This step is optional. Only one step is required for those first few days of Fall.'

- 6.** **Contact Form**
- 7.** **Your name**      **LABEL** Textfield      **TYPE**  
 check the **MANDATORY**      **Add**
- 8.** **Edit component**      **Your name**      Please enter  
 your first and last name.      **Description text**      **Save**  
**component**
- 9.** **Your e-mail**      **LABEL** E-mail  
**TYPE**      **MANDATORY**      **Add**
- 10.** **Edit component**      **Your e-mail address**  
**User email**      Please enter your e-mail address.  
**Description text**      **Save component**

- 11.** Subject **LABEL** Textfield **TYPE**  
check the **MANDATORY** Add
- 12.** Edit component **Subject** **Description**  
Save component
- 13.** Message **LABEL** Textarea **TYPE**  
the **MANDATORY** Add
- 14.** Edit component **Message** **Description**  
Save component  
Contact Form Edit components

Contact Form d7dev Decines

Home > Contact Form

✓ New component *Message* added.

| LABEL               | TYPE      | VALUE      | MANDATORY                           |
|---------------------|-----------|------------|-------------------------------------|
| Your name           | textfield | -          | <input checked="" type="checkbox"/> |
| Your e-mail address | email     | %useremail | <input checked="" type="checkbox"/> |
| Subject             | textfield | -          | <input checked="" type="checkbox"/> |
| Message             | textfield | -          | <input checked="" type="checkbox"/> |
| New component name  | Textfield |            | <input type="checkbox"/>            |

- 15.** **Form settings** **ADVANCED**  
**SETTINGS** **Send message** **Submit**

**16.**

**VIEW**

**Contact Form**

**Contact Form**

[View](#) [Edit](#) [Webform](#) [Results](#) [Devel](#)

Fri, 12/09/2011 - 21:00 -- admin

Please fill out the following form if you have any questions about the d7dev site.

**Your name \***  
  
Please enter your first and last name.

**Your e-mail address \***  
  
Please enter your e-mail address.

**Subject \***

**Message \***

***What just happened?***

## A more in-depth look at the Webform module

```
/contact
Your e-mail address
text email

Chapter 3 hook_form_FORM_ID_alter
html5_tools/html5_tools.module /sites/all/modules/
#type line 336
emailfield textfield
Elements
Chapter 3

* Implements hook_form_FORM_ID_alter().
*/
function html5_tools_form_contact_site_form_alter(&$form,
 &$form_state) {
 // Modify the user registration field to use an email field.
 if (variable_get('html5_tools_override_contact_forms', 1) &&
 $form['mail']['#type'] == 'textfield') {
 $form['mail']['#type'] = 'emailfield';
 }
}
```

## Time for action – using hook\_form\_FORM\_ID\_alter to modify our Webform-based contact form

FORM\_ID  
hook\_form\_FORM\_ID\_alter

1.

Shortcuts      Find content

Contact Form    TYPE Webform

2.

Devel



3.

DEVEL

(Array, 14 elements)

Render

4.

(Array, 7 elements)

#form\_id

#form



webform\_client\_form\_56

5.

d7dev/

6.

## d7dev\_image\_default\_styles

```
/***
 * Implements hook_form_FORM_ID_alter().
 */
function d7dev_form_webform_client_form_56_alter(&$form,
 &$form_state, $form_id) {
}
```

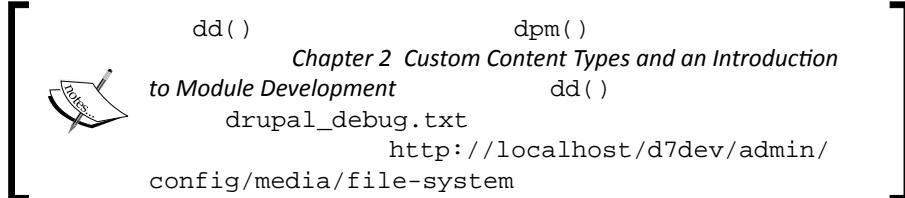
textfield emailfield

7.

```
Devel dd()
$form
d7dev_form_webform_
client_form_56_alter

function d7dev_form_webform_client_form_56_alter(&$form, &$form_
state, $form_id) {
 dd($form, 'd7dev_form_webform_client_form_56_alter');

}
```



8.

```
/Applications/MAMP/tmp/php
C:\XAMPP\...
$ tail -f drupal_debug.txt
```

9.

```
$form
d7dev_form_webform_client_form_56_alter: Array
(
 [#attached] => Array
 ...
)
```

```
textfield emailfield
the dd() $form
```

10.

```
[submitted]
[your_e_mail_address]
[your_e_mail_address] => Array
(
 [#type] => textfield
)
...
```

**11.**

```
[#webform_component]
[type]
[#webform_component] => Array
(
 [nid] => 56
 [cid] => 2
 [pid] => 0
 [form_key] => your_e_mail_address
 [name] => Your e-mail address
 [type] => email
 ...
)
```

**12.**

```
dd()
['#webform']['type']
emailfield textfield
//loop through all of the webform fields
foreach($form['submitted'] as &$field) {
 //if the webform_component type is set and is email,
 //then this is a field we want to change
 if(isset($field['#webform_component']['type']))
 && $field['#webform_component']['type'] == 'email') {
 $field['#type'] = 'emailfield'; //set the field type to
emailfield
 }
}
```

**13.**

```
dd()

[your_e_mail_address] => Array
(
 [#type] => emailfield
 [#title] => Your e-mail address
 ...
)
```

**14.**

```
[#type] emailfield textfield

<input class="email form-text form-email required" type="email"
id="edit-submitted-your-e-mail-address"
name="submitted[your_e_mail_address]"
value="admin@localhost.org" size="60" maxlength="128">
```

## **15.**

the dd( )

```
/**
 * Implements hook_form_FORM_ID_alter().
 */
function d7dev_form_webform_client_form_56_alter(&$form,
 &$form_state, $form_id) {
 //loop through all of the webform fields
 foreach($form['submitted'] as &$field) {
 //if the webform_component type is set and is email,
 //then this is a field we want to change
 if(isset($field['#webform_component']['type'])
 && $field['#webform_component']['type'] == 'email') {
 $field['#type'] = 'emailfield'; //set the field type to
 emailfield
 }
 }
}
```

## ***What just happened?***

|                         |            |          |
|-------------------------|------------|----------|
| hook_form_FORM_ID_alter | text       | email    |
| client_form_56          | FORM_ID    | webform_ |
|                         | emailfield |          |

http://  
drupal.org/project/issues/html5\_tool                    Webform  
  
http://drupal.org/  
node/1312992

*Hi,  
is there any support with the Werbform module?*

hook\_form\_BASE\_FORM\_ID\_alter  
    i  
        BASE\_FORM\_ID  
          BASE\_FORM\_ID  
            hook\_forms

## Time for action – using hook\_form\_BASE\_FORM\_ID\_alter to make our Webform emailfield code more generic

**hook**                                           **emailfield**

**1.**                                                    **webform.module**                                    **/sites/all/**  
modules/webform                                        hook\_forms  
  
/\*\*  
 \* Implements hook\_forms().  
 \*  
 \* All webform\_client\_form forms share the same form handler  
 \*/  
function webform\_forms(\$form\_id) {  
 \$forms = array();  
 if (strpos(\$form\_id, 'webform\_client\_form\_') === 0) {  
 \$forms[\$form\_id]['callback'] = 'webform\_client\_form';  
 }  
 return \$forms;  
}  
  
                                                          **webform\_client\_form**

```
 BASE_FORM_ID
form_BASE_FORM_ID_alter

 hook_

Tools

the html5_tools.module

2. d7dev_form_
webform_client_form_56_alter
 /sites/all/modules/html5_tools/html5_tools.module
 line
 hook_form_FORM_ID_alter()
webform_client_form_alter
/**
 * Implements hook_form_FORM_ID_alter().
 */
function html5_tools_form_webform_client_form_alter(&$form,
&$form_state, $form_id) {
 //loop through all of the webform fields
 foreach($form['submitted'] as &$field) {
 //if the webform_component type is set and is email,
 //then this is a field we want to change
 if(isset($field['#webform_component']['type'])
 && $field['#webform_component']['type'] == 'email') {
 $field['#type'] = 'emailfield'; //set the field type to
 emailfield
 }
 }
}

3. email
 html5_tools_form_
contact_personal_form_alter
the html5_tools.module
contact_forms html5_tools_override_
 0

http://localhost:d7dev/admin/config/markup/html5-tools
 email
```

**4.**           html5\_tools.admin.inc                                   /d7dev/sites/all/  
module/html5\_tools                                                 line 110

```
if (module_exists('webform')) {
 $form['html5_tools_webform_forms'] = array(
 '#type' => 'fieldset',
 '#title' => t("Override Webform fields with their HTML5
counterparts"),
 '#collapsible' => FALSE,
);
 $form['html5_tools_webform_forms']['html5_tools_override_
webform_email'] = array(
 '#type' => 'checkbox',
 '#default_value' => variable_get('html5_tools_override_
webform_email', 1),
 '#title' => t('E-mail field'),
 '#description' => t('Modify the Webform email textfield to an
email field.'),
);
}
```

## How Does it Taste – Getting Feedback

```
foreach($form['submitted'] as &$field) {
 //if the webform_component type is set and is email,
 //then this is a field we want to change
 if(isset($field['#webform_component']['type'])
 && $field['#webform_component']['type'] == 'email') {
 $field['#type'] = 'emailfield'; //set the field type to
 //emailfield
 }
}
}
}
```

7. E-mail  
textfield

**8.** E-mail  
emailfield

9.

10.

```
$ git clone --branch 7.x-1.x http://git.drupal.org/project/html5_
tools.git

Cloning into html5_tools...
remote: Counting objects: 232, done.
remote: Compressing objects: 100% (153/153), done.
remote: Total 232 (delta 149), reused 114 (delta 77)
Receiving objects: 100% (232/232), 41.30 KiB, done.
Resolving deltas: 100% (149/149), done.
```

11.

12.

<http://drupal.org/node/707484>

```
$ git diff > webform-support-1312992-8.patch
```

**13.**

<http://drupal.org/node/1312992>

**to needs review**

#8 Posted by **kmadel** on December 11, 2011 at 11:26pm

Status: active » needs review

Here is an initial stab at adding HTML5 input type support for the Webform module. The initial code will only replace Webform email textfields with the Elements based emailfield.

If everyone thinks this is a good approach, it will be pretty easy to add support for other HTML5 input types.

| Attachment                                      | Size    |
|-------------------------------------------------|---------|
| <a href="#">webform_support-1312992-8.patch</a> | 2.21 KB |

***What just happened?***

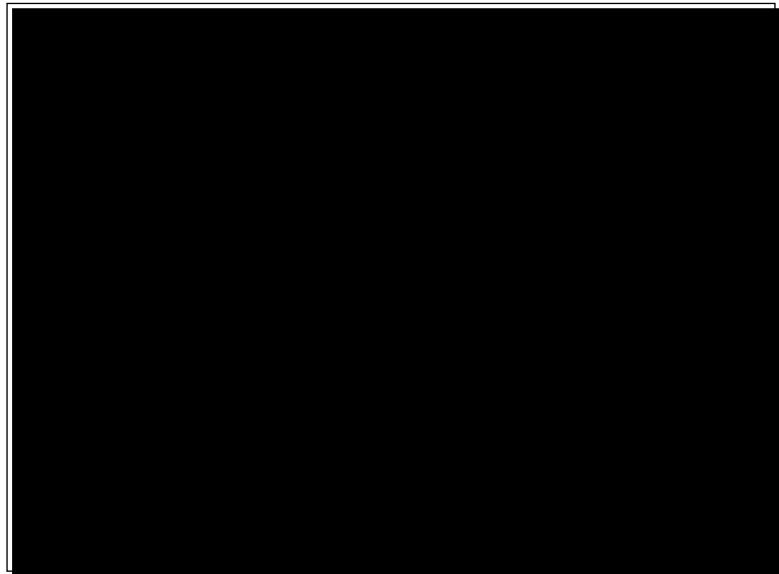
**Time for another recipe**





## **Colorbox File enhancements**

**Media**



*How Does it Taste – Getting Feedback*

---

<http://drupal.org/project/issues/1084984?status>All&categories=A11>  
<http://drupal.org/node/1085174> **Image's title not displaying in Colorbox**

*I realize that the title of the images doesn't show in the Colorbox. Did I do something wrong? Or is the feature not implemented?*

**Media**  
#4  
<http://drupal.org/node/1085174#comment-4816758> **@NicolasH**



[http://drupal.org/project/file\\_entity](http://drupal.org/project/file_entity)

**File types**  
<http://localhost/d7dev/admin/config/media/file-types> **manage fields**

| NAME                       | OPERATIONS                    |
|----------------------------|-------------------------------|
| Application (multipurpose) | <a href="#">manage fields</a> |
| Audio                      | <a href="#">manage fields</a> |
| Image                      | <a href="#">manage fields</a> |
| Text                       | <a href="#">manage fields</a> |
| Video                      | <a href="#">manage fields</a> |
| Other                      | <a href="#">manage fields</a> |

Media <Hidden> Format settings: Colorbox file

File view mode  
Small

Colorbox view mode  
Large

Dimensions  
500x400

Gallery (image grouping)  
Per post gallery

How Colorbox should group the image galleries.

Update Cancel

|         |                   |                   |
|---------|-------------------|-------------------|
| caption | title             | <b>Image file</b> |
|         | <b>Video file</b> |                   |

## Time for action – enhancing the Colorbox File module with field-based captions

hook\_form\_FORM\_ID\_alter

FORM\_ID

1.

|                                                 |                                      |                                      |
|-------------------------------------------------|--------------------------------------|--------------------------------------|
| <b>File types</b><br>the <b>Image file type</b> | <b>Configuration</b><br><b>Media</b> | <b>Admin</b><br><b>manage fields</b> |
|-------------------------------------------------|--------------------------------------|--------------------------------------|

2.

|                                    |                                                    |                                                         |                                |                                  |
|------------------------------------|----------------------------------------------------|---------------------------------------------------------|--------------------------------|----------------------------------|
| <b>prefix</b><br><b>field type</b> | <b>Caption</b><br><b>Name</b><br><b>Text field</b> | <b>Add new field</b><br><b>caption</b><br><b>WIDGET</b> | <b>Text</b><br><b>Select a</b> | <b>field_</b><br><b>Select a</b> |
|------------------------------------|----------------------------------------------------|---------------------------------------------------------|--------------------------------|----------------------------------|

3.

|                       |            |                            |
|-----------------------|------------|----------------------------|
| <b>Maximum length</b> | <b>256</b> | <b>Save field settings</b> |
|-----------------------|------------|----------------------------|

colorbox\_file.module

```
function colorbox_file_form_alter(&$form, &$form_state) {
 dsm($form, 'colorbox_file_form_alter');
}
```

**4.**

```
hook_form_FORM_ID_alter
FORM_ID
Save field
dsm
```

**5.****...(Array, 21 elements)**

```
#form_id key: field_ui_field_edit_form | (Callback) field_ui_field_edit_form();
```

**6.**

```
#form_id
 FORM_ID
 hook_form_FORM_ID_alter
 colorbox_file_form_alter
 field_ui_field_edit_form

/**
 * Implements hook_form_FORM_ID_alter().
 */
function colorbox_file_form_field_ui_field_edit_form_alter(&$form,
$form_state) {

 form_FORM_ID_alter hook
 ID field_edit_form

 field_edit_form
```

| 7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | #instance<br>file | dsm<br>widget=>type    text_field | widget<br>entity_type |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------|-----------------------|
|  <pre> #instance (Array, 13 elements) label (String, 7 characters ) Caption widget (Array, 5 elements) weight (String, 1 characters ) 2 type (String, 14 characters ) text_textfield module (String, 4 characters ) text active (Integer) 1 settings (Array, 1 element) settings (Array, 2 elements) display (Array, 6 elements) required (Integer) 0 description (String, 0 characters ) entity_type (String, 4 characters ) file   (Callback) file(); </pre> |                   |                                   |                       |

8. colorbox\_file\_form\_field\_ui\_field\_edit\_form\_alter

```

//only want this option to appear for text fields on file
entities
if ($form['#instance']['entity_type'] == 'file' &&
$form['#instance']['widget']['type'] == 'text_textfield') {
}

```

9. if

```

fieldset

// Create the fieldset tab.
$form['colorbox_file'] = array(

```

```
'#type' => 'fieldset',
'#title' => t('Colorbox Caption Field'),
'#description' => t('Set field to be used as the Colorbox
caption.
Note: Selecting this text field as the Colorbox caption field
will replace an previously checked field for this file
type.'),
'#tree' => TRUE,
);

$form['colorbox_file']['caption_field'] = array(
 '#type' => 'checkbox',
 '#title' => t('Use field as Colorbox caption'),
);
```

**10.**

fieldset



variable\_set

variable\_set

```
submit field_
edit_form colorbox.module
```

**11.**

```
submit field_ui_field_edit_
form
```

```
//additional submit function to process the caption_field checkbox
value
$form['#submit'] = array_merge($form['#submit'], array('colorbox_
file_form_field_ui_field_edit_form_submit'));
```

12.

```
colorbox_file_form_field_ui_field_
edit_form_submit

colorbox_file_
form_field_ui_field_edit_form_submit

/**
 * Custom submit handler for the field_ui_field_edit_form altered
form.
 */
function colorbox_file_form_field_ui_field_edit_form_submit($form,
 &$form_state) {
 if ($form['colorbox_file']['caption_field']) {
 $bundle = $form['instance']['bundle']['#value'];
 variable_set('colorbox_file_' . $bundle . '_caption_field_
name', $form['#field']['field_name']);
 }
}

colorbox_file_form_field_ui_field_edit_form_
submit if true

variable_set
 $form['instance']['bundle']

['#value'] bundle
 image

theme_colorbox_file
the colorbox_file.theme.inc d7dev/sites/all/modules/
colorbox_file/ title

function theme_colorbox_file($variables) {
...
$caption = $variables['title'];

...

```

```

return theme('link', array(
 'text' => drupal_render($variables['item']),
 'path' => $variables['path'],
 'options' => array(
 'html' => TRUE,
 'attributes' => array(
 'title' => $caption,
 'class' => 'colorbox-file',
 'rel' => $gallery_id,
),
),
),
));
}

 title

#theme
theme()
theme_colorbox_file #theme
colorbox_file_field_formatter_view
colorbox_file.module #theme

/***
 * Implements hook_field_formatter_view().
 */
function colorbox_file_field_formatter_view($entity_type, $entity,
$field, $instance, $langcode, $items, $display) {
.....
$element[$fid] = array(
 '#theme' => 'colorbox_file',
 '#item' => $build[$fid]['file'],
 '#entity_id' => $id,
 '#field' => $field,
 '#display_settings' => $display['settings'],
 '#langcode' => $langcode,
 '#path' => 'colorbox_file/' . $fid . '/' .
$display['settings']['colorbox_view_mode'] . '/' .
$langcode,
 '#title' => isset($instance['label']) ? $instance['label']
: NULL,
);
}

```

```
 #title
the$instance['label'] null
$instance['label'] field_media

 $variables theme_colorbox_file
colorbox_file.theme.inc

#theme
hook_theme
theme
theme
a hook_theme colorbox_file_theme

/**
 * Implements hook_theme().
 */
function colorbox_file_theme() {
 return array(
 'colorbox_file' => array(
 'variables' => array(
 'item' => array(),
 'entity_id' => NULL,
 'field' => array(),
 'display_settings' => array(),
 'langcode' => NULL,
 'path' => NULL,
 'title' => NULL,
),
 'path' => drupal_get_path('module', 'colorbox_file'),
 'file' => 'colorbox_file.theme.inc',
),
);
}

 theme_colorbox_
file colorbox_file_field_
formatter_view
theme_colorbox_file
theme_colorbox_file
```

**13.**    'colorbox\_file\_caption' => NULL                  'title' => NULL  
colorbox\_file\_theme

**14.**

## colorbox\_file\_field\_formatter\_view

```

the foreach colorbox_file_field_formatter_view

foreach (element_children($build) as $fid) {
 $colorbox_caption_var_name = 'colorbox_file_' .
 $build[$fid]['#bundle'] . '_caption_field_name';
//added for chapter 7

 $colorbox_caption_field_name =
 variable_get($colorbox_caption_var_name);
//added for chapter 7

 $colorbox_field_caption_value = isset($build[$fid]['#file']
 ->{$colorbox_caption_field_name}['und'][0]) ?
 $build[$fid]['#file']->
 {$colorbox_caption_field_name}['und'][0]['value'] :
 NULL;
//added for chapter 7

$element[$fid] = array(
 '#theme' => 'colorbox_file',
 '#item' => $build[$fid]['file'],
 '#entity_id' => $id,
 '#field' => $field,
 '#display_settings' => $display['settings'],
 '#langcode' => $langcode,
 '#path' => 'colorbox_file/' . $fid . '/' .
 $display['settings']['colorbox_view_mode'] . '/' .
 $langcode,
//chapter 7 note: this is where Media is being added as the
//title attribute
 '#title' => isset($instances['label']) ? $instances['label'] :
 NULL,
 '#colorbox_file_caption' =>
 $colorbox_field_caption_value,//added for chapter 7
);
}

```

```
$build[$fid]['#file']-
>{$colorbox_caption_field_name}['und'][0]
colorbox_file_caption
 null
 ['und'][0]
```

```
15. colorboxfile.theme.inc $caption =
$variables['title']; switch
//added the following switch for chapter 7
switch ($settings['colorbox_caption']) {
 case 'title':
 $caption = $variables['title'];
 break;
 case 'mediafield':
 $caption = $variables['colorbox_file_caption'];
 break;
 default:
 $caption = '';
}

$caption
$settings['colorbox_caption']
$settings display_
settings colorbox_file_field_formatter_
view $settings = $variables['display_settings'];
display_settings
colorbox_file_field_formatter_settings_form
colorbox_caption $caption
```

```
16. if ($display['type'] == 'colorbox_file') { block
in the colorbox_file_field_formatter_settings_form

$caption = array(
 'title' => t('Title text'),
 'mediafield' => t('File Type text field'),
 'none' => t('None'),
);
$element['colorbox_caption'] = array(
 '#title' => t('Caption'),
```

```

'#type' => 'select',
'#default_value' => 'title',
'#options' => $caption,
'#description' => t('Title will use the label of your Media
field and File Type text field will use the value of a
specified text field for the file type being displayed.'),
);

```

```

$caption

hook_theme
 colorbox_caption
hook_field_formatter_info

```

### **17. colorbox\_file\_field\_formatter\_info**

```
'colorbox_caption' => 'title',
```

### **18.**

```

colorbox_file_field_formatter_
settings_summary if ($display['type'] ==
'colorbox_file') { block of code
$caption = array(
 'title' => t('Title text'),
 'mediafield' => t('File Type text field'),
 'none' => t('None'),
);
if (isset($settings['colorbox_caption'])) {
 $summary[] = t('Colorbox caption: @type', array('@type' =>
$caption[$settings['colorbox_caption']]));
}

```

| Caption                              | Image file type |
|--------------------------------------|-----------------|
| <b>Use field as Colorbox caption</b> |                 |

19.

Caption

Use field as Colorbox caption

Image file type

Save settings

The screenshot shows a configuration interface for a 'COLORBOX CAPTION FIELD'. It includes a checkbox labeled 'Set field to be used as the Colorbox caption.' with the option 'Use field as Colorbox caption' checked. Below this is a section for 'Caption microdata mapping' which states 'No itemtype has been defined for Image. Def...'. It also contains a 'Field property(s)' input field and a note about comma-separated lists. At the bottom is a 'Save settings' button with a blue arrow pointing to it from the right.

20.

types

Structure

manage display

Admin

Content

Media

Colorbox caption

Title text

colorbox\_file\_field\_formatter\_info

The screenshot shows a configuration interface for 'colorbox\_file\_field\_formatter\_info'. It displays several settings: 'File view mode: Preview', 'Colorbox view mode: Original', 'Dimensions: 800x600', 'Colorbox gallery type: Per post gallery', and 'Colorbox caption: Title text'. A red arrow points to the 'Title text' setting, and another red arrow points to a gear icon at the top right of the form.

21.

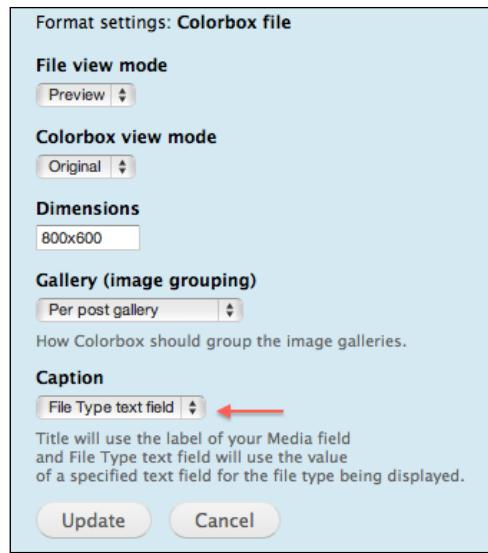
Colorbox caption

formatter settings

Format settings

Caption select list

colorbox\_file\_field\_formatter\_settings\_form function



| 22. | File Type text field | Caption | Update                |
|-----|----------------------|---------|-----------------------|
|     |                      | Save    | Recipe MANAGE DISPLAY |

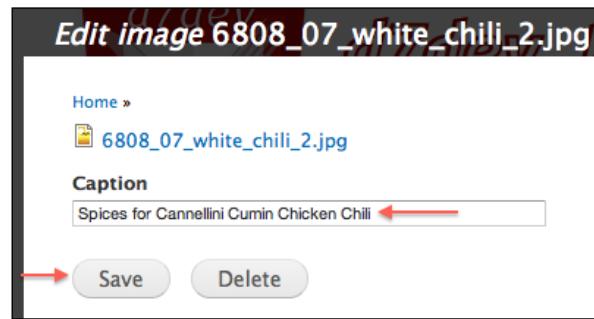
**File Type** text field      **Colorbox caption**  
**Caption field**      **Image file type**  
                            **Caption field**

23. Find content Shortcuts Files

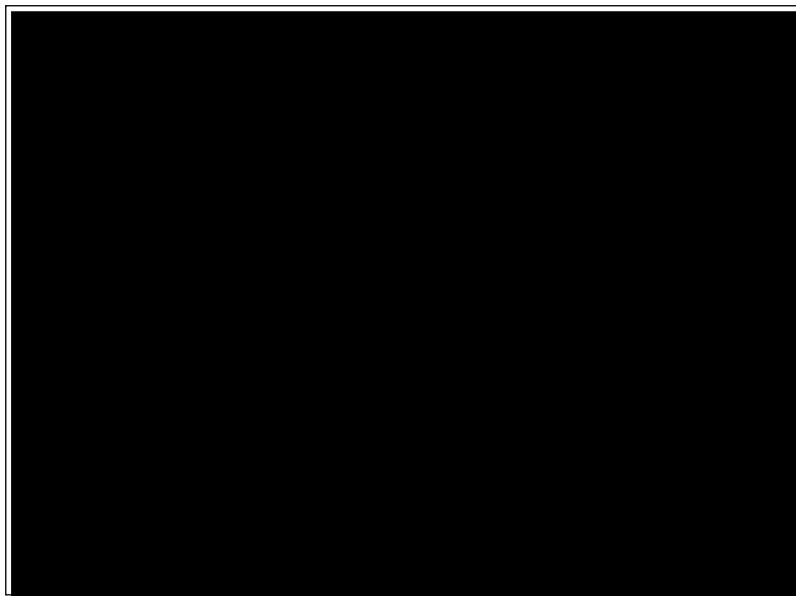
**24.** Edit **OPERATIONS**

6808\_07\_white\_chili\_2.jpg

- 25.** Spices for Cannellini Cumin Chicken Chili  
Caption **Save**



- 26.** Content **Find content** **Cannellini**  
Cumin Chicken Chili
- 27.**



## **What just happened?**

# **Rating recipes with Fivestar**

**Fivestar module**

## **Time for action – installing and configuring the Fivestar module**

**1.**

```
$ drush dl fivestar
Project fivestar (7.x-2.0-alpha1) downloaded to /Users/kurt/
htdocs/d7dev/sites/all/modules/fivestar. [success]
$ drush en fivestar
The following projects have unmet dependencies:
fivestar requires votingapi
Would you like to download them? (y/n): y
Project votingapi (7.x-2.4) downloaded to /Users/kurt/htdocs/
d7dev/sites/all/modules/votingapi. [success]
The following extensions will be enabled: votingapi, fivestar
Do you really want to continue? (y/n): y
fivestar was enabled successfully. [ok]
votingapi was enabled successfully. [ok]
```

**Voting API module**

2.

Structure      Admin  
Content types      manage fields

3.

Add new field      rating  
Add new field      field\_ prefix      Name  
rating      Fivestar Rating      Select a field type  
Stars (rated while viewing)      widget      Save  
Save field settings

4.

RECIPE SETTINGS      'If you have tried this recipe,  
please take the time to rate it.'      Help text      5  
Number of stars      Save settings

5.



**What just happened?**



## Time for action – creating a custom Fivestar widget

<http://drupal.org/node/234391>

1. `hook_fivestar_widgets`
2. `fivestar_fivestar_widgets`
3. `d7dev.module`      `sites/all/modules/custom/d7dev/fivestar_fivestar_widgets`  
`d7dev_image_default_styles`
4. `fivestar d7dev`  
`to drupal_get_path`

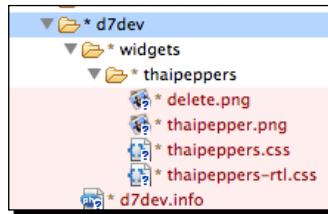
```
function d7dev_fivestar_widgets() {
 $widgets_directory = drupal_get_path('module', 'd7dev') . '/widgets';
 $files = file_scan_directory($widgets_directory, '/\.css$/');

 $widgets = array();
 foreach ($files as $file) {
 if (strpos($file->filename, '-rtl.css') === FALSE) {
 $widgets[$file->uri] = drupal_ucfirst(str_replace('-color',
'', $file->name));
 }
 }
 return $widgets;
}
```
5. `thaipeppers sites/all/modules/custom/d7dev/widgets`

## How Does it Taste – Getting Feedback

- 6.** thaipepper.png delete.png *Chapter 7 code download*

**7.** sites/all/modules/fivestar/widgets/flames thaipeppers  
thaipeppers.css thaipeppers-rtl.css



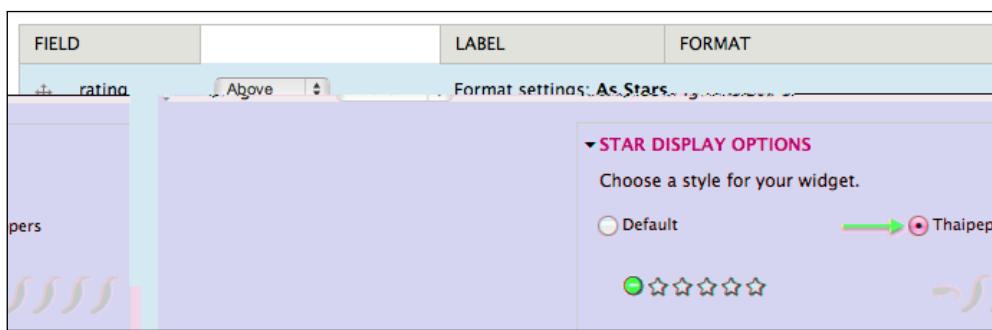
thaipeppers



**9.** thaipeppers  
Admin Structure  
Content types manage  
display

- ## 10. formatter settings

- |            |                                    |                             |
|------------|------------------------------------|-----------------------------|
| <b>11.</b> | <b>Fivestar formatter settings</b> | <b>STAR DISPLAY OPTIONS</b> |
|            |                                    | <b>Update</b>               |



| 12.         | rating |
|-------------|--------|
| description | Save   |

13.



# 8

## Recipe Lists and More with Views

*This chapter will give you an in-depth introduction to the **Views module**, and introduce some of the new Views 3 plugin architecture. We will dive into some more advanced features of Views available in the Views 3 UI, and include an introduction to taxonomy-based Views. We will then develop a Views 3 style plugin to display our new Recipes view as semantic tabs.*

*We also revisit the Colorbox File module as we prepare it for full project status on drupal.org.*

- ◆
- ◆
- ◆
- ◆

### Views revisited – advanced configuration

*Chapter 2 Custom Content Types and an Introduction to Module Development*

**Views edit**

## Random top rated recipe block

### Time for action – building a random top rated recipe block with views

- |                                                                |                  |                |
|----------------------------------------------------------------|------------------|----------------|
| <p>1.</p> <p>Views</p>                                         | <p>Structure</p> | <p>Admin</p>   |
| <p>2.</p> <p>Add new</p>                                       | Views            |                |
| <p>3.</p> <p>Random Top Rated Recipe</p>                       | <p>View name</p> |                |
| <p>4.</p> <p>Recipe type</p>                                   |                  |                |
| <p>5.</p> <p>Create a page checkbox</p>                        | Create a block   |                |
| <p>6.</p> <p>fields      Display format<br/>Add a new view</p> | 1                | Items per page |

**View name \***  
Random Top Rated Recipe Machine name: random\_top\_rated\_recipe\_ [\[Edit\]](#)

Description

Show Content of type Recipe sorted by Newest first

Create a page

Create a block

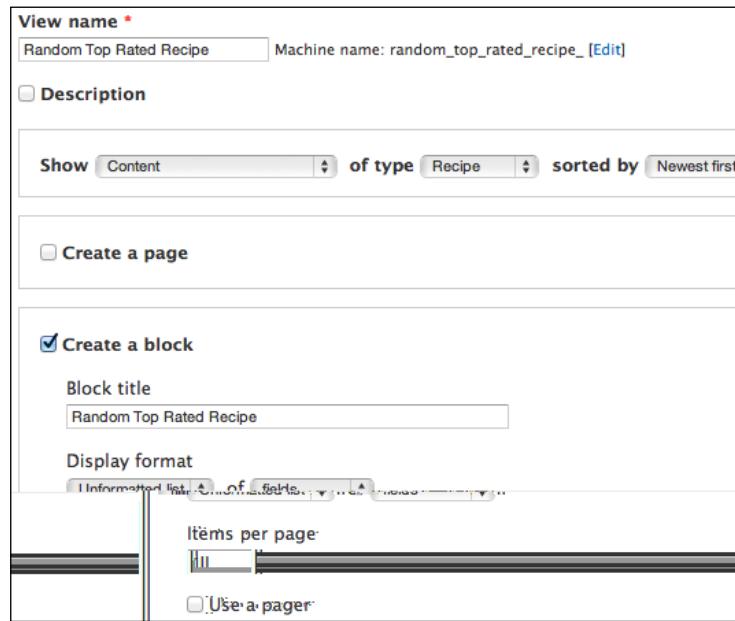
Block title  
Random Top Rated Recipe

Display format

Information list of fields

Items per page:  
3

Use a pager



**7.** Continue & edit

- Title
- 8.** add FIELDS Filter by Content  
Content: image Content rating  
Add and configure fields
- 9.** For the Configure field image Create a label  
square\_thumbnail Image style Apply  
(all displays)
- 10.** For the Configure field rating Create a label  
STAR DISPLAY OPTIONS Thaipeppers  
Apply (all displays)
- 11.** Post date (desc)  
Remove
- 12.** add SORT CRITERIA Global Filter  
the Global: Random Add and configure sort criteria
- 13.** Configure sort criterion  
Apply (all displays)
- FILTER CRITERIA
- 14.** FILTER CRITERIA rating Search  
Content: rating field\_rating:rating d and  
configure filter criteria

**15.**      **Configure filter criterion**                  **Is greater than**                  **Operator**  
3            **Value**                                          **Apply (all displays)**

**16.**

The screenshot shows the configuration interface for a view named 'Random Top Rated Recipe'. The left sidebar contains sections for TITLE, FORMAT, FIELDS, FILTER CRITERIA, and SORT CRITERIA. The right sidebar contains sections for BLOCK SETTINGS, HEADER, FOOTER, and PAGER. Key settings include:

- TITLE:** Random Top Rated Recipe
- FORMAT:** Unformatted list
- FIELDS:** Content: Title, Content: image, Content: rating
- FILTER CRITERIA:** Content: Published (Yes), Content: Type (= Recipe), Content: rating:rating (> 3)
- SORT CRITERIA:** Global: Random (asc)
- BLOCK SETTINGS:** Block name: None, Access: Permission | View published content
- PAGER:** Use pager: Display a specified number of items (1 item), More link: No

**17.**      **Save**                                                  **Random Top Rated Recipe**

**18.**      **Structure**      **Admin**                          **Blocks**

**19.**                                                                  **Blocks configuration**  
**configure**                                                          **View: Random Top Rated Recipe**

**20.**      **Top Recipe**      **Block title**                  **Sidebar Second**                          **REGIONS**  
**SETTINGS**                                                          **D7Dev Theme**

**21.**      **Pages**                  **Only the listed pages**      <front>                  **Show**  
**block on specific pages**                                                  **Save block**

22.

Admin

The screenshot shows a web application interface. At the top left, there are links for 'Logout' and 'Admin'. The main content area features a red header with the title 'Cannellini Cumin Chicken Chili'. Below the title is a description: 'This spicy, creamy white chili is just the ticket on those first cool days of Fall.' There are two buttons: 'comment' and 'add new comment'. To the right of the main content, there is a sidebar with a red header 'Add Recipe' and a section titled 'Top Recipe' featuring 'Cannellini Cumin Chicken Chili' with a small image of the dish. Below this is another image of a purple bowl containing a purple-colored sauce. A rating section shows five yellow stars followed by the text 'Average: 5 (1 vote)'. At the bottom left of the main content area, there is a link 'add new comment'.

***What just happened?***

## Taxonomy-based View with tabs

Taxonomy

Taxonomy module

cuisine

## Time for action – creating a cuisine vocabulary to organize recipes

1. **Structure Admin**  
**Taxonomy**
2. **Taxonomy configuration Add vocabulary**
3. **Type of Cuisine Name Save**
4. **add terms Type of Cuisine**

| VOCABULARY NAME | OPERATIONS                                                                           |
|-----------------|--------------------------------------------------------------------------------------|
| Tags            | <a href="#">edit vocabulary</a> <a href="#">list terms</a> <a href="#">add terms</a> |
| Type of Cuisine | <a href="#">edit vocabulary</a> <a href="#">list terms</a> <a href="#">add terms</a> |
5. **American Name Save**
6. **Asian Thai**
7. **Structure Admin Content types**  
**manage fields**
8. **Add new field recipeCuisine LABEL**  
**recipe\_cuisine NAME** **Term reference FIELD** **Select**  
**list WIDGET** **Save**

| LABEL         | NAME                     | FIELD                  | WIDGET       |
|---------------|--------------------------|------------------------|--------------|
| Add new field | field_recipeCuisin       | Term reference         | Select list  |
| Label         | Field name (a-z, 0-9, _) | Type of data to store. | Form element |
9. **FIELD SETTINGS Types of Cuisine Vocabulary**  
the **Save field settings**

|            |                                                      |                                                                                    |                                                                     |
|------------|------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>10.</b> | <b>EDIT</b><br>recipeCuisine<br>schema.org/Recipe    | <b>Unlimited</b><br><b>Field property(s)</b><br>microdata                          | <b>Number of values</b><br><a href="http://">http://</a>            |
|            |                                                      | <b>Save settings</b>                                                               |                                                                     |
| <b>11.</b> | <b>Find content</b><br><br>American<br>Asian Chicken | <b>Shortcuts</b><br><br>Save<br>Cashew Chicken with Edamame<br>Asian Awesome Sauce | <b>edit</b><br><b>recipeCuisine</b><br><br>Thai Asian<br>Thai Basil |

## **What just happened?**

### **Time for action – creating a Recipes by cuisine type Views block**

- 1.** **Structure**  
the **Add new view**
- 2.** **Recipes by Cuisine**  
Taxonomy terms **Show** **View name**  
type Type of Cuisine of
- 3.**
- 4.** **Create a page** **Create a block**

5.  
edit

Continue &

Name

FIELDS

Content

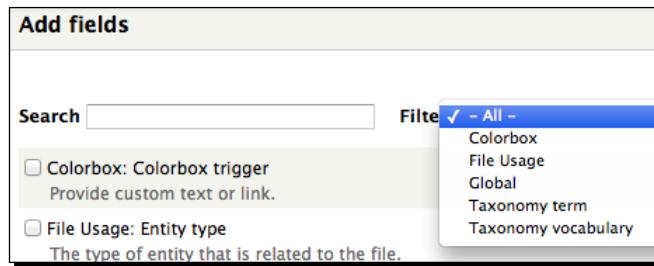
RELATIONSHIPS

Add fields

Search  Filter  - All -

Colorbox: Colorbox trigger  
Provide custom text or link.

File Usage: Entity type  
The type of entity that is related to the file.



6. add RELATIONSHIPS Taxonomy term: Content using  
recipeCuisine Add and configure relationships

7. Apply (all displays)

8. FIELDS add Add and configure  
title Search  
fields Relationship

Configure field: Content: Title

For All displays

The content title.

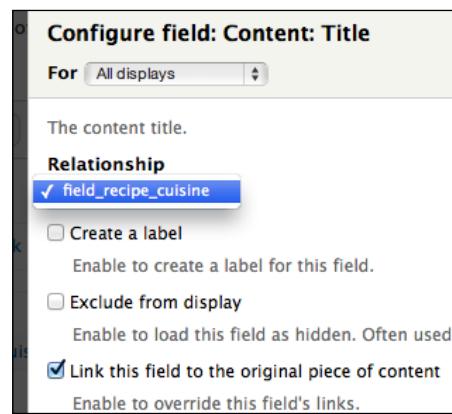
**Relationship**

field\_recipe\_cuisine

Create a label  
Enable to create a label for this field.

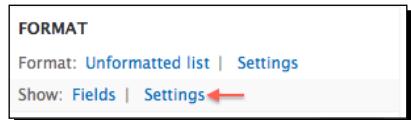
Exclude from display  
Enable to load this field as hidden. Often used

Link this field to the original piece of content  
Enable to override this field's links.



9. Create a label  
Link this field...  
**Apply (all displays)**

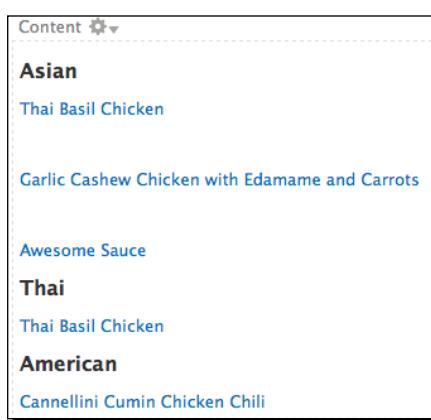
10. **FORMAT** **Settings** **Format**  
Taxonomy term: Name Grouping



11. **FIELDS**  
Taxonomy term: Name Exclude from display  
the Link this field... Apply (add displays)

12. **add** **SORT CRITERIA** **date** **Search**  
Content: Post date Add and configure sort  
criteria

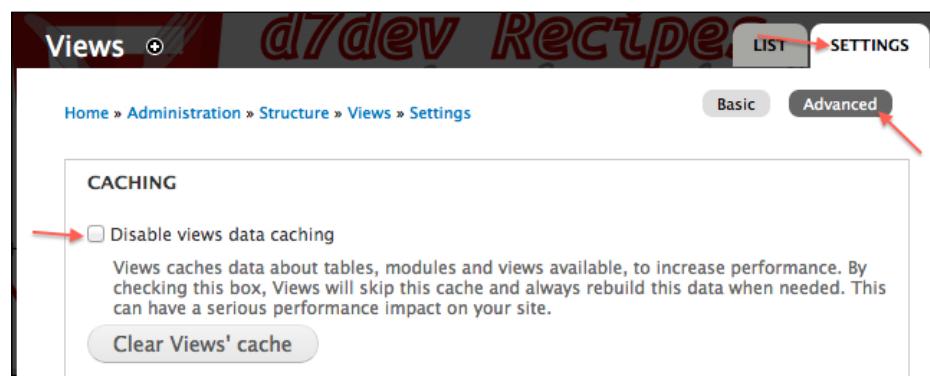
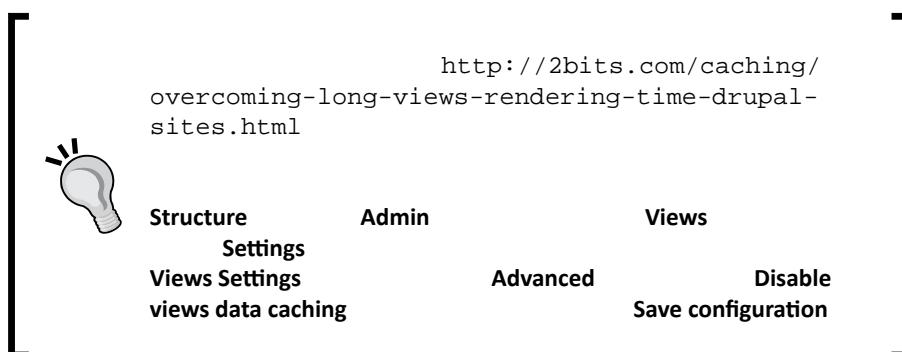
13. Sort descending **Apply**  
(all displays)



14. **Save**

## What just happened?

Thai or Asian                    American  
  
http://drupal.org/project/views\_field\_view                    Global Views



## Time for action – installing and using the Views Field View module for our Recipe by Cuisine Type View

### 1. View Field View

### 2.

```
$ drush dl views_field_view
Project views_field_view (7.x-1.0-rc1) downloaded to /Users/kurt/
htdocs/d7dev/sites/all/modules/views_field_view. [success]
$ drush en views_field_view
The following extensions will be enabled: views_field_view
Do you really want to continue? (y/n): y
views_field_view was enabled successfully. [ok]
```

Global: View

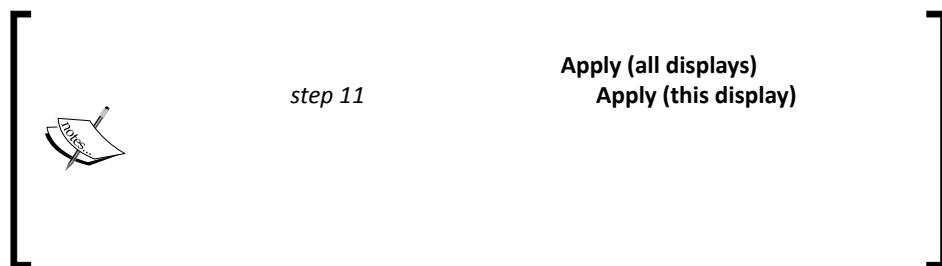
Global: View

### Views Field View

3. Structure edit Admin Views

4. Add Page

5. **Page 2** **Display name** Recipe Cuisine Page  
**Name** **Apply**
6. **add** **FIELDS** **Content** **Filter**  
**Content: rating** **Content: description**  
 Content: rating Content: description Add and  
 configure
7. **Create a label** **For**  
 to All displays (except overridden) STAR  
 DISPLAY OPTIONS Thaipeppers Expose this  
 Fivestar field...
8. **FIELDS add** **rearrange**
9. **Rearrange fields** **Content: rating**  
**Content: description** **Apply (all displays)**
10. **Content: image** **FIELDS** **small**  
**Image style** **Apply (all displays)**
11. **PAGER** **Full** **This page (override)**  
**For** **Display a specified number of items** **Apply (this**  
**display)**



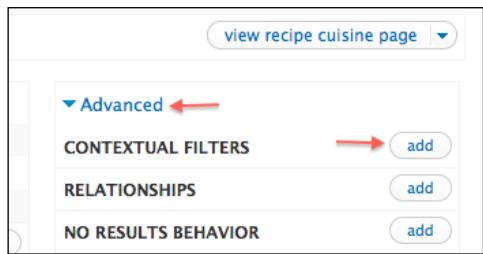
**12.**      Pager                          2      Items per page                          Apply (this  
display)

## Asian Cuisine Type

| 13.           | Page display | Path      |
|---------------|--------------|-----------|
| PAGE SETTINGS | Path:        | recipes/% |
| the Apply     | %            |           |

## Views Field

## **14.** Advanced CONTEXTUAL FILTERS



|            |               |        |                                               |                                      |
|------------|---------------|--------|-----------------------------------------------|--------------------------------------|
| <b>15.</b> | recipeCuisine | Search | Content: recipeCuisine (field_recipe_cuisine) | Add and configure contextual filters |
|------------|---------------|--------|-----------------------------------------------|--------------------------------------|

16.

|                                |                                                             |                           |
|--------------------------------|-------------------------------------------------------------|---------------------------|
| This page (override)           | Provide default value                                       | WHEN THE                  |
| FILTER VALUE IS NOT IN THE URL |                                                             | Taxonomy term ID from URL |
| Type                           | Load default filter from node page, that's good for related |                           |
| taxonomy blocks                |                                                             | Apply (this display)      |

Configure contextual filter: Content: recipeCuisine (field\_recipe\_cuisine)

For This page (override)

Appears in: node\_recipes

The contextual filter values is provided by the URL.

**WHEN THE FILTER VALUE IS NOT IN THE URL**

Display all results for the specified field ► EXCEPT

Provide default value

**Type**

Taxonomy term ID from URL

Load default filter from term page

Load default filter from node page, that's good for related taxonomy blocks

Limit terms by vocabulary

**Vocabularies**

Tags

Type of Cuisine

**Multiple-value handling**

Filter to items that share all terms

Filter to items that share any term

17.

Views list

18.

edit

19.

(field\_recipe\_cuisine) Content: Title

FIELDS

Remove

Term ID

20.

FIELDS

Taxonomy term

Taxonomy term:

Term ID

Add and configure field

**21.** Exclude from display  
the Apply (all displays)

**22.** FIELDS add Global Global: View  
Add and configure fields

**23.** Create a label VIEW SETTINGS  
recipe\_list View Recipe Cuisine Page Display  
Apply (all displays)

Recipe Cuisine Page  
Recipe List

**24.** REPLACEMENT PATTERNS [tid]  
Arguments Apply (all displays)

**Configure field: Global: View**

For All displays

Create a label  
Enable to create a label for this field.

Exclude from display  
Enable to load this field as hidden. Often used to group fields.

**VIEW SETTINGS**

**View**  
recipe\_list  
Select a view to embed.

**Display**  
Recipe Cuisine Page  
Select a view display to use.

**Arguments**  
[tid]  
Use a comma-separated list of each argument which should be available replacement tokens.

**REPLACEMENT PATTERNS**

The following tokens are available for this field. Note that these are tokens for this specific field only, and not fields that come after this field; if you need a field name, use the Arguments field above.

- [name] == Taxonomy term: Name
- [tid] == Taxonomy term: Term ID

**Asian**



**Thai Basil Chicken**



Average: 5 (1 vote)

A spicy, flavorful version of one of my favorite Thai dish. Don't try to get away with using anything but fresh Thai basil and Thai peppers.



**Garlic Cashew Chicken with Edamame and Carrots**



Average: 4 (1 vote)

A savory dish with an Asian flare... The cashews give this dish a nice crunch and a bit of sweetness., while the edamame really helps make it fill provide their own unique crunchy texture.



**Thai Basil Chicken**



SQL

GROUP BY

**25.**

**Advanced**

**Use aggregation  
Apply (all displays)**

**Aggregate**

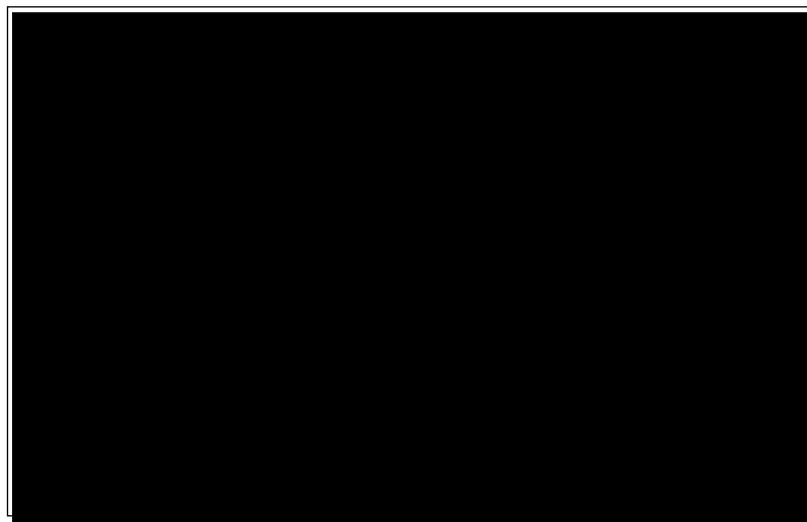
**Aggregation type**

Maximum

Select the aggregation function to use on this field.

Advanced Cancel

- 26.** (field\_recipe\_cuisine) Content: Post date (desc)  
Aggregation  
Maximum      Aggregation type      Apply
- 27.** SORT CRITERIA add  
the Content: Nid      nid      Search  
Add and configure sort criteria
- 28.** Count      Aggregation type      Apply and continue
- 29.**      Apply  
(add displays)
- 30.**



- 31.** Save

|            |                                  |                                 |                   |
|------------|----------------------------------|---------------------------------|-------------------|
| <b>32.</b> | Structure                        | Admin                           | Blocks            |
| <b>33.</b> |                                  | <b>View: Recipes by Cuisine</b> |                   |
|            | configure                        |                                 |                   |
| <b>34.</b> | <b>Sidebar Second</b><br><front> | D7Dev                           | <b>Save block</b> |
| <b>35.</b> | home<br>by Cuisine               | Admin                           | <b>Recipe</b>     |

**Recipes by Cuisine**

**Thai**



Thai Basil Chicken



Average: 5 (1 vote)

A spicy, flavorful version of one of my favorite Thai dish. Don't try to get away with using anything but fresh Thai basil and Thai peppers.

**Asian**



Thai Basil Chicken



Average: 5 (1 vote)

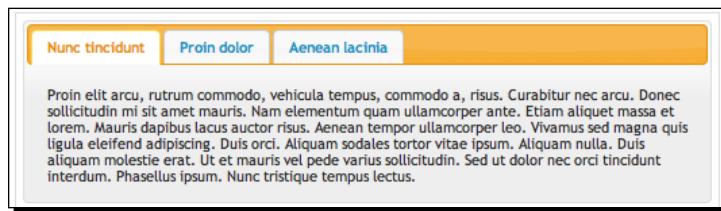
A spicy, flavorful version of one of my favorite Thai dish. Don't try to get away

***What just happened?***

## Tabbed Views display

### Recipes by Cuisine

<http://jqueryui.com/demos/tabs/>



```
<div id="tabs">

 Tab 1
 Tab 2
 Tab 3

 <div id="tabs-1">
 Tab Content 1
 </div>
 <div id="tabs-2">
 Tab Content 2
 </div>
 <div id="tabs-3">
 Tab Content 3
 </div>
</div>
```

### **Unformatted**

```
<div>
 <h3>Tab 1</h3>
 <div>
 Tab Content 1
 </div>
 <h3>Tab 2</h3>
 <div>
 Tab Content 2
 </div>
 <h3>Tab 3</h3>
 <div>
 Tab Content 3
 </div>
</div>
```



**Quick Tabs** <http://drupal.org/project/quicktabs>      **Views UI Tabs** <http://drupal.org/sandbox/recrit/1236298>

## Time for action – developing a Views style plugin for Semantic tabs

- ```
1.                                     sites/all/modules/custom

2.                                     custom                               views_
semantic_tabs

3.                                     views_semantic_tabs.

info

name = Views Semantic Tabs
description = Provides a Views style plugin for displaying grouped
fields in semantic tabs.
core = 7.x
package = Views

files[] = views_semantic_tabs_style_plugin.inc

; Module dependencies
dependencies[] = views

hook_views_api

views_semantic_tabs_style_plugin.
inc
```

4. views_semantic_tabs
views_semantic_tabs.module

```
<?php

/**
 * Implementation of hook_views_api().
 */
function views_semantic_tabs_views_api() {
    return array(
        'api' => 3,
    );
}

hook_views_plugins
```

MODULENAME.views.inc

5. views_semantic_tabs views_semantic_tabs.views.inc

```
<?php

/**
 * Implements hook_views_plugins
 */
function views_semantic_tabs_views_plugins() {
    $module_path = drupal_get_path('module', 'views_semantic_tabs');
    return array(
        'style' => array(
            // Views style plugin for semantic tabs.
            'views_semantic_tabs' => array(
                'title' => t('Semantic Tabs'),
                'help' => t('Displays grouped rows as semantic tabs with
jQuery.'),
                'handler' => 'views_semantic_tabs_style_plugin',
                'uses row plugin' => TRUE,
                'uses grouping' => TRUE,
                'uses options' => TRUE,
                'type' => 'normal',
                'theme' => 'views_semantic_tabs',
            ),
        ),
    );
}
```

hook_views_plugins

handler
style
uses...

6. views_semantic_tabs
views_semantic_tabs_style_plugin.inc

7. sites/all/modules/views/plugins
views_plugin_style_default.inc
views_semantic_tabs_style_plugin.inc

```
<?php
/**
 * @file
 * Contains the semantic tabs style plugin.
 */

/**
 * Semantic tabs style plugin to render rows decorated as tabs and
 * using the grouping field as the tab title.
 *
 * @ingroup views_style_plugins
 */
class views_semantic_tabs_style_plugin extends views_plugin_style
{

 /**
 * Options form
 */
function options_form(&$form, &$form_state) {
  parent::options_form($form, $form_state);
  $form['grouping']['#required'] = TRUE;
  $form['grouping']['#description'] = t('Grouping is required
for this style.');
}
}
```

views_plugin_style

Programming OOP

Object-Oriented

class extend



<http://api.drupal.org/api/drupal/includes-database--database.inc/group/database/7>

```
views_plugin_style

          of parent:: construct:
parent::options_form($form, $form_state)    parent:: construct

          $form['grouping']    required

views_semantic_tabs_views_plugin
          views_plugin_style
render
```

8.

options_form

```
/***
* Render the display in this style.
*/
function render() {
  $output = parent::render();

  /* set up JavaScript and CSS for tabs */
  drupal_add_js(drupal_get_path('module', 'views_semantic_tabs')
    . '/js/jquery.tabs.js');

  drupal_add_js(drupal_get_path('module', 'views_semantic_tabs')
    . '/js/views-semantic-tabs.js');
```

```

drupal_add_css(drupal_get_path('module', 'views_semantic_tabs')
  . '/css/tabs.css');

$view_settings['display'] = $this->view->current_display;
$view_settings['viewname'] = $this->view->name;

$views_semantic_tabs_id = 'views-semantic-tabs-' . $this->view->
  name . '-' . $this->view->current_display;

drupal_add_js(array('views_semantic_tabs' => array
  ($views_semantic_tabs_id => $view_settings)), 'setting');

$output = '<dl>' . $output . '</dl>';
return $output;
}

render

```

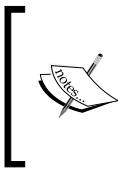
views-semantic-tabs.js jquery.tabs.js tabs.
css

<https://github.com/kmadel/lightweight-semantic-jquery-tabs/>
downloads jquery.tabs.js

```

<dl>
  <dt>Tab 1</dt>
  <dd>
    Tab Content 1
  </dd>
  <dt>Tab 2</dt>
  <dd>
    Tab Content 2
  </dd>
  <dt>Tab 3</dt>
  <dd>
    Tab Content 3
  </dd>
</dl>

```



[http://www.
maxdesign.com.au/articles/definition/](http://www.maxdesign.com.au/articles/definition/)
[http://arcnerva.com/blog/web-development/
semantic-html-definition-lists-dl-dt-dd/](http://arcnerva.com/blog/web-development/semantic-html-definition-lists-dl-dt-dd/)

9. lightweight-semantic-jquery-tabs
jquery.tabs.js js tabs.css
css views_semantic_tabs
views-semantic-tabs.js
\$output render \$output

views_semantic_tabs_views_plugins views_...
plugin_styles render

\$output .= theme(\$this->theme_functions(),
array(
'view' => \$this->view,
'options' => \$this->options,
'rows' => \$rows,
'title' => \$title)
);

\$this->theme_functions()
theme
views_semantic_tabs_views_plugins
render dl

10. views_semantic_tabs
theme views_semantic_tabs_views_...
plugins

11. theme
views-semantic-tabs.tpl.php
<?php
/**
 * @file views-semantic-tabs.tpl.php
 * Default simple view template to display a list of rows as
 semantic tabs.
 *
 * @ingroup views_templates
 */

```

?>
<?php if (!empty($title)): ?>
  <dt><a href="#"><?php print $title; ?></a></dt>
<?php endif; ?>
  <dd>
    <?php foreach ($rows as $id => $row): ?>
      <?php print $row; ?>
    <?php endforeach; ?>
  </dd>

$output      dl          render
            $title
dt           $rows
dd           jquery.tabs.js

views-semantic-tabs.js

12.          js
views-semantic-tabs.js
(function ($) {

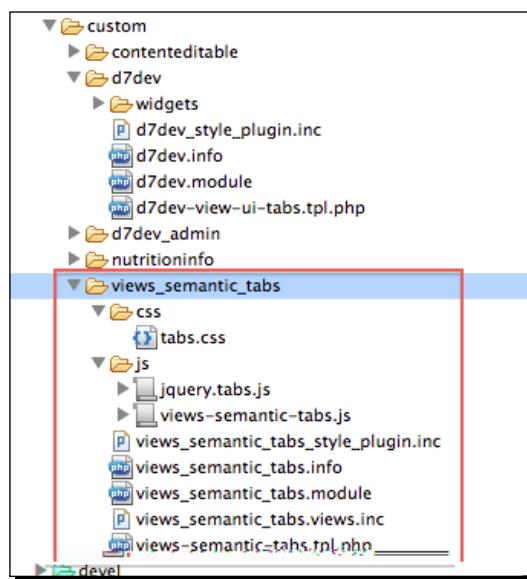
  Drupal.behaviors.views_semantic_tabs = {
    attach: function(context, settings) {
      $.each(settings.views_semantic_tabs, function(id) {
        var viewname = this.viewname;
        var display = this.display;

        /* the selectors we have to play with, will be unique per
         View instance*/
        var displaySelector = '.view-id-' + viewname +
          '.view-display-id-' + display + ' .view-content dl';

        $(displaySelector, context)
          .once('views_semantic_tabs').tabs();
      });
    }
  };
})(jQuery);

```

```
(function ($) { ... })(jQuery);  
  
Drupal.behaviors  
  
that the Document Object Model DOM  
jQuery .ready() Drupal.behaviors  
  
        settings  
        drupal_add_js  
  
Drupal.settings  
  
        tabs()  
  
views_semantic_tabs
```



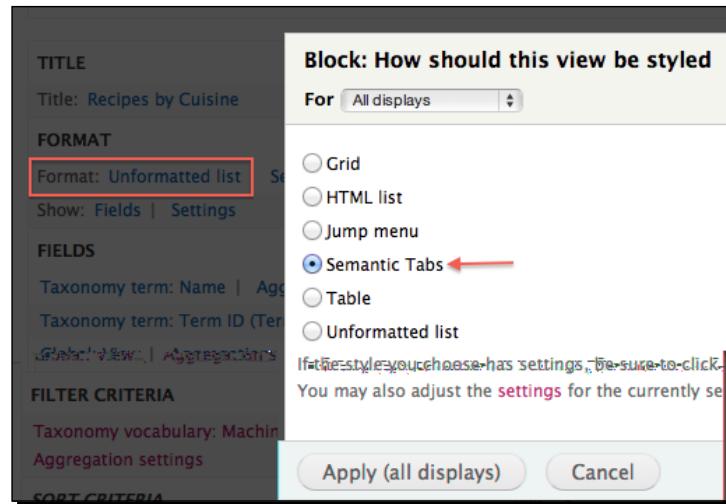
13.**Views****Modules****Admin****14.****Views Semantic Tabs****Views**

VIEWS

| ENABLED | NAME | VERSION | DESCRIPTION |
|-------------------------------------|---------------------|-------------|---|
| <input checked="" type="checkbox"/> | Views | 7.x-3.0-rc3 | Create customized lists and queries from your database. (Code Review)
Requires: Chaos tools (enabled)
Required by: d7dev (enabled), Media (enabled), Media Internet Sources (disabled), M
Semantic Tabs (disabled), Views UI (enabled) |
| <input checked="" type="checkbox"/> | Views Field View | 7.x-1.0-rc1 | Embeds a view inside a view as field (Code Review)
Requires: Views (enabled), Chaos tools (enabled) |
| <input checked="" type="checkbox"/> | Views Semantic Tabs | | Provides a Views style plugin for displaying grouped fields in semantic tabs.
Requires: Views (enabled), Chaos tools (enabled) |
| <input type="checkbox"/> | Views UI | 7.x-3.0- | Administrative interface to views. Without this module, you cannot create or |

15.**Save****16.****links****home****Admin****Recipes by Cuisine****contextual****Edit view****17.****Recipes by Cuisine****edit**

- 18.** **FORMAT** **Unformatted list** **Semantic Tabs**



- 19.** **Semantic Tabs** **Apply (all displays)**
- 20.** **Style options** **Taxonomy term: Name** **Grouping field**
 Apply (all displays) **Grouping field**



- 21.** **Save**

Recipes by Cuisine

Thai Asian American

 Thai Basil Chicken

Average: 5 (1 vote)

A spicy, flavorful version of one of my favorite Thai dish. Don't try to get away with using anything but fresh Thai basil and Thai chilies.

What just happened?

Time for another Recipe

Recipes by Cuisine



Promoting the Colorbox File module as a full project

[http://drupal.org/
coding-standards](http://drupal.org/coding-standards)

Coder

Introduction to the Coder module

Time for action – installing and using the Coder module

1.

2.

```
$ drush dl coder
Project coder (7.x-1.0) downloaded to /Users/kurt/htdocs/d7dev/
sites/all/modules/coder. [success]
Project coder contains 3 modules: coder_upgrade, coder_review,
coder.

$ drush en coder_review
The following extensions will be enabled: coder, coder_review
Do you really want to continue? (y/n): y
coder was enabled successfully. [ok]
coder_review was enabled successfully. [ok]
```

Code Review code_review

coder_review

3.

the Admin

Coder

Configuration
DEVELOPMENT

The screenshot shows a Drupal administrative interface for the 'Coder' module. The top navigation bar includes links for Home, Administration, Configuration, Development, Select, Default, Active, Core, All, Files, Patches, and Settings. Below this, a 'SELECTION FORM' section is titled 'REVIEWS'. It contains a list of checkboxes with the following options:

- Converting 4.6.x modules to 4.7.x
- Converting 4.7.x modules to 5.x
- Converting 5.x modules to 6.x
- Converting 6.x modules to 7.x
- Drupal Coding Standards (every developer should use)
- Drupal Commenting Standards (every developer should use)
- Drupal SQL Standards (new review, so use with caution)
- Drupal Security Checks (very basic, needs work, errs on the side of caution so may give false positives)
- Internationalization

4.

(most)

REVIEWS

minor

show warnings at or above the severity warning level

5.

SELECT SPECIFIC MODULES

colorbox_file

Run reviews

The screenshot shows a Drush Coder interface. At the top, a green checkmark icon indicates "Coder found 1 projects, 4 files, 18 minor warnings, 0 warnings were flagged to be ignored". Below this, instructions say "Use the Selection form to select options for this code review, or change the Default Settings and use". There are two buttons: "SELECTION FORM" (with a right-pointing arrow) and "SITES/ALL/MODULES/COLORBOX_FILE/COLORBOX_FILE MODULE" (with a downward-pointing arrow). Under the module section, it says "colorbox_file.module" and lists two minor warnings:

- Line 176: There should be no trailing spaces
- Line 197: There should be no trailing spaces

6.

colorbox_file.module colorbox_file.

theme.inc

7.

SELECTION FORM

Run reviews

What just happened?

Commit changes to Colorbox File sandbox



Time for action – committing Colorbox File module changes to Drupal Git Repository

1.

```
colorbox_
file

git status

$ git status
# On branch master
# Changes not staged for commit:
#   (use "git add <file>..." to update what will be committed)
#   (use "git checkout -- <file>..." to discard changes in working
#    directory)
#
#       modified:   colorbox_file.info
#       modified:   colorbox_file.module
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
#       README.txt
#       colorbox_file.js
#       colorbox_file.pages.inc
#       colorbox_file.theme.inc
no changes added to commit (use "git add" and/or "git commit -a")

git status
```

2.

```
$ git add -A
You have new mail in /var/mail/kurt
Kurt-MacBook-Pro:colorbox_file kurt$ git commit -m "Issue #1296186
by jide, 1291618 by oxyc, and changed and enhancements by kmadel:
Changes include support for all entity types, entity based fields
as colorbox caption."
```

```
[master ecd0b10] Issue #1296186 by jide, 1291618 by oxyc, and
changed and enhancements by kmadel: Changes include support for
all entity types, entity based fields as colorbox caption.

 6 files changed, 486 insertions(+), 183 deletions(-)
 create mode 100644 README.txt
 create mode 100644 colorbox_file.js
 rewrite colorbox_file.module (79%)
 create mode 100644 colorbox_file.pages.inc
 create mode 100644 colorbox_file.theme.inc
```

3.

```
$ git push -u origin master
...
To kmadel@git.drupal.org:sandbox/kmadel/1084984.git
  fa74c35..ecd0b10  master -> master
Branch master set up to track remote branch master from origin.
```

What just happened?

http://drupalcode.org/sandbox/kmadel/1084984.git

projects / sandbox/kmadel/1084984.git / summary

summary | shortlog | log | commit | commitdiff | tree

description For more information about this repository, visit the project page at http://drupal.org/sandbox/kmadel/1084984
owner drupal-git
last change Fri, 6 Jan 2012 02:09:36 +0000

[shortlog](#)

| | | | | |
|------------|------------|---|--------|---|
| 3 min ago | Kurt Madel | Issue #1296186 by jide, 1291618 by oxyc, and changed... | master | commit commitdiff tree snapshot |
| 2011-07-15 | Kurt Madel | remove .DS_Store | | commit commitdiff tree snapshot |

-m

commit

Summary

9

Rotating Banners and Project Promotion

In this chapter we are going to enhance the appearance of our d7dev site's front page with a rotating banner. We are going to introduce another Views style plugin that will provide an interactive rotating banner, so that we can highlight the images of the recipes on our d7dev site.

We are also going to revisit the Colorbox File module, and walk through the process of promoting a sandbox project to a full project on Drupal.org.

- ◆
- ◆
- ◆ .install
- ◆

Rotating banner with Views Slideshow

Views Slideshow module

views_slideshow_cycle views_slideshow

Time for action – installing the Views Slideshow module

1.

2.

```
$ drush dl views_slideshow
Project views_slideshow (7.x-3.0) downloaded to /Users/kurt/
htdocs/d7dev/sites/all/modules/views_slideshow.
[success]

Project views_slideshow contains 2 modules: views_slideshow_cycle,
views_slideshow.

$ drush en views_slideshow_cycle
The following projects have unmet dependencies:
views_slideshow_cycle requires libraries
Would you like to download them? (y/n): y
Project libraries (7.x-1.0) downloaded to /Users/kurt/htdocs/
d7dev/sites/all/modules/libraries. [success]

The following extensions will be enabled: libraries, views_
slideshow, views_slideshow_cycle
Do you really want to continue? (y/n): y
libraries was enabled successfully. [ok]
views_slideshow was enabled successfully. [ok]
views_slideshow_cycle was enabled successfully. [ok]
```

What just happened?

```
views_slideshow  
views_slideshow_cycle  
views_slideshow_cycle  
views_slideshow  
libraries  
module http://drupal.org/project/libraries
```

Libraries API

Custom Drush commands

*Chapter 6 Adding Media to
our Site*

```
sites/all/libraries/colorbox  
  
sites/all/libraries/jquery.  
cycle
```

**Time for action – creating a custom Drush command to install
the jQuery Cycle plugin**

1.

3. views_slideshow.drush.inc

```
<?php

/**
 * @file
 * drush integration for views_slideshow.
 */

/**
 * The jQuery Cycle plugin URI.
 */
define('JQUERY_CYCLE_DOWNLOAD_URI',
  'https://github.com/downloads/malsup/cycle/jquery
  .cycle.all.latest.js');
```

4. hook_drush_command to views_slideshow_drush_command \$items

```
function views_slideshow_drush_command() {
  $items = array();

  // the key in the $items array is the name of the command.
  $items['jquery-cycle-plugin'] = array(
    'callback' => 'drush_jquery_cycle_plugin',
    'description' => dt("Downloads the jQuery Cycle plugin."),
    'bootstrap' => DRUSH_BOOTSTRAP_DRUSH, // No bootstrap.
    'arguments' => array(
      'path' => dt('Optional. A path where to install the jQuery
        Cycle plugin. If omitted Drush will use the default
        location.'),
    ),
    'aliases' => array('jcycle'),
  );

  return $items;
}
```

5. hook_drush_help

```
function views_slideshow_drush_help($section) {
  switch ($section) {
    case 'drush:jquery-cycle-plugin':
      return dt("Downloads the jQuery Cycle plugin from https://github.com/downloads/malsup/cycle, default location is sites/all/libraries.");
    }
}
```

6. drush_colorbox_post_pm_enable

7. JQUERY_CYCLE_DOWNLOAD_URI

```
define('JQUERY_CYCLE_FILE_NAME', 'jquery.cycle.all.js');
```

8. drush_colorbox_plugin drush_jquery_cycle_plugin

```
/***
 * Command to download the jQuery Cycle plugin.
 */
function drush_jquery_cycle_plugin() {
  $args = func_get_args();
  if (!empty($args[0])) {
    $path = $args[0];
  }
  else {
    $path = 'sites/all/libraries/jquery.cycle';
  }

  // Create the path if it does not exist.
  if (!is_dir($path)) {
    drush_op('mkdir', $path);
    drush_log(dt('Directory @path was created', array('@path' => $path)), 'notice');
  }

  // Set the directory to the download location.
  $olddir = getcwd();
  chdir($path);
```

```
$filename = basename(JQUERY_CYCLE_DOWNLOAD_URI);

// Remove any existing jQuery Cycle plugin file
if (is_file(JQUERY_CYCLE_FILE_NAME)) {
    drush_op('unlink', JQUERY_CYCLE_FILE_NAME);
    drush_log(dt('An existing jQuery Cycle plugin was overwritten
        at @path', array('@path' => $path)), 'notice');
}

// Download the jQuery Cycle JavaScript file
if (!drush_shell_exec('wget ' . JQUERY_CYCLE_DOWNLOAD_URI)) {
    drush_shell_exec('curl -O ' . JQUERY_CYCLE_DOWNLOAD_URI);
}

//rename the jQuery Cycle JavaScript file to jquery.cycle.all.js
drush_op('rename', $filename, JQUERY_CYCLE_FILE_NAME);

// Set working directory back to the previous working directory.
chdir($olddir);

if (is_dir($path)) {
    drush_log(dt('jQuery Cycle plugin has been downloaded to @
        path', array('@path' => $path)), 'success');
}
else {
    drush_log(dt('Drush was unable to download the jQuery Cycle
        plugin to @path', array('@path' => $path)), 'error');
}
}

$path
```

the **unzip**

COLORBOX_

DOWNLOAD_URI

9.

```
drush  
jquery_cycle_plugin
```

10.

```
$ drush jquery-cycle-plugin  
jQuery Cycle plugin has been downloaded to sites/all/libraries/  
jquery.cycle [success]
```

What just happened?

Creating a rotating banner with Views Slideshow

Time for action – creating a banner using the Views Slideshow module

1.

Structure

Admin

Views

2.

Add new view

Views

3.

Front Banner

View name

Recipe

Create a page

Create a block

4. **Slideshow of fields** **Display format** **Add new**
view **Continue &**
edit

View name *
Front Banner Machine name: front_banner [Edit]

Description

Show Content of type Recipe sorted by Newest first

Create a page

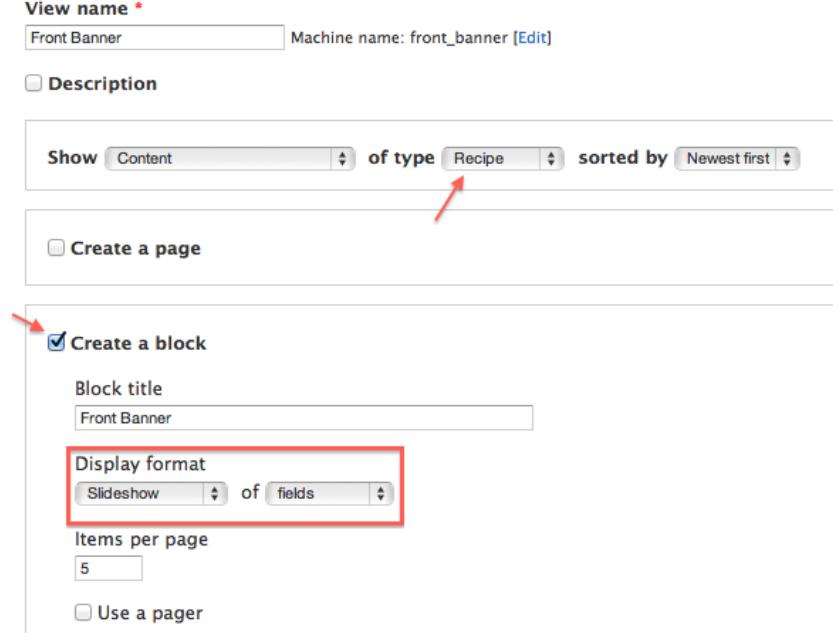
Create a block

Block title Front Banner

Display format **Slideshow of fields**

Items per page 5

Use a pager

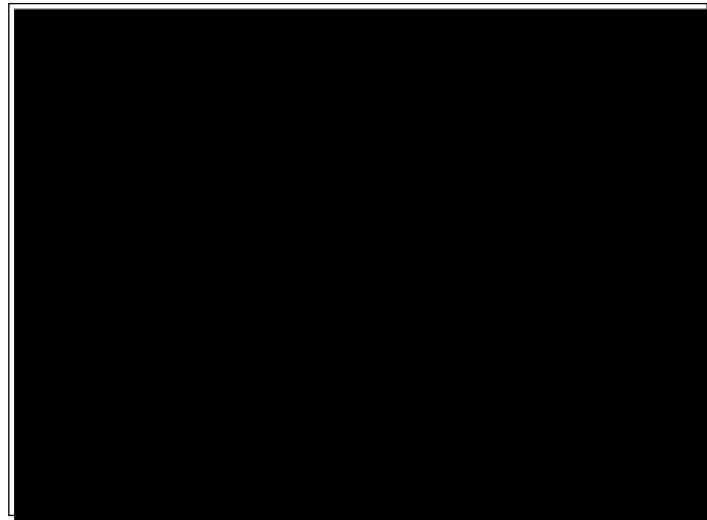


Content:

Title

5. **add** **FIELDS** **Content: image** **Add and**
configure fields

6. **Configure field** **Create a label** **large**
Image style **Apply (all displays)**
Auto preview **Views edit**



Content: image

7. add **FILTER CRITERIA** **Content: image**
(field_image:fid) **Add and configure filter criteria**

This is an alias of Content: image (field_image:alt).

Content: image (field_image:fid)
Appears in: node:article, node:recipe. Also known as: Content: image (field_image:fid), Content: image (field_image:fid).

Content: Image (field_image:fid)
This is an alias of Content: image (field_image:fid).

Content: image (field_image:height)

Selected: Content: image (field_image:fid)

Add and configure filter criteria **Cancel**

| 8. | Filter criteria | Is not empty (NOT NULL) | Operator |
|----|-----------------|-------------------------|----------|
| | | Apply (all displays) | |

Content: Title

the Content: Title Content: image

9. FIELDS add rearrange

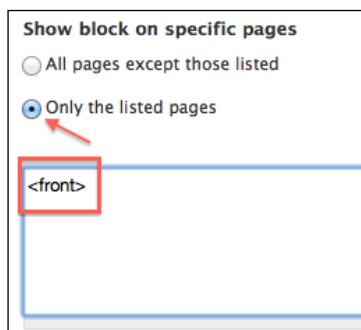


10. Content: Title Content: image
the Apply (all displays)

11. Save Structure Admin
Blocks

12. **View: Front Banner** configure

| | | |
|----------------------|--|-------------|
| 13. | <none> | Block title |
| Content listed pages | region to display the block for our D7Dev Theme
<front> | Only the |



14.

Save block

Front Banner

Blocks configuration

Main page content

View:

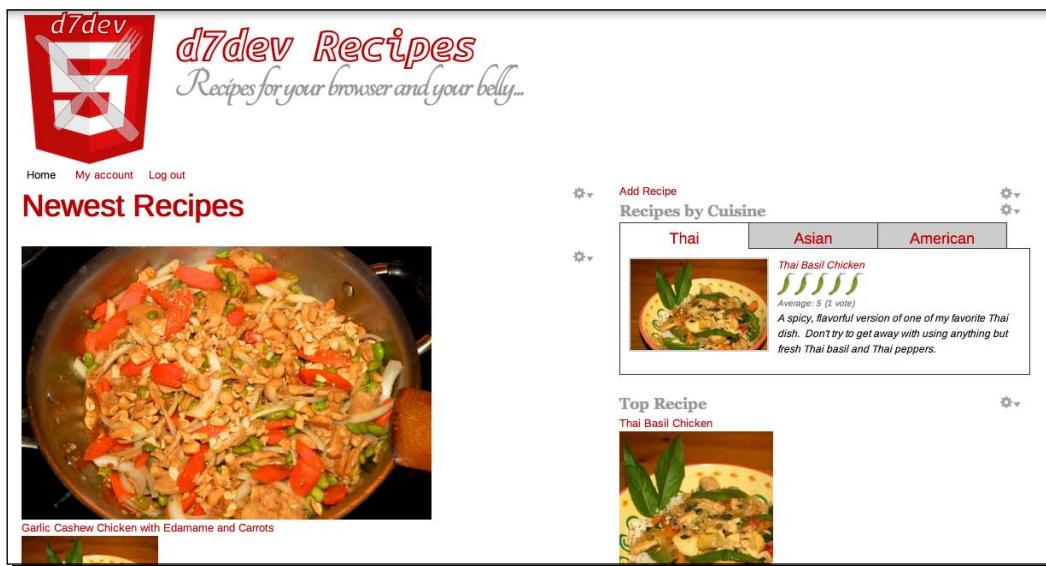
Content

Save blocks

* The changes to these blocks will not be saved until the *Save blocks* button is clicked.

| BLOCK | REGION |
|-----------------------|---------|
| Content | |
| + View: Front Banner* | Content |
| + Main page content | Content |

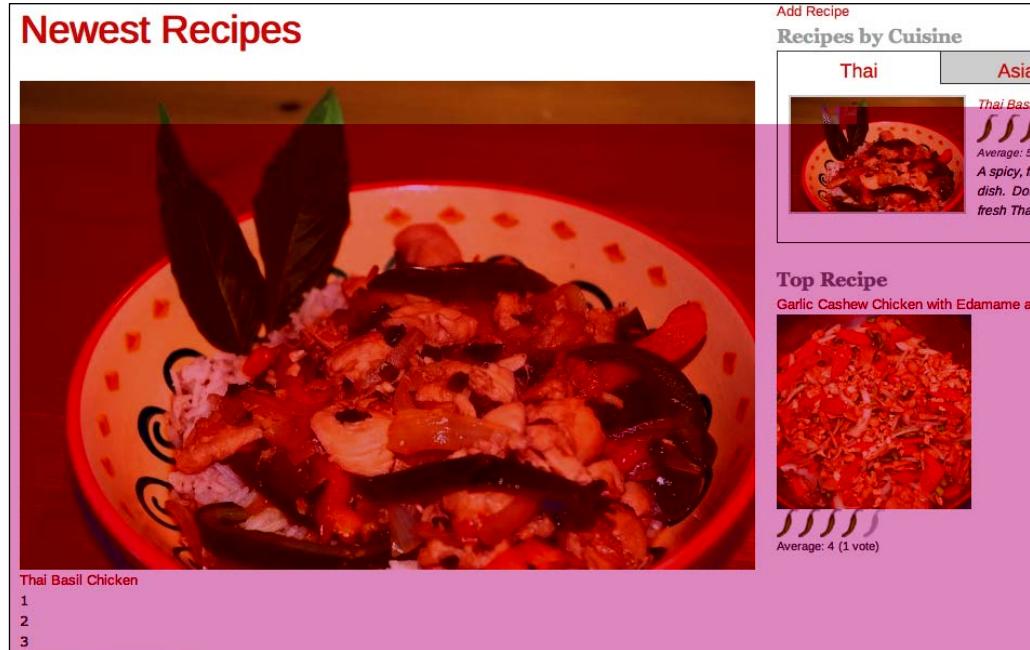
15.



What just happened?

Have a go hero – creating a new image style for the images in our rotating recipe banner

Chapter 6
front_banner
Content: image
Front
Banner



Enhance the appearance of our rotating banner with a pager and CSS

Time for action – updating the front banner view to include a slideshow pager

1.

Edit view



2.

FIELDS add
Global: View result counter
fields

global

Search

Add and configure

3.

Configure field
Exclude from display

Create a label

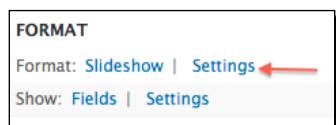
Apply (all displays)

1

4.

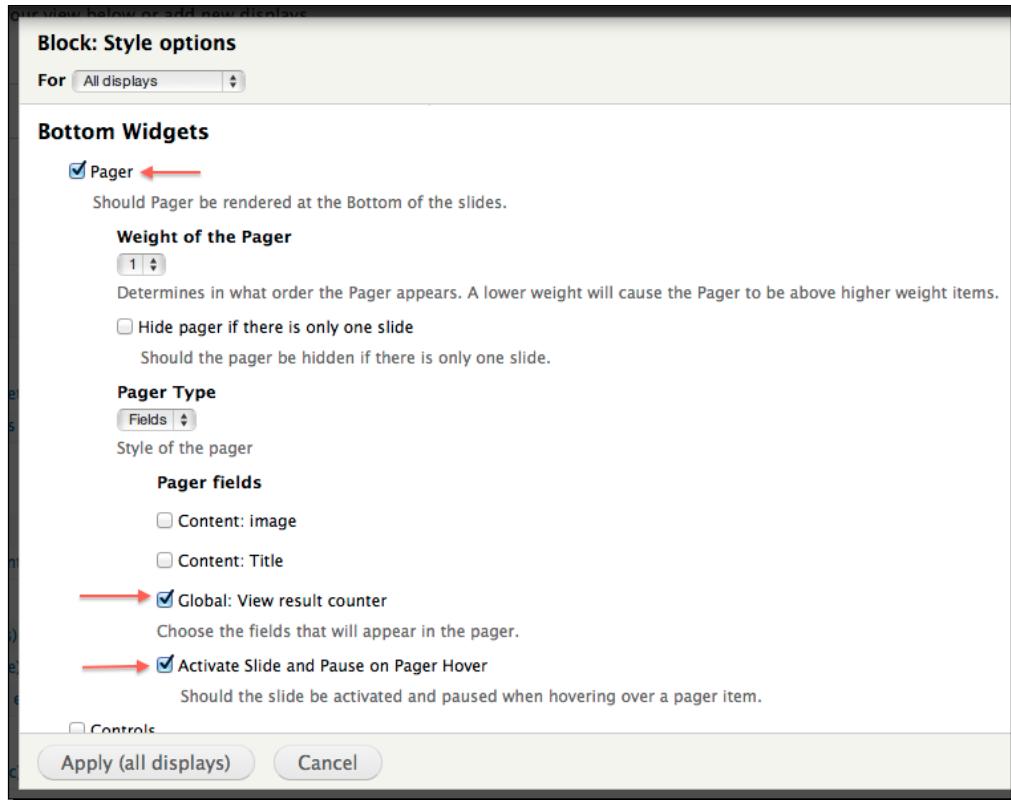
Settings

Slideshow

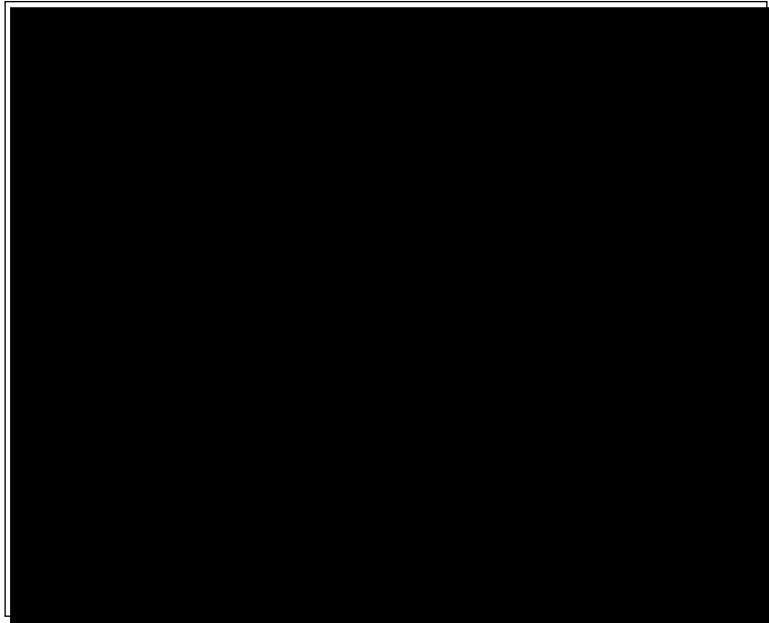


Style options

- 5.** **Bottom Widgets** **Pager**
 Pager **Global: View result counter**
 Apply (all displays)



- 6.** **Save**



7.

Inspect Element



8.

Elements

div

views-slideshow-

controls-bottom

The screenshot shows the browser's developer tools with the 'Elements' tab selected. A blue box highlights the 'views-slideshow-controls-bottom' element in the DOM tree. The element has a width of 680px and a height of 57px. The code snippet below shows the HTML structure:

```
<div id="views_slideshow_cycle_div_front_banner-block_1" class="views-slideshow-cycle-main-frame-row views_slideshow_cycle_slide views_slideshow_slide views-row-2 views_slideshow_cycle_hidden views-row-even" style="position: absolute; z-index: 4; top: 0px; left: 0px; display: block; width: 480px; height: 338px; opacity: 1; "></div>
<div id="views_slideshow_cycle_div_front_banner-block_2" class="views-slideshow-cycle-main-frame-row views_slideshow_cycle_slide views_slideshow_slide views-row-3 views_slideshow_cycle_hidden views-row-odd" style="position: absolute; top: 0px; left: 0px; width: 480px; height: 313px; z-index: 3; opacity: 0; display: none; "></div>
</div>
<div class="views-slideshow-controls-bottom clearfix">
  <div id="widget_pager_bottom_front_banner-block" class="views-slideshow-pager-fields widget_pager_widget_pager_bottom views_slideshow_pager_field views-slideshow-pager-field-processed"></div>
</div>
```



9.

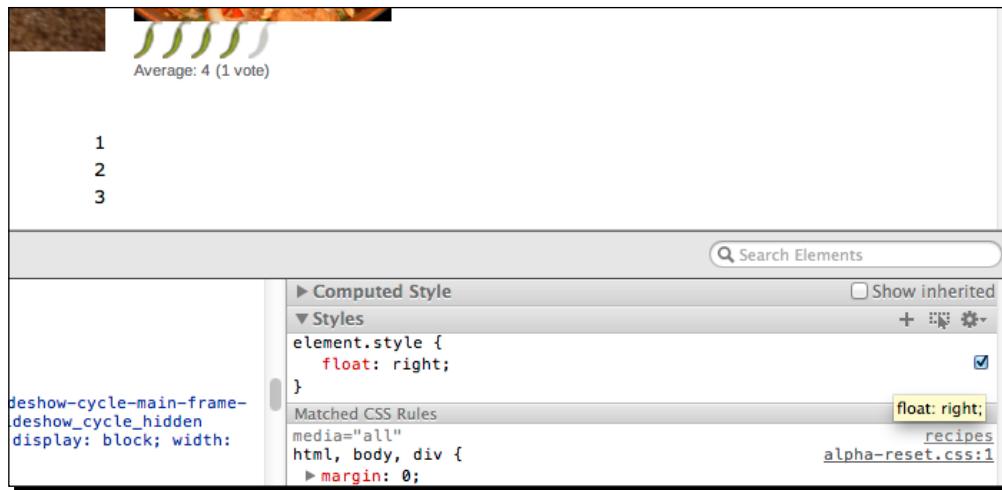
div

class views-slideshow-pager-fields

element.style

float: right;

Styles



10.

```
float: right  
position: relative;  
bottom: 40px;
```

11.

```
global.css  
themes/d7dev_theme/css
```

12.

```
/* Front Banner styles */  
div.views-slideshow-pager-fields{  
    float: right;  
    position: relative;  
    bottom: 44px;  
    width: 300px;  
    text-align: right;  
    z-index: 100;  
}
```

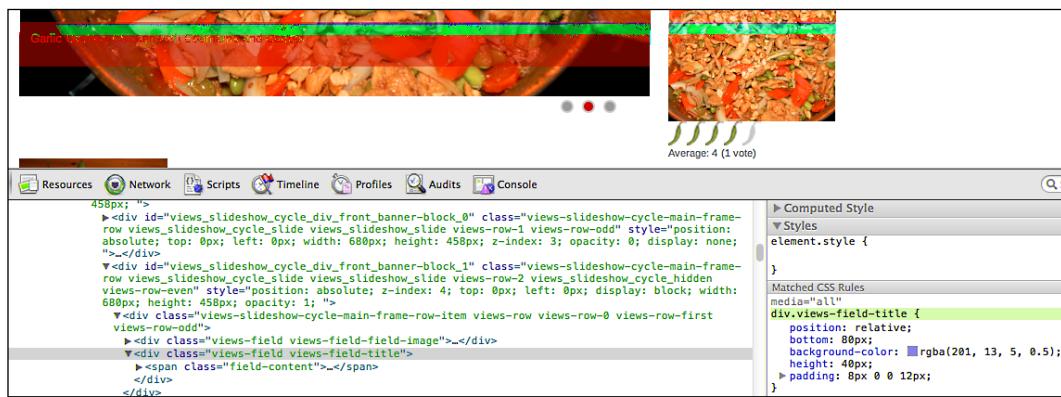
13.

```
views-slideshow-pager-fields div
div           views-slideshow-pager-field-item
global.css      div.views-slideshow-pager-field-
item
div.views-slideshow-pager-field-item{
    display: inline-block;
    background-color: #999;
    width: 10px;
    height: 10px;
    text-indent: -9999px;
    border: 2px solid #CCC;
    -moz-border-radius: 4px;
    border-radius: 8px;
    margin-left: 4px;
    cursor: pointer;
}
div.views-slideshow-pager-field-item:hover,
div.views-slideshow-pager-field-item.active{
    background-color: #BF0000;
}
```



14.**Inspect Element****15.**

| | | |
|----------------------------|--------|-------------------|
| div | anchor | views-field-title |
| | | global.css |
| field-title | | div.views- |
| views-field-title selector | | div. |

Matched CSS Rules**16.**

div.views-field-title

```

position: relative;
bottom: 80px;
background-color: rgba(201,13,5,0.5);
height: 40px;
padding: 8px 0 0 12px;
margin: 0 4px;

```

17.

global.css

div.views-field-title

```

div.views-field-field-image{
  border: 4px solid #CCC;
}

div.views-field-title {
  position: relative;

```

```
bottom: 80px;
background-color: rgba(201,13,5,0.5);
height: 40px;
padding: 8px 0 0 12px;
}

div.views-field-title a{
    font-size: 26px;
    color: #CCC;
    -webkit-text-fill-color: #CCC;
    -webkit-text-stroke-width: 1px;
    -webkit-text-stroke-color: #FFF;
}

div.views-field-title a:hover{
    color: #FFF;
    -webkit-text-fill-color: #FFF;
    text-decoration: none;
}
```

18.

19.

| | |
|------------------------|----------------------|
| bottom
44px to 70px | div.views-slideshow- |
| pager-fields | global.css |

20.

| Element | Elements | Inspect |
|-----------------------|-----------------------|---------|
| view-id-front_banner | | div |
| global.css | | . |
| div.views-field-title | .view-id-front_banner | |
| div.views-field-title | | |

21.

global.css

Newest Recipes

Add Recipe

Recipes by Cuisine

Thai Asian

Thai Basil Chicken

Average: 5 (1 vote)
A spicy, flavorful version of this dish. Don't try to get a fresh Thai basil and Thai lime.

Top Recipe

Cannellini Cumin Chicken Chili



What just happened?

Time for another recipe

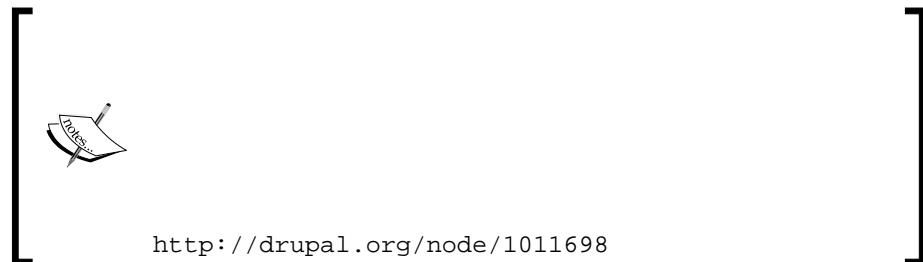


- ◆ name
- ◆ cuisineType
- ◆ description

- ◆ recipeYield
- ◆ prepTime
- ◆ cookTime
- ◆ ingredients
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -
 -

- ◆ instructions

Promoting a sandbox project to a full project



<http://drupal.org/node/1011698>

Chapter 6

variable_set

| | name The name of the variable. | |
|-------------------------------------|--|------------------------|
| <input type="checkbox"/> | additional_settings__active_tab_recipe | s:14:"edit-microdata"; |
| <input type="checkbox"/> | admin_theme | s:5:"seven"; |
| <input type="checkbox"/> | backup_migrate_destination_id | s:8:"download"; |
| <input type="checkbox"/> | backup_migrate_profile_id | s:7:"default"; |
| <input type="checkbox"/> | backup_migrate_source_id | s:2:"db"; |
| <input type="checkbox"/> | clean_url | s:1:"1"; |
| <input checked="" type="checkbox"/> | colorbox_file_image_caption_field_name | s:13:"field_caption"; |
| <input type="checkbox"/> | comment_anonymous_recipe | i:0; |
| <input type="checkbox"/> | comment_default_mode_recipe | i:1; |

hook_uninstall

Time for action – implementing hook_uninstall for the Colorbox File module

```
hook_uninstall                               .install
                                              http://api.drupal.org/api/drupal/modules--
system--system.api.php/function/hook_uninstall/7

1.                                                 the colorbox_file      d7dev/sites/
all/modules                                         colorbox_file.install

2.       colorbox_file.install

<?php

/**
 * @file
 * Uninstall function for the colorbox file module.
 */
```

```
/**  
 * Implements hook_uninstall().  
 */  
function colorbox_file_uninstall() {  
    //Remove all colorbox_file varialbes  
    db_delete('variable')->condition('name', 'colorbox_file_%',  
        'LIKE')->execute();  
}  
  
colorbox_file  
colorbox_file      db_delete  
colorbox_file_
```

db_delete http://api.drupal.org/
api/drupal/includes--database--database.inc/
function/db_delete/7



```
db_query("DELETE FROM {variable} WHERE name  
LIKE %s", "colorbox_file_%");
```

http://drupal.
org/project/sqlsrv, and the Oracle Database -
http://drupal.org/project/oracle

What just happened?

Time for action – uninstalling and renaming the Colorbox File module

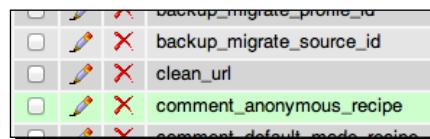
hook_uninstall

1.

```
$ drush dis colorbox_file
The following extensions will be disabled: colorbox_file
Do you really want to continue? (y/n): y
colorbox_file was disabled successfully.      [ok]
$ drush pm-uninstall colorbox_file
The following modules will be uninstalled: colorbox_file
Do you really want to continue? (y/n): y
colorbox_file was successfully uninstalled.      [ok]
```

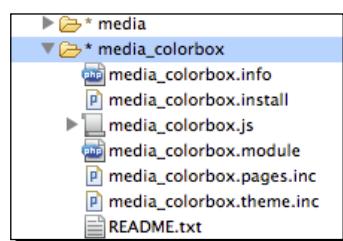
```
          colorbox_file           dis
                  pm-uninstall
colorbox_file_uninstall
```

colorbox_file_



2.

```
          colorbox_file           media_colorbox
                           media_colorbox
colorbox_file
```



3.

```
colorbox_file
```

```
media_colorbox
```

4.

```
media_colorbox
```

```
$ drush en media_colorbox
The following extensions will be enabled: media_colorbox
Do you really want to continue? (y/n): y
media_colorbox was enabled successfully. [ok]
```

5.

| | | |
|-------------------|---------------|------------|
| the Configuration | Admin | File types |
| the Media | manage fields | Image file |

6.

| | | |
|---------------|------------|------|
| MANAGE FIELDS | Image file | edit |
| Caption | | |

7.

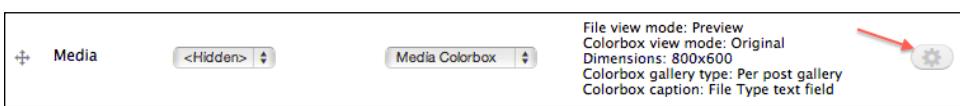
| | |
|-------------------------------|------------------------|
| Caption field edit | COLORBOX CAPTION FIELD |
| Use field as Colorbox caption | Save |
| settings | |

8.

| | | |
|-----------|----------------|---------|
| Structure | Admin | Content |
| types | manage display | |

9.

| | |
|-----------------|-----------------|
| MANAGE DISPLAY | Media |
| Colorbox FORMAT | format settings |

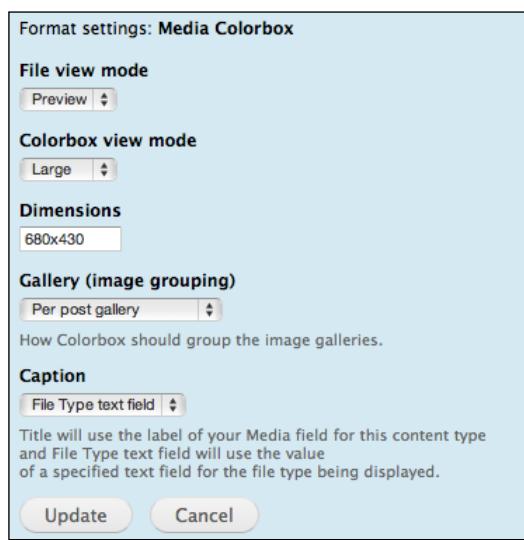


10.

Media Colorbox Format

Update

Save

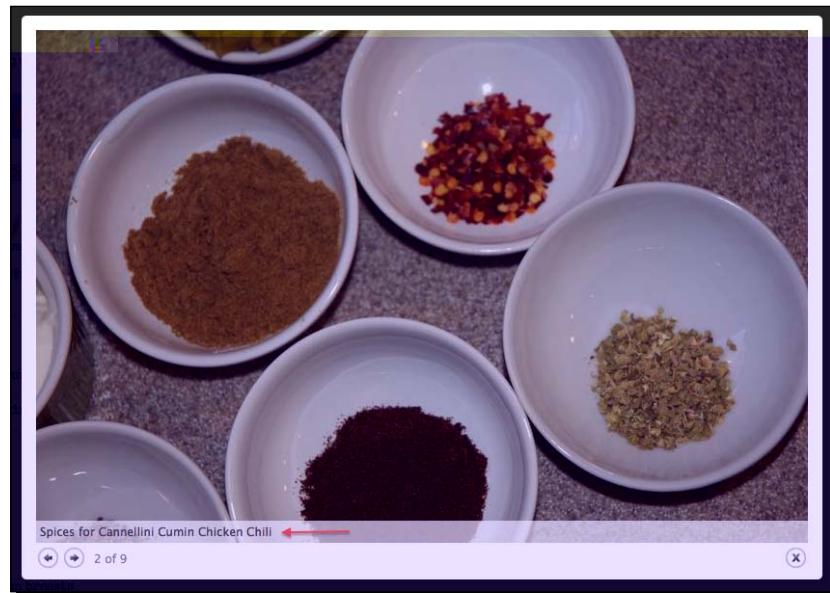


11.

Shortcuts

Find content

media



What just happened?

Time for action – promoting the Media Colorbox module to be a full project on Drupal.org

1.

```
git status                               media_colorbox
d7dev/sites/all/modules/media_colorbox

# On branch master

# Changes not staged for commit:
#   (use "git add/rm <file>..." to update what will be committed)
#   (use "git checkout -- <file>..." to discard changes in working
#    directory)
#
# modified:   README.txt
# deleted:   colorbox_file.info
# deleted:   colorbox_file.js
# deleted:   colorbox_file.module
# deleted:   colorbox_file.pages.inc
# deleted:   colorbox_file.theme.inc
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
# media_colorbox.info
# media_colorbox.install
# media_colorbox.js
# media_colorbox.module
# media_colorbox.pages.inc
# media_colorbox.theme.inc
```

2.

git

```
$ git add -A
$ git commit -m "renamed"
[master 99fc324] renamed
 9 files changed, 114 insertions(+), 93 deletions(-)
 delete mode 100644 colorbox_file.info
 delete mode 100644 colorbox_file.js
 create mode 100644 media_colorbox.info
 create mode 100644 media_colorbox.install
 create mode 100644 media_colorbox.js
 rename colorbox_file.module => media_colorbox.module (72%)
 rename colorbox_file.pages.inc => media_colorbox.pages.inc (73%)
 rename colorbox_file.theme.inc => media_colorbox.theme.inc (82%)
$ git push -u origin master
Counting objects: 11, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (9/9), done.
Writing objects: 100% (9/9), 5.04 KiB, done.
Total 9 (delta 1), reused 0 (delta 0)
To kmaDEL@git.drupal.org:sandbox/kmaDEL/1084984.git
 3baa11c..99fc324  master -> master
Branch master set up to track remote branch master from origin.
```

3.

kmaDEL's sandbox: Colorbox File

[View](#) [Version control](#) [Edit](#) [Maintainers](#)

This is a [sandbox project](#), which contains experimental code for development and testing purposes only. This is a [sandbox project](#), which contains experimental code for development and testing purposes only.

Experimental Project
This is a [sandbox project](#), which contains experimental code for development and testing purposes only.

[Visit the Version control tab for full directions.](#)

Integrates Colorbox with the Media module via a custom colorbox file formatter.

[Promote to full project](#)

4.

Promote to full project

5.

Promote

media_colorbox

Promote to full project

Colorbox File

View Version control **Edit** Maintainers
Project Issues **Promote**

You are about to promote the project *Colorbox File* to a full project. This action is not reversible.

I understand that this action cannot be undone and wish to proceed anyway
Please confirm that you understand the implications of promoting this project.

Short project name: *

media_colorbox

This will be used to generate a /project/<shortname>/ URL for your project. You may not edit this value after the project has been promoted.

Enable releases
Allow releases of this project with specific versions. This can be changed later.

Promote to full project

6.

Promote

Are you sure you want to promote *Colorbox File* from a
sandbox to a full project with the shortname
media_colorbox?

The project will use the shortname *media_colorbox* which can not be changed later. Furthermore, once a project is promoted, it can not be turned back into a sandbox.

Promote [Cancel](#)

7.

git

Colorbox File

[View](#) Version control Edit Maintainers

✓ • The project *Colorbox File* has been promoted to a full project.

• **New URL**

Now that this experimental project has been promoted, you'll need to update the URL of your remote repository or reclone it.

```
git remote set-url origin kmadel@git.drupal.org:project/media_colorbox.git
```

Posted by [kmadel](#) on *March 8, 2011 at 12:26pm*

Integrates Colorbox with the Media module via a custom colorbox file formatter.

Downloads

Project Information

Maintenance status: [Actively maintained](#)
Development status: [Under active development](#)
Module categories: [Fields](#), [Media](#)
Last modified: January 16, 2012

[View all releases](#) 
[Add new release](#)
[Administer releases](#)

8.

colorbox

media_

[Edit](#)**Media Colorbox project**

▼ Project information

Project title: *
Media Colorbox

Short project name: *
media_colorbox
This will be used to generate a /project/<shortname> / URL for your project. This string is also used to generate the name of releases associated with this project.

Description: *

Split summary at cursor

B **I** **ABC** H2 H3 H4 **(1)** code PHP

Integrates Colorbox with the Media module via a custom colorbox field formatter. The field formatter may be applied to file based fields and as the formatter for the 'file' field on file entity types.

<h3>Requirements</h3>

 [Colorbox](http://drupal.org/project/colorbox) (7.x-2.x)

 [File Entity](http://drupal.org/project/file_entity) (7.x-2.x)

 [Media](http://drupal.org/project/media) (7.x-2.x)

Media Colorbox

[View](#) Version control Edit Revisions Maintainers Automated Testing

Posted by [kmadel](#) on March 8, 2011 at 12:26pm

Integrates [Colorbox](#) with the [Media](#) module via a custom colorbox field formatter. The field formatter may be applied to file based fields and as the formatter for the 'file' field on file entity types.

Requirements

- [Colorbox](#)
- [File Entity](#) (7.x-2.x)

Highly Recommended

- [Media](#) (7.x-2.x)

Downloads

Project Information

Maintenance status: [Actively maintained](#)
Development status: [Under active development](#)
Module categories: [Fields](#), [Media](#)
Last modified: January 16, 2012

[View all releases](#) 
[Add new release](#)
[Administer releases](#)

9. git

```
git checkout -b 7.x-1.x
git push -u origin 7.x-1.x
```

10.

[View](#)
[Add new release](#) [Project information](#)
[Create Project release](#)

11. Create Project release

[Next](#)

Create Project release

Git release tag or branch: *

7.x-1.x (7.x-1.x-dev) ↗

Select the Git tag or branch (and therefore version number) for this release.

[Next](#)

12. Create Project release details

[Save](#)

[Release notes](#)

Create Project release

▼ Release identification

Now that the branch has been selected, these can not be modified unless you [go back to the previous page](#).

Git branch: * Version string: *

7.x-1.x ↗ 7.x-1.x-dev

▼ Vocabularies

Core compatibility: *

7.x ↗

Release type:

- None -
Bug fixes
New features

Release notes: *

B *I* ABC H2 H3 H4 code PHP database node list grid chart graph

Initial dev release for more widespread testing that was done with sandbox project.

Media Colorbox » Releases
media_colorbox 7.x-1.x-dev

[View](#) [Edit](#)

✓ Project release *media_colorbox 7.x-1.x-dev* has been created.

Posted by [kmadel](#) on *January 16, 2012 at 3:48pm*
Development snapshot from branch: 7.x-1.x
[View usage statistics for this release](#)
Initial dev release for more widespread testing that was done with sandbox project.

Categories: 7.x

[tar.gz](#) [zip](#)

Releases for Media Colorbox

Summary

[.install](#)

[SimpleTest](#) [SimpleTest](#)

[SimpleTest](#)
[SimpleTest](#)

10

Test Your Code with SimpleTest

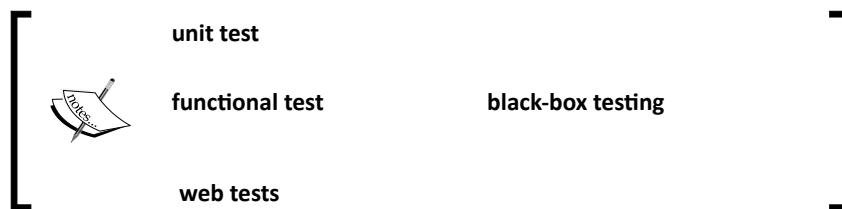
*There never seems to be enough time in the day to write additional code for testing your code. I have to admit that I am not a test first developer by nature. However, I do understand the importance and value that tests provide. Tests can be written and run whenever we add new functionality to our code. This will quickly let us know if our changes break any of the previously existing functionality. Drupal 7 includes a testing framework called **SimpleTest** that makes writing tests for Drupal easier.*

- ◆
- ◆
- ◆

What is SimpleTest?

<http://www.simpletest.org/>

JUnit



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

SimpleTest in Drupal Core

.test

SimpleTest web interface

[admin/config/development/
testing](admin/config/development/testing)

The screenshot shows the Drupal Configuration page. In the top navigation bar, the 'Configuration' tab is selected. Below it, there are links for 'Add content', 'Find content', 'Performance', and 'Manage file display'. A search bar is present above the main content area. The main content area displays a table with a single row labeled 'TEST'. This row has a checkbox and a link to 'Module'. Underneath this row, there are four other rows, each with a checkbox and a link: 'Node', 'Block availability', 'Load multiple nodes', and 'Multistep node form basic options'. Each of these rows also has a detailed description to its right.

Testing configuration

.info

NODE SAVE

The screenshot shows the results of a Drush test run. At the top, it says 'RESULTS' and '42 passes, 0 fails, 0 exceptions, and 6 debug messages'. Below this, there is a section titled 'NODE SAVE' with the sub-instruction 'Test node_save() for saving content.' It then shows another '42 passes, 0 fails, 0 exceptions, and 6 debug messages'. Below this, there is a table with the following data:

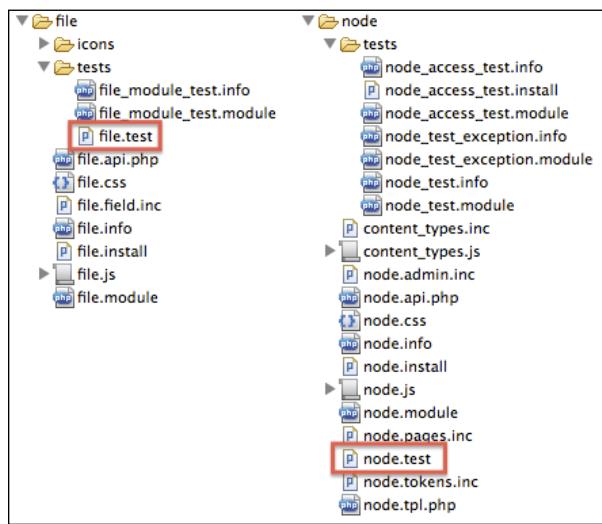
| MESSAGE | GROUP | FILENAME | LINE | FUNCTION | STATUS |
|---|-------|-----------|------|---------------------------|--------|
| Enabled modules: node_test | Other | node.test | 1144 | NodeSaveTestCase->setUp() | ✓ |
| Created role of name: xduwl3lm, id: 4 | Role | node.test | 1146 | NodeSaveTestCase->setUp() | ✓ |
| Created permissions: create_article_content | Role | node.test | 1146 | NodeSaveTestCase->setUp() | ✓ |

Test files structure for modules

<http://drupal.org/node/394888>

All tests for a module are to be placed in a central test file in root of a module directory.

```
node          node.test  
node          test  
file.test    test
```



```
.test           module  
  
          .info  
.test         .info  
  
est
```

The SimpleTest class

Chapter 8 Recipe Lists and More with Views

DrupalUnitTestCase

DrupalUnitTestCase

DrupalWebTestCase

getInfo setUp

The getInfo function

getInfo

- ◆ name
- ◆ description
- ◆ group

The setUp function

setUp
DrupalWebTestCase

DrupalUnitTestCase
setUp

setUp DrupalUnitTestCase

setUp

DrupalWebTestCase are the core

Test functions

Test functions

Test assertions

Test assertions

DrupalWebTestCase
DrupalTestCase

DrupalUnitTestCase

DrupalWebTestCase

Unit Testing with the Drupal SimpleTest module

DrupalUnitTestCase

examples

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



```
class SimpletestUnitTestExampleTestCase extends DrupalUnitTestCase {

    public static function getInfo() {
        return array(
            'name' => 'Simpletest Example unit tests',
            'description' => 'Test that simpletest_example_empty_mysql_date
                works properly.',
            'group' => 'Examples',
        );
    }

    function setUp() {
        drupal_load('module', 'simpletest_example');
        parent::setUp();
    }

    /**
     * Call simpletest_example_empty_mysql_date and check that it
     * returns correct
     * result.
     *
     * Note that no environment is provided; we're just testing the
     * correct
     * behavior of a function when passed specific arguments.
     */
    public function testSimpletestUnitTestExampleFunction() {
```

```
$result = simpletest_example_empty_mysql_date(NULL);
$message = t('A NULL value should return TRUE.');
$this->assertTrue($result, $message);

$result = simpletest_example_empty_mysql_date('');
$message = t('An empty string should return TRUE.');
$this->assertTrue($result, $message);

$result = simpletest_example_empty_mysql_date('0000-00-00');
$message = t('An "empty" MySQL DATE should return TRUE.');
$this->assertTrue($result, $message);

$result = simpletest_example_empty_mysql_date(date('Y-m-d'));
$message = t('A valid date should return FALSE.');
$this->assertFalse($result, $message);
}

}

SimpletestCase
DrupalTestCase
base

getInfo           setUp
getInfo           setUp
setUp
setUp
setUp
setUp
```

Functional or web testing with Drupal SimpleTest

```
class SimpletestCase extends DrupalWebTestCase {
protected $privileged_user;

public static function getInfo() {
    return array(
        'name' => 'SimpletestCase Example',
        'description' => 'Ensure that the simpletest_example content type provided functions properly.',
        'group' => 'Examples',
    );
}
```

Test Your Code with SimpleTest

```
public function setUp() {
    parent::setUp('simpletest_example'); // Enable any modules
    required for the test
    // Create and log in our user. The user has the arbitrary
    //privilege
    // 'extra special edit any simpletest_example' which the code
    //uses
    // to grant access.
    $this->privileged_user = $this->drupalCreateUser(array('create'
        'simpletest_example content', 'extra special edit any '
        'simpletest_example'));
    $this->drupalLogin($this->privileged_user);
}

// Create a simpletest_example node using the node form
public function testSimpleTestExampleCreate() {
    // Create node to edit.
    $edit = array();
    $edit['title'] = $this->randomName(8);
    $edit["body[und][0][value]"] = $this->randomName(16);
    $this->drupalPost('node/add/simpletest-example',
        $edit, t('Save'));
    $this->assertText(t('Simpletest Example Node Type @title has
        been created.', array('@title' => $edit['title'])));
}

...
}

Drupalsection
DrupalWebTestCase
DrupalTestCase
    getInfo
    setUp
        setUp
        drupalCreateUser
DrupalUnitTestCase
```

Time for another recipe



- ◆ name
- ◆ cuisineType
- ◆ description

- ◆ recipeYield
- ◆ prepTime
- ◆ cookTime
- ◆ ingredients
 -
 -
 -
 -
 -
 -

-
-
-
- ◆ instructions

Writing our own SimpleTests

Chapter 2 Custom Content Types and an Introduction to Module Development

Time for action – creating a unit test case for the D7Dev duration formatter

d7dev_integer_duration
d7dev_field_formatter_view

1. sites/all/modules/custom/d7dev
tests

2.

d7dev.test

3.

d7dev.info

files[] = tests/d7dev.test

.info

4.

d7dev.test

<?php

/**

* @file

* Tests for d7dev.module.

*/

/**

* Unit test for d7dev_integer_duration formatter

*/

class DurationFormatterUnitTestCase extends DrupalUnitTestCase{

}

DrupalUnitTestCase

5.

getInfo

public static function getInfo() {
 return array(
 'name' => 'Duration formatter unit test',
 'description' => 'Unit test the gcd function for the
duration formatter.',
 'group' => 'D7Dev'
);
}

getInfo

Testing configuration

6.

```
setUp  
function setUp() {  
    parent::setUp('d7dev');  
}  
  
d7dev  
test
```

7.

```
setUp  
/**  
 * Test greatest common denominator function.  
 */  
function testNumberDurationField() {  
    $gcdResult = gcd(40, 60); //expect this to be 20  
    //use assertEquals to check if we get the expected value  
    $this->assertEquals(20, $gcdResult, t('Greatest common  
denominator for 60 and 40 is @result.', array('@result' =>  
$gcdResult)));  
}  
  
d7dev.module  
assertEqual  
DrupalTestCase
```

8.

Performance

Configuration

Admin

Development

9.

Performance administrative

Clear all caches

10.

Configuration
Development

Admin

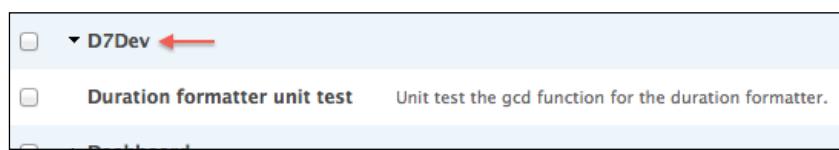
Testing

11.

Testing administrative

D7Dev

getInfo



12.

Duration formatter unit test

Run tests
result

Test

The screenshot shows a test results interface. At the top, a green message box says "The test run finished in 0 sec." Below it is a section titled "ACTIONS" with a "Run tests" button. The main area is titled "RESULTS" and displays the message "1 pass, 0 fails, and 0 exceptions". A link "► DURATION FORMATTER UNIT TEST" is shown below. The entire interface is framed by a thick black border.

0

RESULTS

1pass

13.

DURATION FORMATTER UNIT TEST

| DURATION FORMATTER UNIT TEST | | | | |
|--|-------|------------|------|--|
| Unit test the gcd function for the duration formatter. | | | | |
| 1 pass, 0 fails, and 0 exceptions | | | | |
| MESSAGE | GROUP | FILENAME | LINE | FUNCTION |
| Greatest common denominator for 60 and 40 is 20. | Other | d7dev.test | 31 | DurationFormatterUnitTestCase->testNumberDurationField() |

What just happened?

Time for action – creating a web test case for the D7Dev duration formatter

d7dev_integer_duration

1. d7dev.test file

```
/**  
 * Web test for d7dev_integer_duration formatter.  
 */  
class DurationFormatterWebTestCase extends DrupalWebTestCase {  
}
```

```
DrupalUnitTestCase  
DrupalWebTestCase
```

2.

getInfo

```
protected $field;  
protected $instance;  
protected $test_user;  
  
public static function getInfo() {  
    return array(  
        'name' => 'Duration formatter web test',  
        'description' => 'Test the creation and display of number  
field with duration formatter.',  
        'group' => 'D7Dev'  
    );  
}
```

getInfo

Testing configuration

getInfo

3.

setUp

```
function setUp() {  
    parent::setUp('d7dev');  
    $this->test_user = $this->drupalCreateUser(array('access  
content', 'create article content'));  
    $this->drupalLogin($this->test_user);  
}
```

```
        setUp
    drupalCreateUser    drupalLogin
DrupalWebTestCase
DrupalUnitTestCase    drupalCreateUser

drupalLogin

4.
        setUp
/**
 * Test the d7dev_integer_duration formatter output.
 */
function testNumberDurationField() {

}

5.
        number_integer

// Create a field with the d7dev_integer_duration formatter.
$this->field = array(
    'field_name' => drupal_strtolower($this->randomName()),
    'type' => 'number_integer',
);
field_create_field($this->field);
$this->instance = array(
    'field_name' => $this->field['field_name'],
    'entity_type' => 'node',
    'bundle' => 'article',
    'widget' => array(
        'type' => 'number',
    ),
    'display' => array(
        'default' => array(
            'type' => 'd7dev_integer_duration',
        ),
    ),
);
field_create_instance($this->instance);
```

```
randomName           drupal_strtolower
field_name          randomName
DrupalTestCase
d7dev_integer_duration
field_create_
field_create_instance
instance
setUp
setUp
setUp

6.
number_integer
// Display creation form.
$this->drupalGet('node/add/article');
$langcode = LANGUAGE_NONE;

// Submit a integer value; formatted it should become '1 and
// 3/4'.
$value = '105';
$edit = array(
  'title' => $this->randomName(),
  "{$this->field['field_name']}[$langcode][0][value]" =>
    $value,
);
$this->verbose('$edit: ' . var_export($edit, TRUE));
$this->drupalPost(NULL, $edit, t('Save'));

drupalGet      DrupalWebTestCase
$edit
number_integer to 105      title
drupalPost

$edit
that the number_integer      105

7.
number_integer      105
//the d7dev_integer_duration should convert the integer to
//hours and fraction of an hour
$this->assertRaw('1 and <sup>3</sup>&frasl;<sub>4</sub>',
t('Value formatted correctly.'));
```

```
assertRaw  
DrupalWebTestCase assertRaw  
true
```

- | | | | |
|-----|-----------------------------------|---------------------------|---------|
| 8. | Performance | Configuration Development | Admin |
| 9. | Performance administrative | Clear all caches
.test | |
| 10. | Configuration Development | Admin | Testing |
| 11. | Testing administrative
getInfo | | D7Dev |

| | | |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | Duration formatter unit test | Unit test the gcd function for the duration formatter. |
| <input checked="" type="checkbox"/> | Duration formatter web test | Test the creation and display of number field with duration formatter. |

- ## 12. Duration formatter unit test

Test result

The test run finished in **31 sec.**

ACTIONS

Filter All (1) Run tests [Return to list](#)

RESULTS

14 passes 0 fails, 0 exceptions, and 5 debug messages

► DURATION FORMATTER WEB TEST

13.

setUp

DrupalWebTestCase

DrupalWebTestCase

```
$this->assertRaw('1 and <sup>3</sup>&frasl;<sub>4</sub>' ,  
t('Value formatted correctly.'));.
```

14.

DURATION FORMATTER WEB TEST

| MESSAGE | GROUP | FILENAME | LINE | FUNCTION | STATUS |
|---|------------|------------|------|---|--------|
| GET http://d7dev.local:8888/user/2 returned 200 (7.36 KB). | Browser | d7dev.test | 55 | DurationFormatterWebTestCase->setUp() | ✓ |
| Valid HTML found on "http://d7dev.local:8888/user/2" | Browser | d7dev.test | 55 | DurationFormatterWebTestCase->setUp() | ✓ |
| Verbose message | Debug | d7dev.test | 55 | DurationFormatterWebTestCase->setUp() | ⚠ |
| User yUTpLMn4 successfully logged in. | User login | d7dev.test | 55 | DurationFormatterWebTestCase->setUp() | ✓ |
| GET http://d7dev.local:8888/node/add/article returned 200 (15.08 KB). | Browser | d7dev.test | 84 | DurationFormatterWebTestCase->testNumberDurationField() | ✓ |
| Valid HTML found on "http://d7dev.local:8888/node/add/article" | Browser | d7dev.test | 84 | DurationFormatterWebTestCase->testNumberDurationField() | ✓ |
| Verbose message | Debug | d7dev.test | 84 | DurationFormatterWebTestCase->testNumberDurationField() | ⚠ |
| Verbose message | Debug | d7dev.test | 93 | DurationFormatterWebTestCase->testNumberDurationField() | ⚠ |
| GET http://d7dev.local:8888/node/1 returned 200 (11.78 KB). | Browser | d7dev.test | 94 | DurationFormatterWebTestCase->testNumberDurationField() | ✓ |
| Valid HTML found on "http://d7dev.local:8888/node/1" | Browser | d7dev.test | 94 | DurationFormatterWebTestCase->testNumberDurationField() | ✓ |
| Verbose message | Debug | d7dev.test | 94 | DurationFormatterWebTestCase->testNumberDurationField() | ⚠ |
| Value formatted correctly. ← | Other | d7dev.test | 97 | DurationFormatterWebTestCase->testNumberDurationField() | ✓ |

setUp

drupalCreateUser
drupalPost

drupalGet
assertRaw

15.

Verbose message

setUp

DrupalWebTestCase

The screenshot shows a web browser window with the URL `d7dev.local:8888/sites/default/files/simpletest/verbose/DurationFormatterWebTestCase-1.html`. The page displays a verbose test message with red annotations:

- A red arrow points to the URL bar.
- A red box highlights the text "ID #1 (Previous | Next)".
- A red arrow points to the ending URL "Ending URL: http://d7dev.local:8888/user".

Below the browser window, the Drupal login page is displayed. It features the Drupal logo and a blue header bar with a "Home" link. The main content area has the following structure:

- A heading "User account".
- Three buttons: "Create new account", "Log in", and "Request new password".
- A "Username" field containing "admin".
- A "Password" field containing "*****".
- A "Log in" button.

Below the "Username" field is the placeholder text "Enter your Drupal username.". Below the "Password" field is the placeholder text "Enter the password that accompanies your username."

```
sites/default/files/
simpletest/verbose/DurationFormatterWebTestCase-1.html
```

```
http://d7dev.local:8888/user           setUp
DrupalWebTestCase
```

[Previous](#) [Next](#)

16.

[Next](#)

```
sites/default/
files/simpletest/verbose/DurationFormatterWebTestCase-5.html
```

The screenshot shows a web browser window with the URL `d7dev.local:8888/sites/default/files/simpletest/verbose/DurationFormatterWebTestCase-5.html`. The page content includes a code dump of a PHP array under the heading "Fields:":

```
Fields: <?php array (
  'title' => 'cMFXC1LO',
  'field_tags[und]' => '',
  'body[und][0][summary]' => '',
  'body[und][0][value]' => '',
  'body[und][0][format]' => 'filtered_html',
  'field_image[und][0][fid]' => '0',
  'field_image[und][0][display]' => '1',
  'xxpg8iun[und][0][value]' => '105',
  'changed' => '',
  'form_build_id' => 'form-hp0rghrmU22d90CmPY8W2zrtUFA3a3KI0xVyNMt6W4o',
  'form_token' => 'LvgnnLFYt7BnCnvmu8WViRyz4lYfQ3vdZhy3WqfmBks',
  'form_id' => 'article_node_form',
  'additional_settings_active_tab' => '',
  'op' => 'Save',
)
```

The page also displays a success message: "Article cMFXC1LO has been created." Below the message, there is a navigation bar with links for "Home" and "Add content". The main content area shows the node details for "cMFXC1LO", including the author "yUTpLMn4", the creation date "Wed, 01/25/2012 - 07:08", and the duration "xxpg8iun: 1 and 3/4 hours".

drupalPost

What just happened?

duration

Summary

drupal_web_test_case.php

Features

11

Introduction to the Features Module and Configuration Management

*In this chapter, we are going to introduce you to the **Features module**, and show how it can be used to not only share Drupal components with other Drupal users' sites, but also to manage certain aspects of Drupal configuration between different environments of the same site (a development site versus a live site, for example).*

- ◆
- ◆
- ◆
- ◆

Introduction to the Features module

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

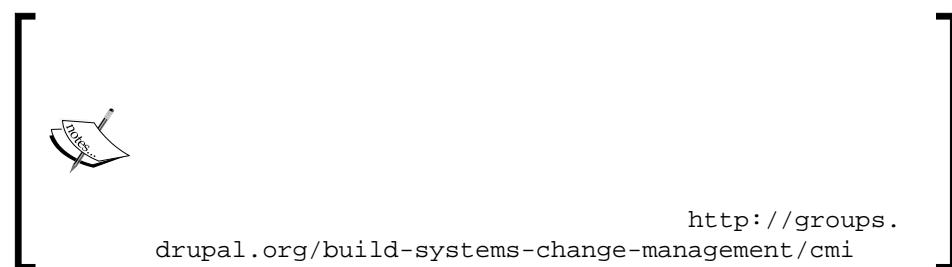
Using Features to manage configuration

- ◆ Migrating or synchronizing databases between environments

- ◆ **Manually updating configuration between environments**

Custom Content Types and an Introduction to Module Development

- ◆ **Writing custom code for all configuration changes**



Drupal components that can be managed with Features

Features supported components

CTools

- ◆ **Content types**

- ◆ **Fields**

- ◆ **Image styles**

Chapter 6 Adding Media to our Site

Chapter 6

- ◆ **Text formats**

- ◆ **Menus**

- ◆ **Taxonomies**

- ◆ **Views**

Chapter 8 Recipe Lists and More with Views

- ◆ Roles and permissions

◆



Drupal components supported with additional modules

- ◆ Core Blocks

Extra module http://drupal.org/project/features_extra

Context module <http://drupal.org/project/context>

Boxes module <http://drupal.org/project/boxes>

- ◆ Content

UUID Features

Integration module http://drupal.org/project/uuid_features



- ◆ **Vocabulary terms**

- ◆ **Variables**

Strongarm module

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

<http://drupal.org/taxonomy/term/11478>

Time for action – installing the Features module

1.

2.

```
$ drush dl features
Project features (7.x-1.0-beta6) downloaded to /Applications/MAMP/
htdocs/d7dev/sites/all/modules/features. [success]
$ drush en features
The following extensions will be enabled: features
Do you really want to continue? (y/n): y
features was enabled successfully. [ok]
```

3.

Structure

| Admin | Features |
|----------|----------|
| Features | |

Features *d7dev Recipes*

Home » Administration » Structure

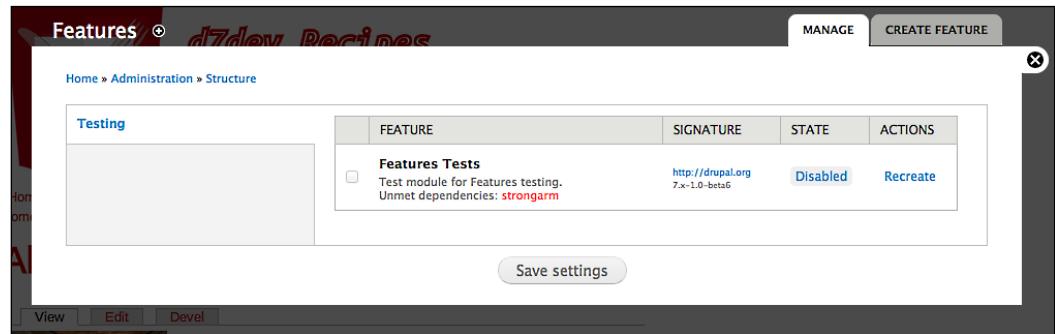
MANAGE CREATE FEATURE

Testing

| FEATURE | SIGNATURE | STATE | ACTIONS |
|--|---------------------------------|----------|----------|
| Features Tests
Test module for Features testing.
Unmet dependencies: strongarm | http://drupal.org/7.x-1.0-beta6 | Disabled | Recreate |

Save settings

View Edit Devel



| MANAGE | Features |
|--------|------------------------|
| | Save settings |
| | Features Tests feature |

What just happened?

Adding a new Feature

Time for action – creating a Recipe content type feature

1. **Structure** **Admin**
Features
2. **Features MANAGE** **CREATE FEATURE**
3. **CREATE FEATURE** D7Dev Recipe content
Content type for entering recipes. **Description** 7.x-1.0-beta1
Version
4. Content types: node **Edit** **Download**
feature

The screenshot shows the 'Edit components' interface. On the left, under 'Content types: node', 'Récipe' is selected (indicated by a green arrow). The right side displays the 'FIELDS' section, which includes fields like node-recipe-field_cooktime, node-recipe-field_description, node-recipe-field_image, node-recipe-field_ingredients, node-recipe-field_media, node-recipe-field_nutrition_information, node-recipe-field_prepetime, node-recipe-field_rating, node-recipe-field_recipe_cuisine, node-recipe-field_recipeinstructions, and node-recipe-field_recipeyield. Below the FIELDS section are sections for 'FIELDGROUP', 'CONTENT TYPES', 'TAXONOMY', and 'DEPENDENCIES'. At the bottom, there are tabs for 'Normal', 'Auto-detected' (which is highlighted with a green border), and 'Provided by dependency'.

Auto-detected

DISPLAY

5. **d7dev_recipe_**
- | | |
|----------------------------------|----------|
| content_type | download |
| sites/all/modules/d7dev_features | |

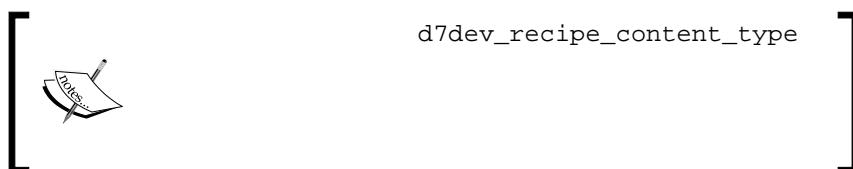
6.

```
$ cd /Applications/MAMP/htdocs/d7dev/
$ mkdir sites/all/modules/d7dev_features
$ tar -C /Applications/MAMP/htdocs/d7dev/sites/all/modules/d7dev_
features/ -xvf ~/Downloads/d7dev_recipe_content_type-7.x-1.0-
beta1.tar
x d7dev_recipe_content_type/d7dev_recipe_content_type.features.
field.inc
x d7dev_recipe_content_type/d7dev_recipe_content_type.field_group.
inc
x d7dev_recipe_content_type/d7dev_recipe_content_type.features.inc
x d7dev_recipe_content_type/d7dev_recipe_content_type.features.
taxonomy.inc
x d7dev_recipe_content_type/d7dev_recipe_content_type.info
x d7dev_recipe_content_type/d7dev_recipe_content_type.module
$
```

7.

recipe

```
$ cd /Applications/MAMP/htdocs/d7dev/
$ drush en d7dev_recipe_content_type
The following extensions will be enabled: d7dev_recipe_content_
type
Do you really want to continue? (y/n): y
d7dev_recipe_content_type was enabled successfully. [ok]
$
```



8.

```
$ cd /Applications/MAMP/htdocs/d7dev/
$ git add -A
$ git commit -m 'add recipe content type feature'
[master 8903cd1] add recipe content type feature
 13 files changed, 1039 insertions(+), 166 deletions(-)
create mode 100644 sites/all/modules/d7dev_features/d7dev_recipe_
content_type/d7dev_recipe_content_type.features.field.inc
create mode 100644 sites/all/modules/d7dev_features/d7dev_recipe_
content_type/d7dev_recipe_content_type.features.inc
create mode 100644 sites/all/modules/d7dev_features/d7dev_recipe_
content_type/d7dev_recipe_content_type.features.taxonomy.inc
create mode 100644 sites/all/modules/d7dev_features/d7dev_recipe_
content_type/d7dev_recipe_content_type.field_group.inc
create mode 100644 sites/all/modules/d7dev_features/d7dev_recipe_
content_type/d7dev_recipe_content_type.info
create mode 100644 sites/all/modules/d7dev_features/d7dev_recipe_
content_type/d7dev_recipe_content_type.module
$

Now we will create a live environment for our D7Dev site by using
Git to clone a copy of our D7Dev site.
$ cd /Applications/MAMP/htdocs/
$ git clone /Applications/MAMP/htdocs/d7dev/ d7live
Cloning into d7live...
done.
$

d7dev_recipe_content_type
```

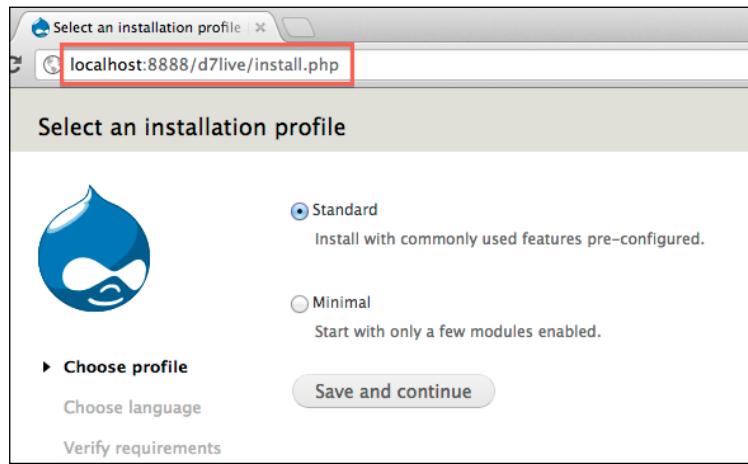
9.

Getting Set up

Chapter 1

d7live d7dev

<http://localhost/d7live/>



10.

d7live
D7Live

Chapter 1

d7dev

11.

```
$ drush dl features
Project features (7.x-1.0-beta6) downloaded to /Applications/MAMP/
htdocs/d7dev/sites/all/modules/features. [success]
$ drush en features
The following extensions will be enabled: features
Do you really want to continue? (y/n): y
features was enabled successfully. [ok]
```

12.

```
$drush
All commands in features: (features)
  features-add (fa)      Add a component to a feature module.
  features-diff (fd)     Show the difference between the default and
                         overridden state of a feature.
  features-export (fe)   Export a feature from your site into a
                         module.
  features-list (fl,      List all the available features for your si
                         te.
                         features)
  features-revert (fr)   Revert a feature module on your site.
  features-revert-all    Revert all enabled feature module on your
                         site.
  (fr-all, fra)
  features-update (fu)   Update a feature module on your site.
  features-update-all    Update all feature modules on your site.
  (fu-all, fua)
```

13.

| Features | | Structure | Admin |
|--------------------------|--|------------------------------|--|
| Disabled STATE | | | |
| | FEATURE | SIGNATURE | STATE |
| <input type="checkbox"/> | D7Dev Recipe
content type
Content type for entering recipes. | Unavailable
7.x-1.0-beta1 | Disabled Recreate |

14.

Disabled

STATE

Enabled or Disabled

| FIELDS | | DEFAULT |
|---|-------------------------------|---------|
| node-recipe-field_cooktime | node-recipe-field_description | |
| node-recipe-field_image | node-recipe-field_ingredients | |
| node-recipe-field_media | | |
| node-recipe-field_nutrition_information | | |
| node-recipe-field_preatime | node-recipe-field_rating | |
| node-recipe-field_recipe_cuisine | | |
| node-recipe-field_recipeinstructions | | |
| node-recipe-field_recipeyield | | |

| FIELD_GROUP | | DEFAULT |
|--------------------------------------|--|---------|
| group_nutrition node recipe form | | |
| group_time_yield node recipe default | | |

| CONTENT TYPES | | DEFAULT |
|---------------|--|---------|
| recipe | | |

| TAXONOMY | | DEFAULT |
|-----------------|--|---------|
| type_of_cuisine | | |

| DEPENDENCY | | STATUS |
|-----------------------|----------|--------|
| HTML5 contentEditable | Disabled | |
| d7dev | Disabled | |
| features | Disabled | |

| File | | Enabled |
|----------------|----------|---------|
| File entity | Disabled | |
| Fivestar | Disabled | |
| Image | Enabled | |
| Media | Disabled | |
| Media Colorbox | Disabled | |

15.

d7dev_recipe_content_type

d7dev_recipe_content_type

```
$ drush en d7dev_recipe_content_type
The following extensions will be enabled: nutritioninfo, colorbox,
media_colorbox, media, votingapi, fivestar, file_entity, field_
group, features, ctools, views, d7dev, entity, contenteditable,
d7dev_recipe_content_type
Do you really want to continue? (y/n): y
Drush command terminated abnormally due to an unrecoverable error.
[error]
```

```
Error: Call to undefined function views_get_enabled_views() in /  
Applications/MAMP/htdocs/d7live/sites/all/modules/media/media.  
module, line 1054  
$
```

16.

```
$ drush en media  
The following extensions will be enabled: views, ctools, file_  
entity, media  
Do you really want to continue? (y/n): y  
ctools was enabled successfully. [ok]  
file_entity was enabled successfully. [ok]  
media was enabled successfully. [ok]  
views was enabled successfully. [ok]  
$ drush en d7dev_recipe_content_type  
The following extensions will be enabled: nutritioninfo, colorbox,  
media_colorbox, votingapi, fivestar, field_group, features, d7dev,  
entity, contenteditable, d7dev_recipe_content_type  
Do you really want to continue? (y/n): y  
colorbox was enabled successfully. [ok]  
contenteditable was enabled successfully. [ok]  
d7dev was enabled successfully. [ok]  
d7dev_recipe_content_type was enabled successfully. [ok]  
entity was enabled successfully. [ok]  
fivestar was enabled successfully. [ok]  
media_colorbox was enabled successfully. [ok]  
nutritioninfo was enabled successfully. [ok]  
votingapi was enabled successfully. [ok]  
field_group was enabled successfully. [ok]  
features was enabled successfully. [ok]  
$
```

17.

Structure D7Live Admin
Features MANAGE

Features

The screenshot shows the 'Features' management interface. A sidebar on the left lists 'Testing'. The main area displays a table with columns: FEATURE, SIGNATURE, STATE, and ACTIONS. One row is selected, highlighted with a red arrow pointing to it. The selected row contains the following data:

| FEATURE | SIGNATURE | STATE | ACTIONS |
|---|------------------------------|------------|----------|
| D7Dev Recipe
content type
Content type for
entering recipes. | Unavailable
7.x-1.0-beta1 | Overridden | Recreate |

D7Dev Recipe content type
Overridden

STATE

A zoomed-in view of the table row for the 'D7Dev Recipe content type'. The 'STATE' column shows 'Overridden'.

| FEATURE | SIGNATURE | STATE | ACTIONS |
|---|------------------------------|------------|----------|
| D7Dev Recipe
content type
Content type for
entering recipes. | Unavailable
7.x-1.0-beta1 | Overridden | Recreate |

type_of_cuisine

OVERRIDDEN

18.

Admin

Structure

types

19.

Content types

manage fields

| LABEL | NAME | FIELD | WIDGET | OPERATIONS | |
|----------------------|-----------------------------|-----------------------|-----------------------------|------------|--------|
| ⊕ name | title | Node module element | | | |
| ⊕ description | field_description | Long text | Text area (multiple rows) | edit | delete |
| ⊕ image | field_image | Image | Image | edit | delete |
| ⊕ recipeYield | field_recipeyield | Text | Text field | edit | delete |
| ⊕ prepTime | field_prepetime | Integer | Text field | edit | delete |
| ⊕ cookTime | field_cooktime | Integer | Text field | edit | delete |
| ⊕ ingredients | field_ingredients | Text | Text field | edit | delete |
| ⊕ recipeInstructions | field_recipeinstructions | Long text | Text area (multiple rows) | edit | delete |
| ⊕ nutrition | field_nutrition_information | Nutrition Information | Nutrition Information form | edit | delete |
| ⊕ Media | field_media | File | Media file selector | edit | delete |
| ⊕ rating | field_rating | Fivestar Rating | Stars (rated while viewing) | edit | delete |
| ⊕ recipeCuisine | field_recipe_cuisine | Term reference | Select list | edit | delete |

What just happened?

Managing updates to Feature components

Time for action – updating our Recipe content type feature

1.

Taxonomy

Structure

Admin

2.

Taxonomy

Add vocabulary

3.

Dietary Consideration Name 'Allows categorization of recipes based on dietary considerations such as gluten-free or vegan.' Description Handle as an item in microdata
Save

Taxonomy + **d7dev_recipes**

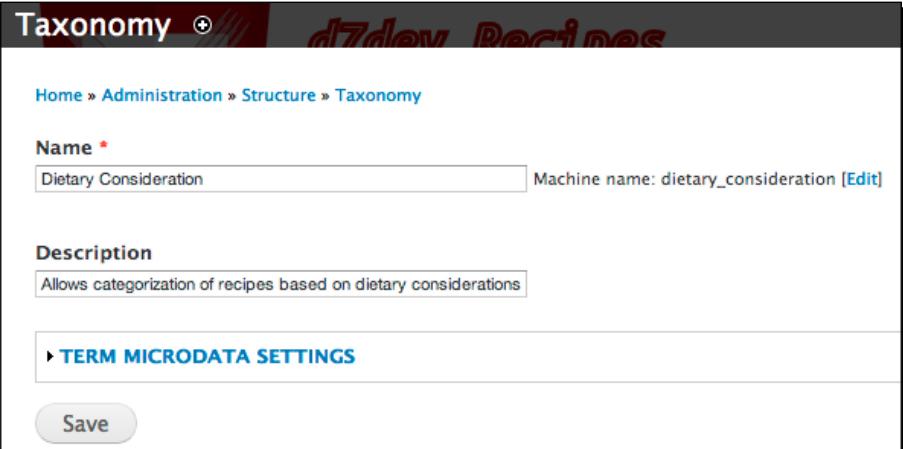
Home » Administration » Structure » Taxonomy

Name *
Dietary Consideration Machine name: dietary_consideration [Edit]

Description
Allows categorization of recipes based on dietary considerations

► TERM MICRODATA SETTINGS

Save



4.

Structure
manage fields

Admin

Content types

5.

MANAGE FIELDS

Add new field

recipeDiet

Label recipe_diet

Field name

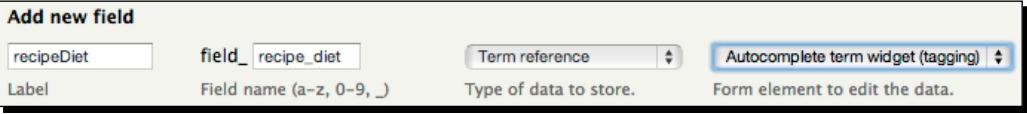
Term reference

Autocomplete term widget (tagging)

Save

Add new field

| | | | |
|-------|--------------------------|------------------------|------------------------------------|
| Label | field_recipe_diet | Term reference | Autocomplete term widget (tagging) |
| Label | Field name (a-z, 0-9, _) | Type of data to store. | Form element to edit the data. |



| 6. | FIELD SETTINGS | Dietary Consideration | Vocabulary |
|----|---------------------|-----------------------|------------|
| | Save field settings | | |

7.

8.

```
          fu
d7dev_recipe_content_type
$ cd /Applications/MAMP/htdocs/d7dev/
$ drush fu d7dev_recipe_content_type
Module appears to already exist in sites/all/modules/d7dev_
features/d7dev_recipe_content_type
Do you really want to continue? (y/n): y
Created module: d7dev_recipe_content_type in sites/all/modules/
d7dev_features/d7dev_recipe_content_type [ok]
$
```

field_
dietary_consideration
recipe_diet

9.

```
$ cd /Applications/MAMP/htdocs/d7dev/
$ git add -A
$ git commit -m 'added recipeDiet term reference field'
[master 1c16903] added recipeDiet term reference field
 4 files changed, 120 insertions(+), 0 deletions(-)
$ cd ../d7live
$ git pull
remote: Counting objects: 21, done.
remote: Compressing objects: 100% (11/11), done.
remote: Total 11 (delta 8), reused 0 (delta 0)
Unpacking objects: 100% (11/11), done.
From /Applications/MAMP/htdocs/d7dev
```

```
8903cd1..1c16903  master      -> origin/master
Updating 8903cd1..1c16903
Fast-forward
.../d7dev_recipe_content_type.features.field.inc |    74
+++++
.../d7dev_recipe_content_type.features.inc        |   10 ++
...d7dev_recipe_content_type.features.taxonomy.inc |    32
+++++
.../d7dev_recipe_content_type.info                |     4 +
4 files changed, 120 insertions(+), 0 deletions(-)
$
```

10.

fr or features-revert

```
$ cd /Applications/MAMP/htdocs/d7dev/
$ drush fr d7dev_recipe_content_type
```

Note features-revert
 d7dev_recipe_content_type

11.

Admin

Features

Structure

Overridden STATE

| CTOOLS EXPORT API | | DEFAULT |
|---|-------------------------------|------------|
| field_group:field_group:1 | | |
| FIELDS | FIELDGROUP | DEFAULT |
| node-recipe-field_cooktime | node-recipe-field_description | |
| node-recipe-field_image | node-recipe-field_ingredients | |
| node-recipe-field_media | | |
| node-recipe-field_nutrition_information | | |
| node-recipe-field_prep_time | node-recipe-field_rating | |
| node-recipe-field_recipe_cuisine | | |
| node-recipe-field_recipe_diet | | ↑ |
| node-recipe-field_recipe_instructions | | |
| node-recipe-field_recipeyield | | |
| FIELDGROUP | FIELDGROUP | DEFAULT |
| group_nutrition node recipe form | | |
| group_time_yield node recipe default | | |
| CONTENT TYPES | CONTENT TYPES | DEFAULT |
| recipe | | |
| TAXONOMY | TAXONOMY | OVERRIDDEN |
| dietary_consideration | type_of_cuisine | → |

What just happened?

Features for sharing Drupal components

Modules

search <http://drupal.org/project/modules>

51 Modules match your search

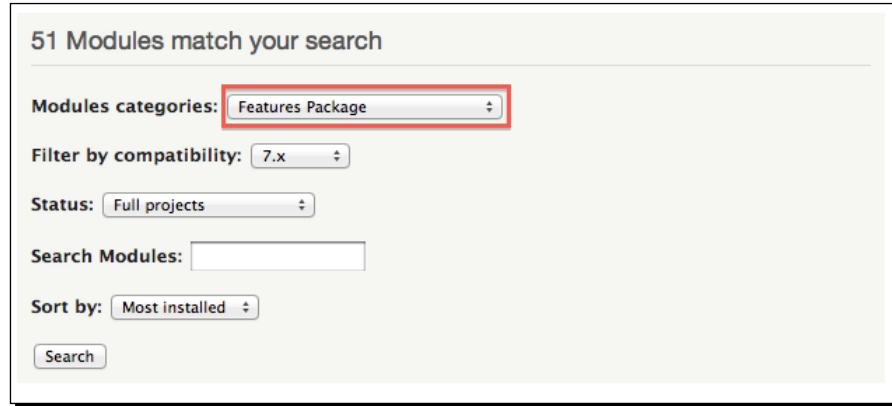
Modules categories:

Filter by compatibility:

Status:

Search Modules:

Sort by:

A screenshot of a web page titled "51 Modules match your search". At the top, there is a dropdown menu labeled "Modules categories" with "Features Package" selected. Below it are other dropdown menus for "Filter by compatibility" (set to "7.x"), "Status" (set to "Full projects"), and "Sort by" (set to "Most installed"). There is also a text input field for "Search Modules". A "Search" button is at the bottom. The entire screenshot is enclosed in a black border.

Summary

Pop quiz Answers

Chapter 1, Getting Set up

Pop quiz – PHP and MySQL configuration for Drupal

| | |
|--|--|
| | |
|--|--|

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