Minimalist Drupal Development

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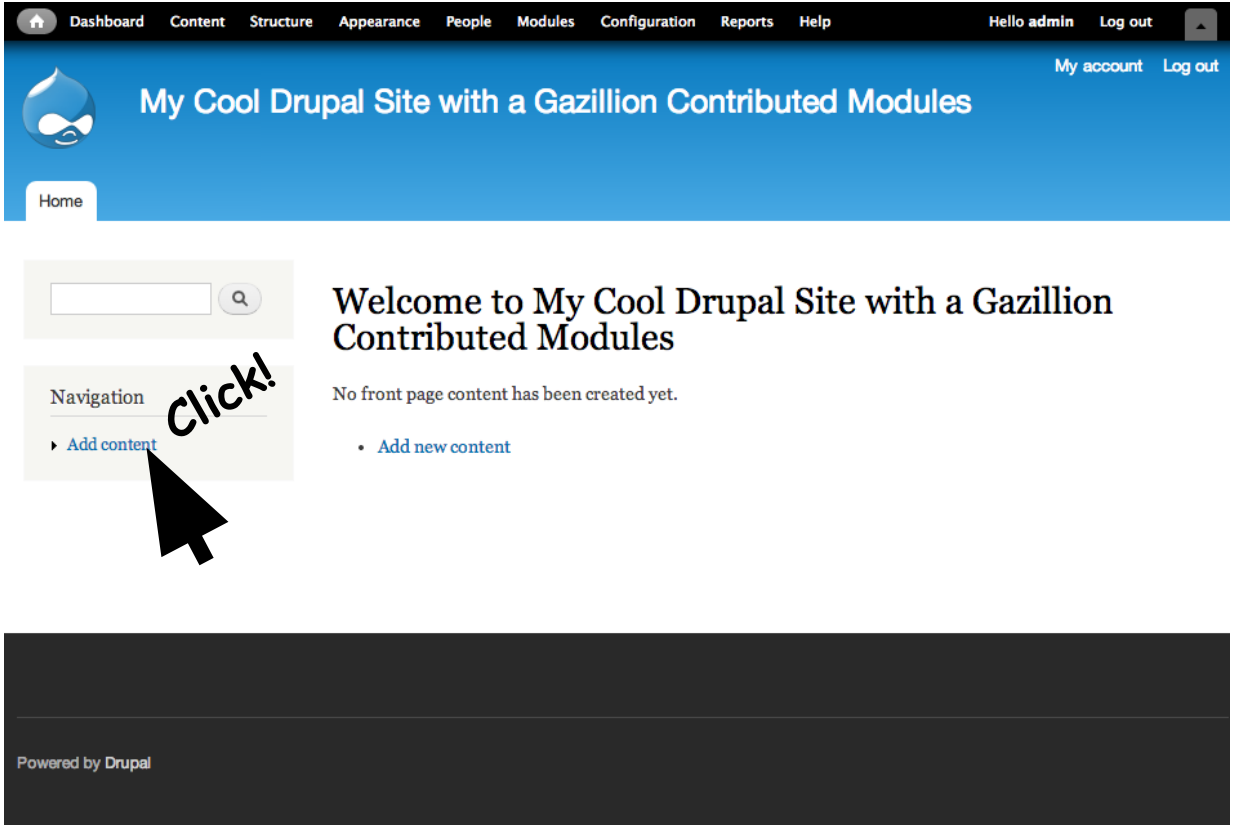
Drupal is awesome! But…



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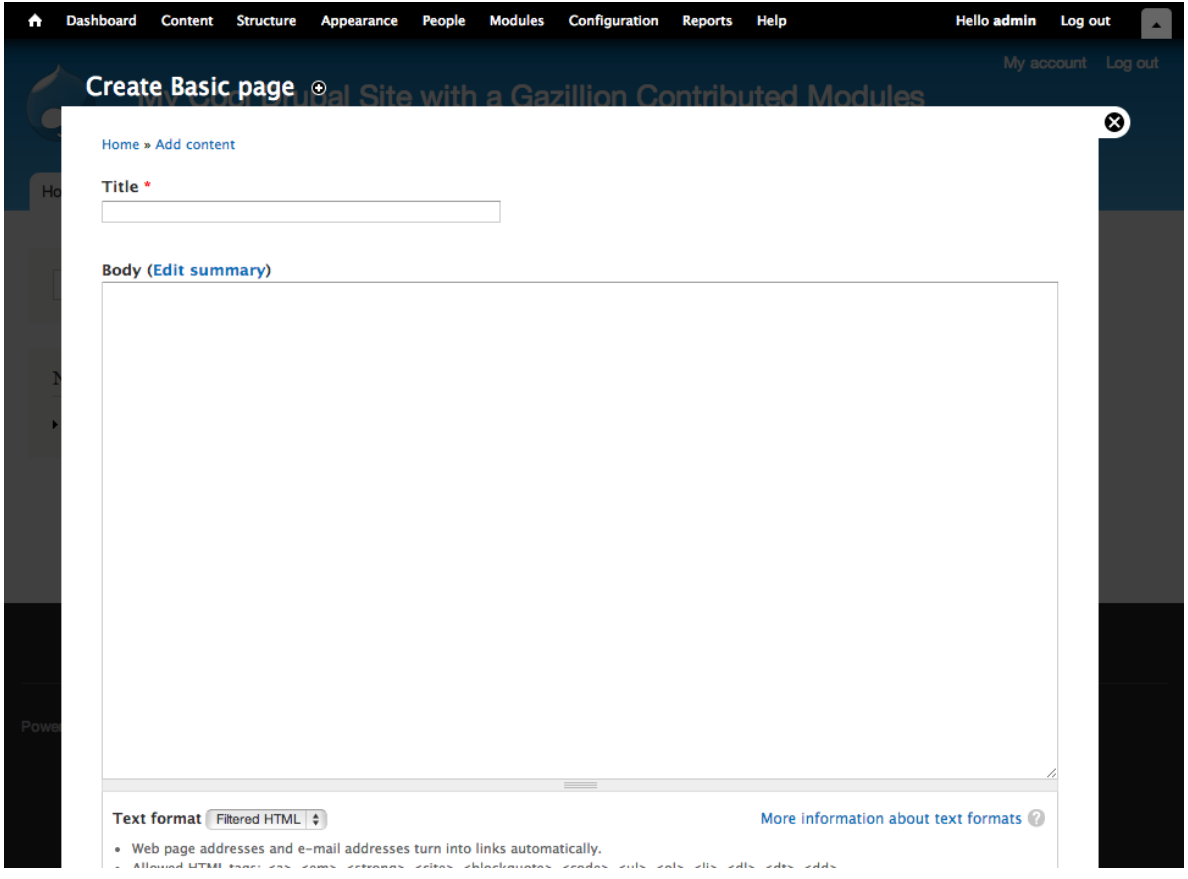
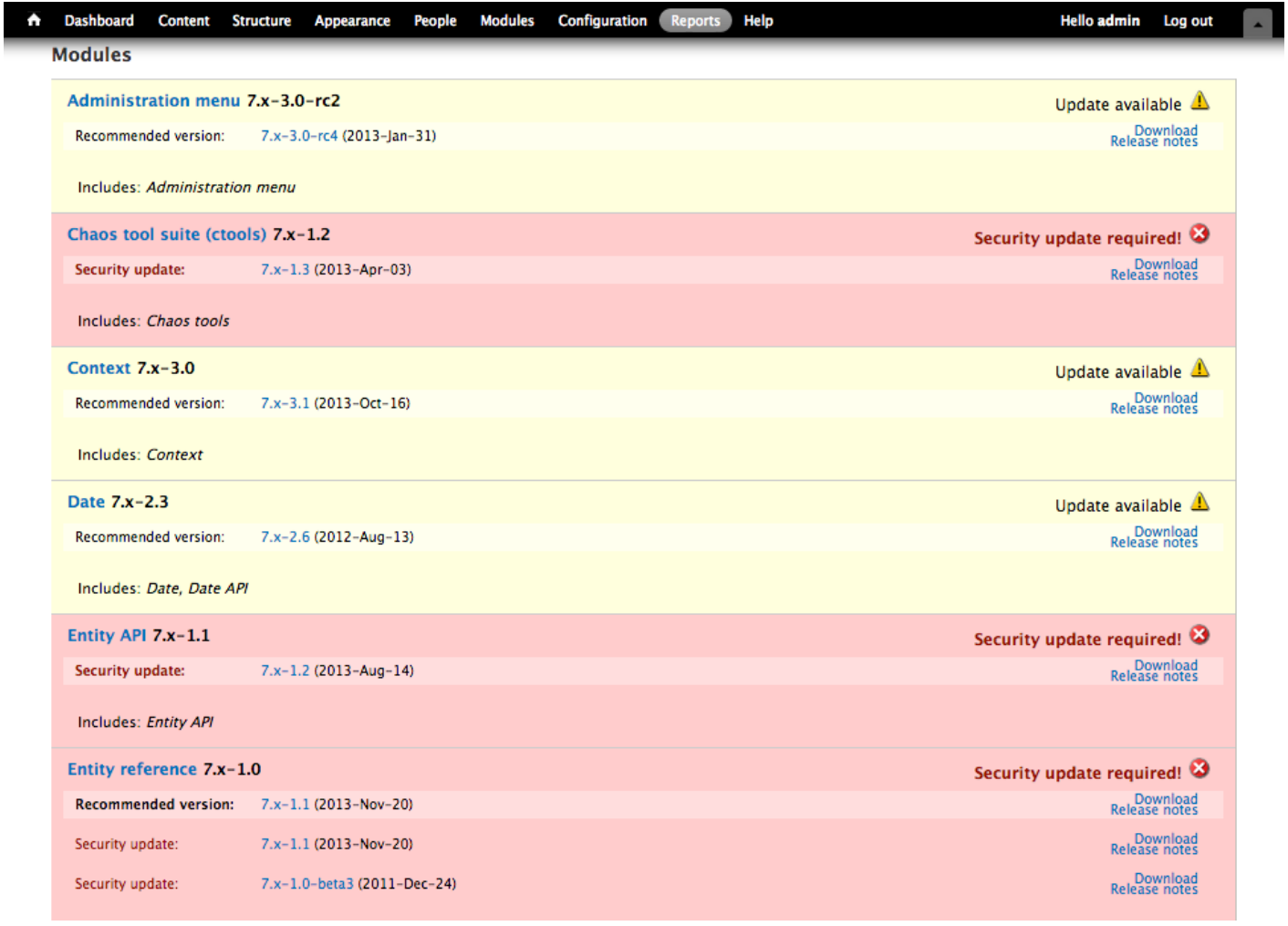


But…


Dashboard
Content
Structure
Appearance
People
Modules
Configuration
Reports
Help
Hello admin
Log out
Modules
Administration menu 7.x-3.0-rc2
Update available
Recommended version: 7.x-3.0-rc4 (2013-Jan-31)
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Release notes
Includes: Administration menu
Chaos tool suite (ctools) 7.x-1.2
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Security update: 7.x-1.3 (2013-Apr-03)
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Update available
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Includes: Context
Date 7.x-2.3
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Security update: 7.x-1.1 (2013-Nov-20)
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Security update: 7.x-1.0-beta3 (2011-Dec-24)
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Release notes

Free but at a Cost

Functionality comes for free, but the cost is performance, security, and integration time.

The open buffet:

http://2bits.com/articles/server-indigestion-the-drupal-contributed-modules-open-buffet-binge-syndrome.html

A Solution: Minimalism

- Be smart about your site build
- Choose third party code wisely
- Write some code yourself
- Don’t be a click monkey! (or be less of one)

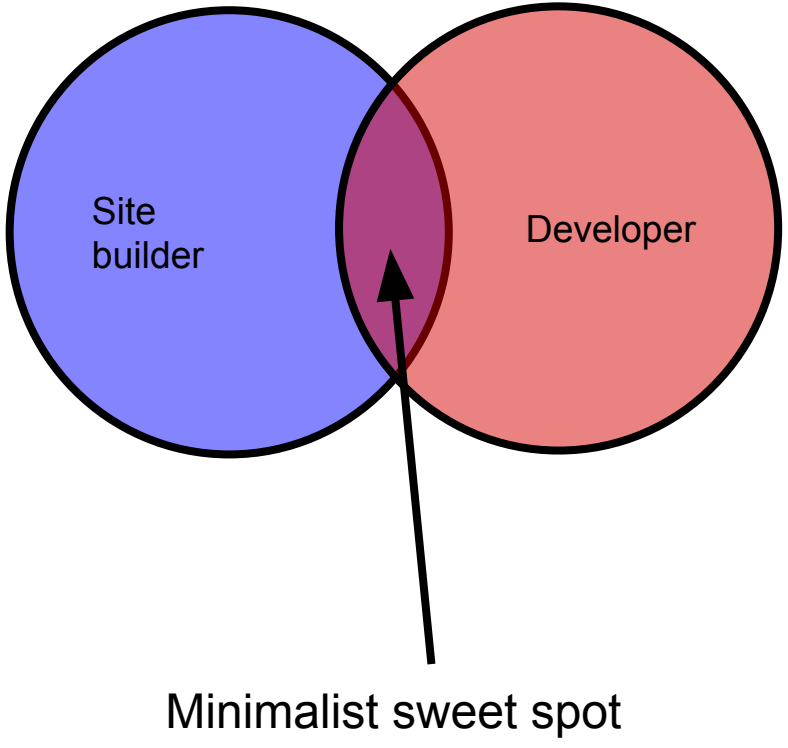
Is this for every Drupal site builder? Not really.

Being a Developer Helps

But it's not a requirement!

Site builders and developers: Be selective about the code you add to your site

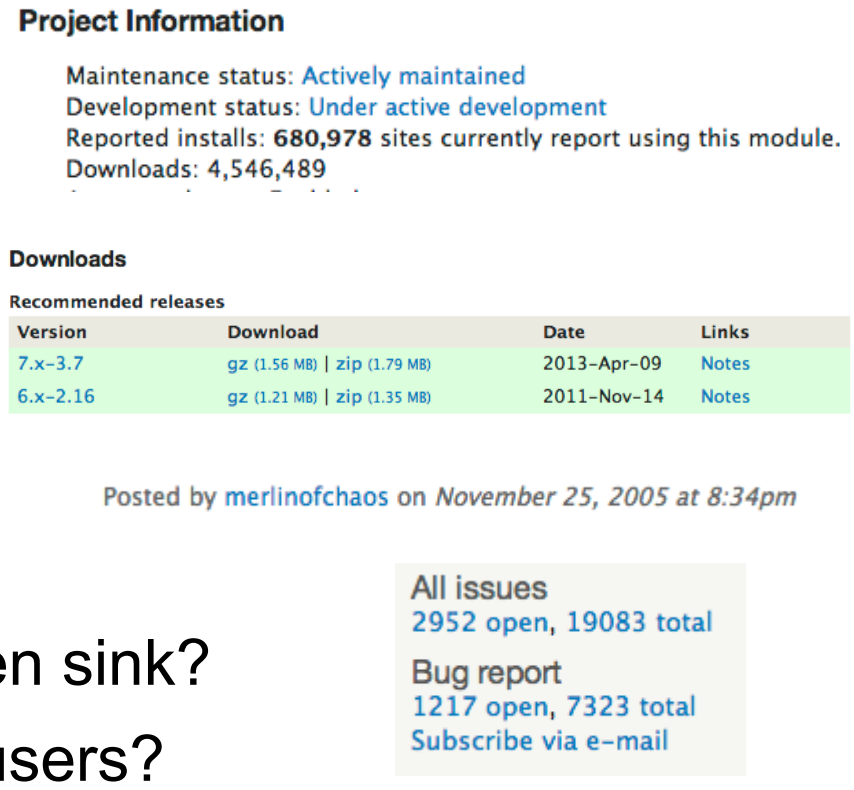
Developers: Write some of that code yourself (or borrow it!)



Module selection

- Number of sites (more is better!)
- Size (smaller is better!)
- Actively developed?
- Developer (recognise the name?)
- Number of bugs (fewer is better!)
- Focused use case or kitchen sink?
- Anything in it for your end users?

  (Admin menu: great for site builders and admins, useless for visitors; over 800 LOC in the .module file alone, loaded for all users, but useful to only a few)



Project Information

Maintenance status: Actively maintained
Development status: Under active development
Reported installs: **680,978** sites currently report using this module.
Downloads: 4,546,489

Downloads

Recommended releases

Version	Download	Date	Links
7.x-3.7	gz (1.56 MB) | zip (1.79 MB)	2013-Apr-09	Notes
6.x-2.16	gz (1.21 MB) | zip (1.35 MB)	2011-Nov-14	Notes

Posted by merlinofchaos on *November 25, 2005 at 8:34pm*

All issues
2952 open, 19083 total

Bug report
1217 open, 7323 total
Subscribe via e-mail

Drupal is a framework

Third party developers aren’t the only ones who can add functionality to your site.

YOU can!

Use what Drupal gives you

- Entities (and helpful querying methods)
- View modes
- Theme regions
- Hooks everywhere
- APIs galore

Using APIs

Drupal core examples:

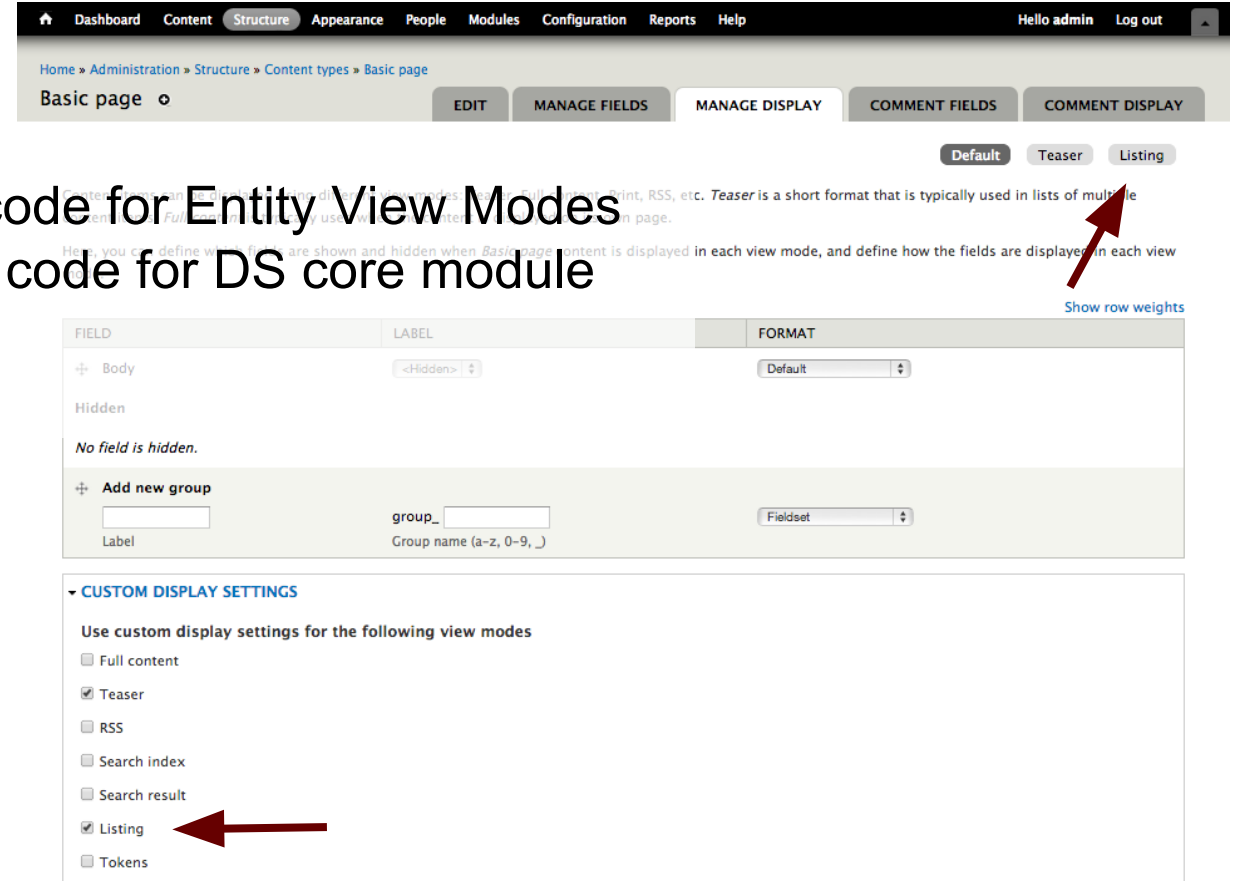
- hook_entity_info_alter()
- EntityFieldQuery

Contrib examples:

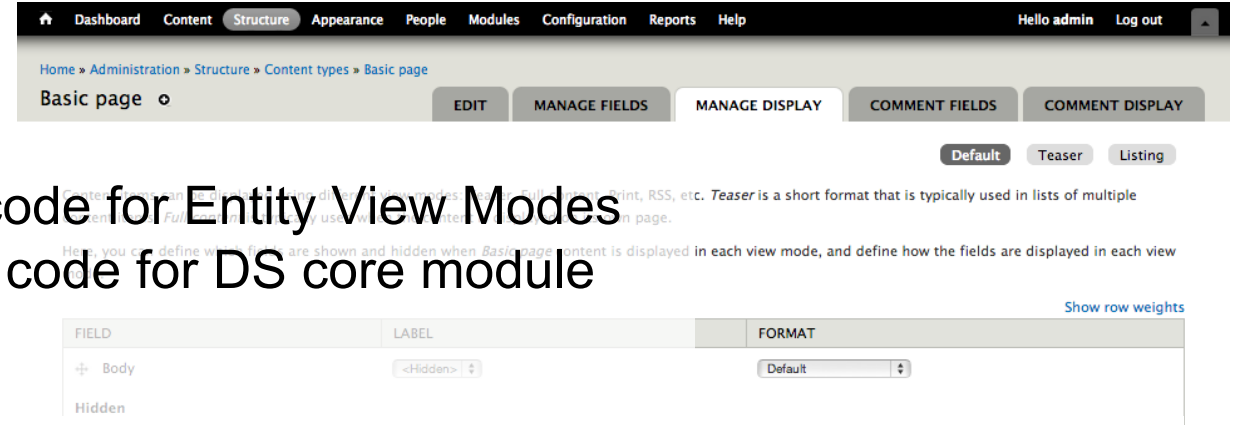
- Bean API

API: View Modes

- over 400 lines of code for Entity View Modes
- over 1200 lines of code for DS core module



API: View Modes



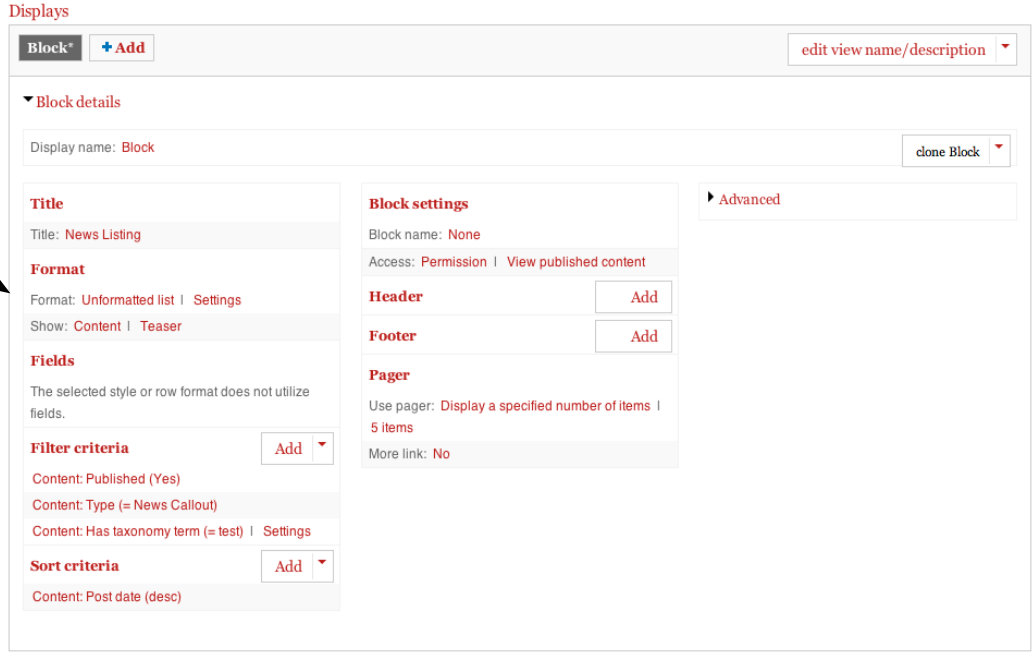
- over 400 lines of code for Entity View Modes
- over 1200 lines of code for DS core module
- 6 lines of code:

```
/**
 * Implements hook_entity_info_alter().
 */
function CUSTOM_entity_info_alter(&$entity_info) {
  $entity_info['node']['view modes']['listing'] = array(
    'label' => t('Listing'),
    'custom settings' => FALSE,
  );
}
```

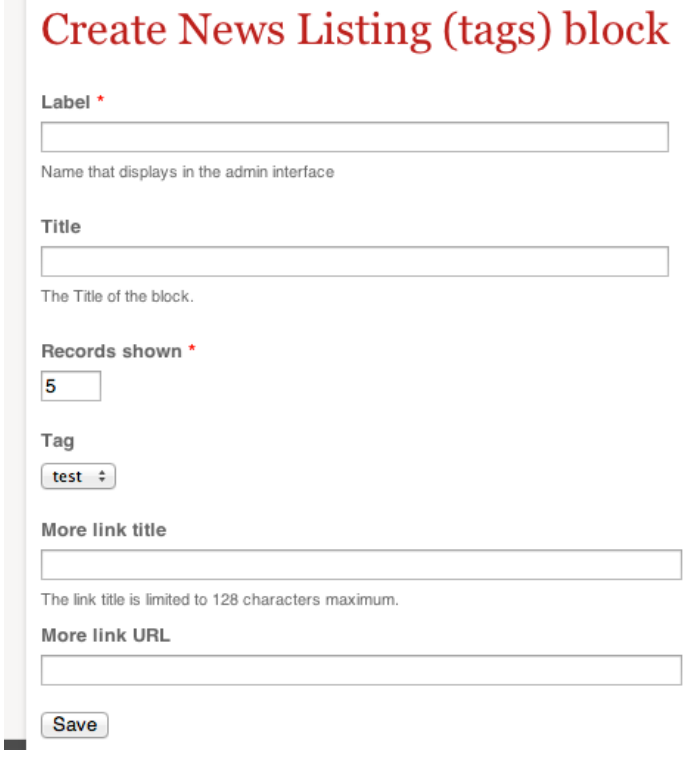
API: EntityFieldQuery vs. Views

Views Requires:

- Views module (1.5MB of code)
- Use of this interface by site editors



API: EntityFieldQuery vs. Views




```
$query = new EntityFieldQuery();

$query
  ->entityCondition('entity_type', 'node')
  ->entityCondition('bundle', 'news')
  ->propertyCondition('status', 1)
  ->fieldCondition('field_tags', 'tid', $bean->tags)
  ->fieldOrderBy('field_published_date', 'value', 'DESC')
  ->range(0, $bean->records_shown);

$result = $query->execute();
```

API: BEAN

```
/**
 * Implements hook_bean_types_api_info().
 */
function CUSTOM_bean_types_api_info() {
  return array('api' => 4);
}

/**
 * Implements hook_bean_types().
 */
function CUSTOM_bean_types() {
  $plugins = array();
  $plugins['news_tags'] = array(
    'label' => t('News Listing (tags)'),
    'description' => t('Provides a listing of news items based on callout tags.'),
    'handler' => array(
      'class' => 'NewsTagsBean',
      'parent' => 'bean',
      'path' => drupal_get_path('module', CUSTOM) . '/plugins/bean',
      'file' => 'news_tags.inc',
    ),
  );
  return $plugins;
}
```

API: BEAN

```
class NewsTagsBean extends BeanPlugin {
  /**
   * Declares default block settings.
   */
  public function values() {
    $values = array(
      'records_shown' => FALSE,
      'tags' => FALSE,
    );

    return array_merge(parent::values(), $values);
  }

  /**
   * Builds extra settings for the block edit form.
   */
  public function form($bean, $form, &$form_state) {
    $form = array();

    // Set default number of records shown
    if (!$records_shown = $bean->records_shown) {
      $records_shown = 5;
    }

    // Set default list of tags
    if (!$tags = $bean->tags) {
      $tags = false;
    }
```

Code borrowing

Modules have admin interfaces and support multiple use cases. Sometimes you only need a portion of a module.

Downside: now it’s your code!

Examples from a recent project:

- Image link formatter
- Node Menu Required
- Taxonomy Dupecheck

Code borrowing: Image link formatter

Contrib module to apply link field URL to an image field image. Module has an admin page, requires adjustments to the image formatter, and then addition to a Feature module. But here's the meat of what it does:

```
/**
 * Implements hook_node_view_alter()
 *
 * Alters the render array of the image field on a news node (if displayed) to
 * make it a link to the URL from field_url.
 *
 * Inspired by the image_link_formatter module. See:
 * http://drupalcode.org/project/image_link_formatter.git/blob/refs/heads/7.x-1.x:/image_link_formatter.module#l120
 */
function CUSTOM_node_view_alter(&$build) {
  if ($build['#node']->type == 'news' && !empty($build['field_image'])) {
    $language = field_language('node', $build['#node'], 'field_url');
    if (!empty($build['#node']->field_url[$language][0]['url'])) {
      $build['field_image'][0]['#path'] = array(
        'path' => $build['#node']->field_url[$language][0]['url'],
        'options' => array('attributes' => $build['#node']->field_url[$language][0]['attributes']),
      );
    }
  }
}
```

Code borrowing: Node Menu Required

Contrib module to force nodes into menus. It's already small, but this is all it does:

```
/**
 * Implements hook_FORM_ID_form_alter().
 *
 * Override form attributes for Hide Menu Item and Summary
 */
function CUSTOM_form_page_node_form_alter(&$form, &$form_state, $form_id) {
  // Require the menu link title and parent fields.
  $form['menu']['enabled']['#value'] = TRUE;
  $form['menu']['enabled']['#disabled'] = TRUE;
  $form['menu']['link']['link_title']['#required'] = TRUE;
  $form['menu']['link']['parent']['#required'] = TRUE;
}
```

Use Drupal’s regions

- Not Panels or Display Suite
  - Page editing experience is fractured and complex
- Blocks aren’t the only thing that can be placed in regions
- It’s nice to be able to version block placement

How to use regions?

BEAN! Block types just like content types + Blockreference field

Region View Modes: put any field in a region

Field Group for better layout options (bonus: improved node add/edit forms)

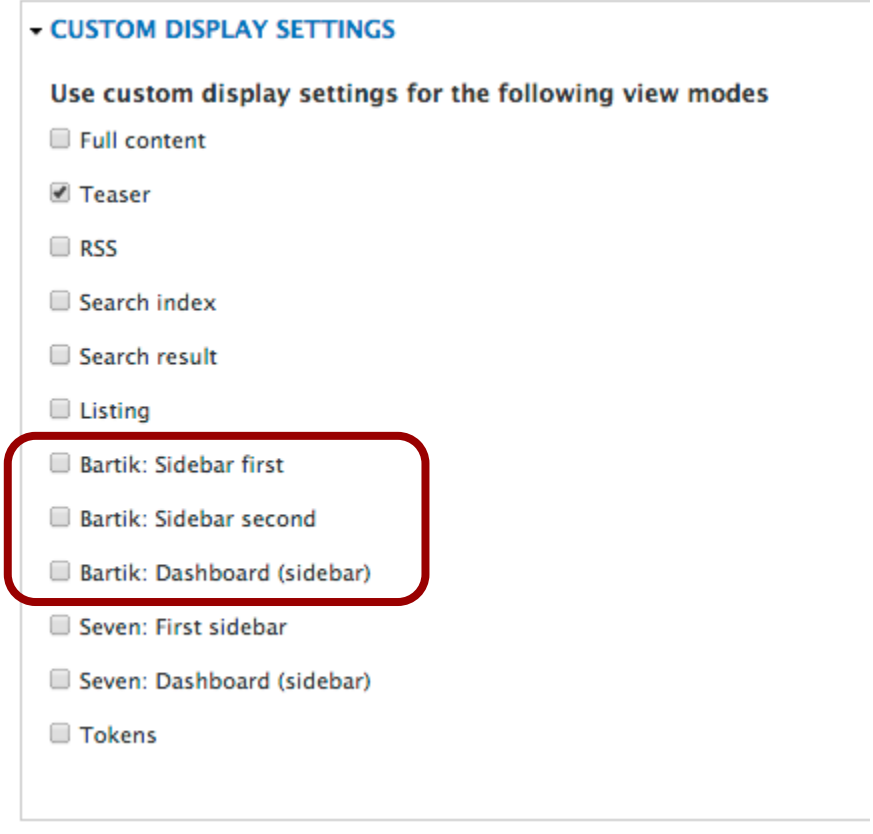
Region View Modes

For this example: there's a blockreference field on the page content type.

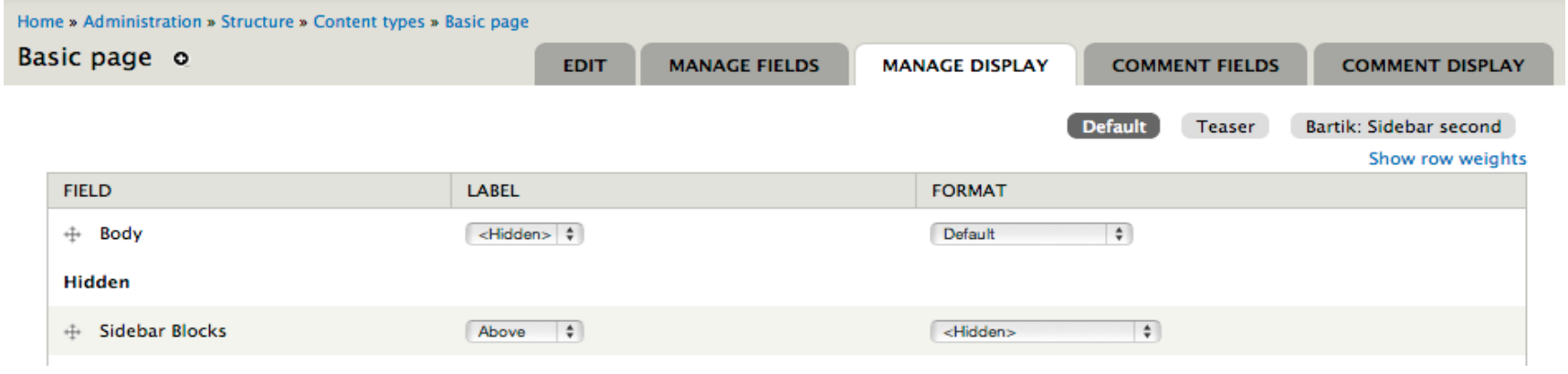
Show row weights

LABEL	MACHINE NAME	FIELD TYPE	WIDGET	OPERATIONS	
Title	title	Node module element			
Body	body	Long text and summary	Text area with a summary	edit	delete
Sidebar Blocks	field_sidebar_blocks	Block reference	Select list	edit	delete

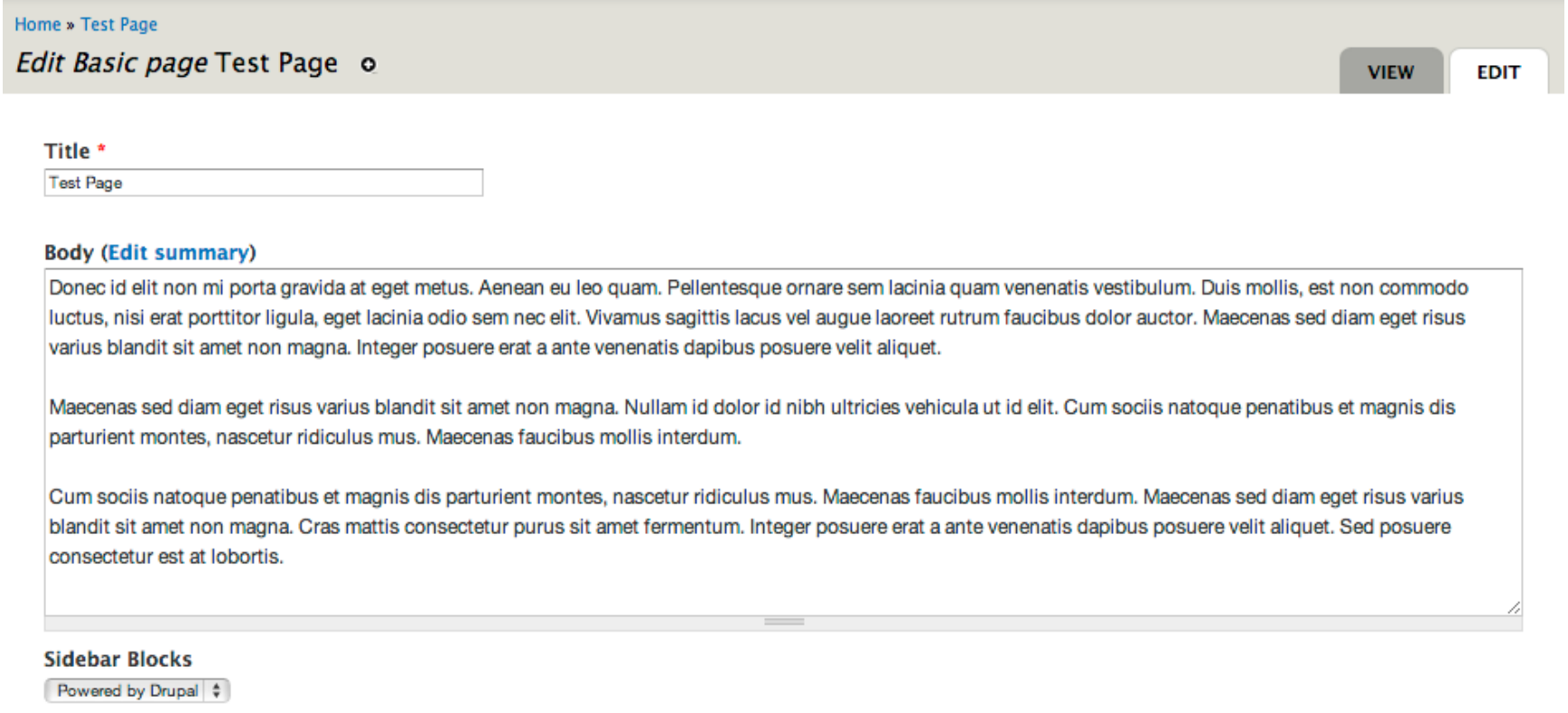
Region View Modes



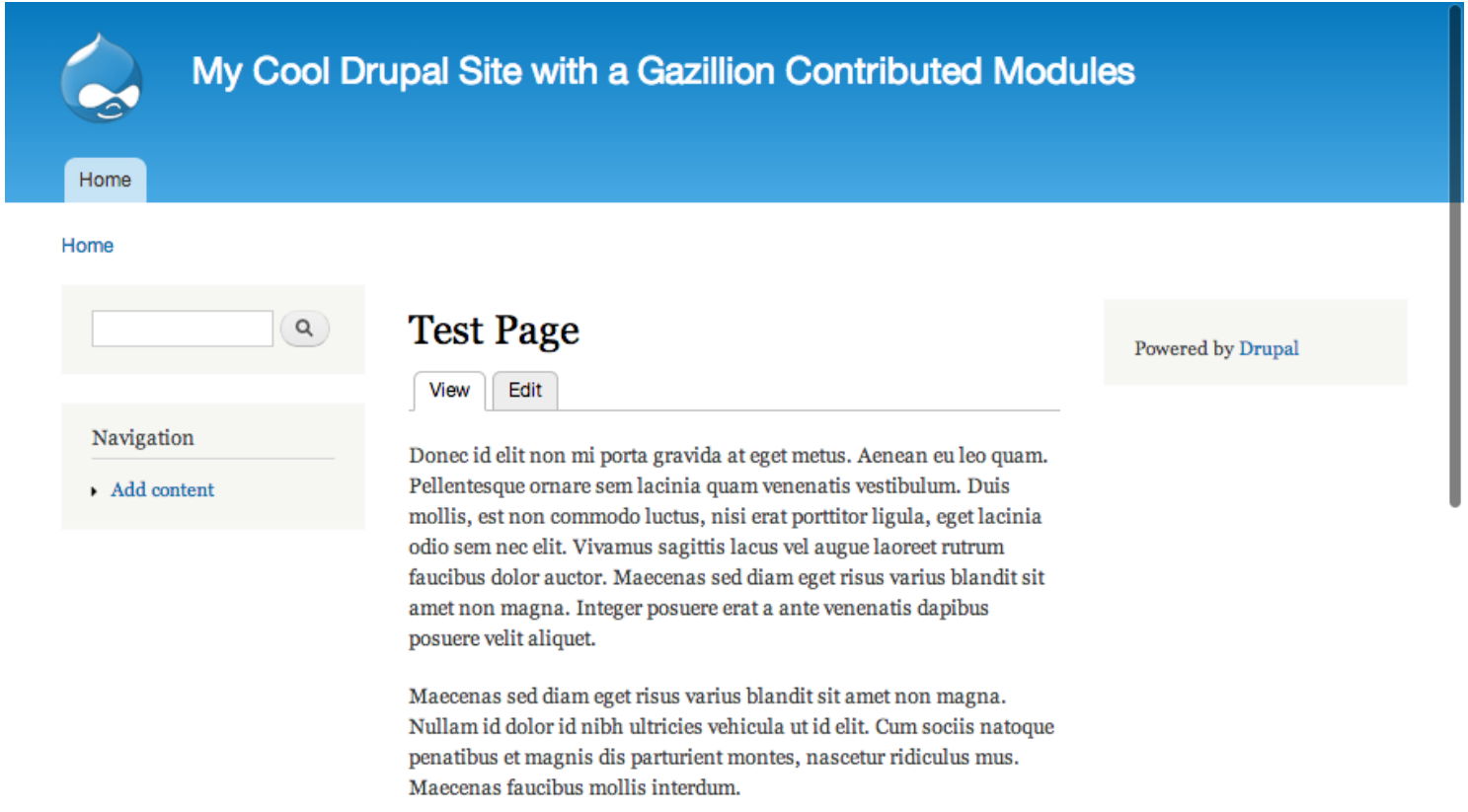
Region View Modes



Region View Modes



Region View Modes



In Conclusion

- Do more with what you get
- Choose contributed code wisely
- Have fun!

Thanks!

- Singlebrook Technology
- Inspiration from energy.gov

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