

Drupal Demonstration







Introduction to Drupal



What is Drupal?



- Drupal is a free open source (FOSS) Content Management System (CMS)
 - Easy to publish, manage and organize a wide variety of content on a website.
 - Drupal offers a sophisticated programming interface for developers, but no programming skills are required for website installation and administration.



Free open source (FOSS)



- Non-proprietary
- Community of developers and support
 - Drupal is open-source software distributed under the GPL ("GNU General Public License") and is maintained and developed by a community of thousands of users and developers

"Open source is a development methodology; free software is a social movement."

Further reading:

- Wikipedia Free Software Foundation
- Wikipedia Free software movement
- Wikipedia Open source software
- Raymond, Eric S. 'The Cathedral and the Bazaar'



Content Management System (CMS)



- computer application used to manage work flow needed to collaboratively create, edit, review, index, search, publish and archive various kinds of digital media and electronic text.
- simplify the publication of Web content to Web sites, in particular allowing content creators to submit content without requiring technical knowledge of HTML or the uploading of files.

DISA

Dynamic database-driven websites



- Sites are not static
 - Logged in users (authenticated users) see different dynamically generated content
 - Ease of editing and submitting new content means that we can perceive and create websites differently than we did a decade ago. (Content is not a fixed entity posted by an IT expert)
 - We can be active participants instead of passive recipients of the internet



Drupal sites



- Community web portals
- Discussion sites
- Corporate web sites
- Intranet applications
- Personal web sites or blogs
- E-commerce applications
- Resource directories
- Social Networking sites
- Libraries
- Universities



Drupal in action

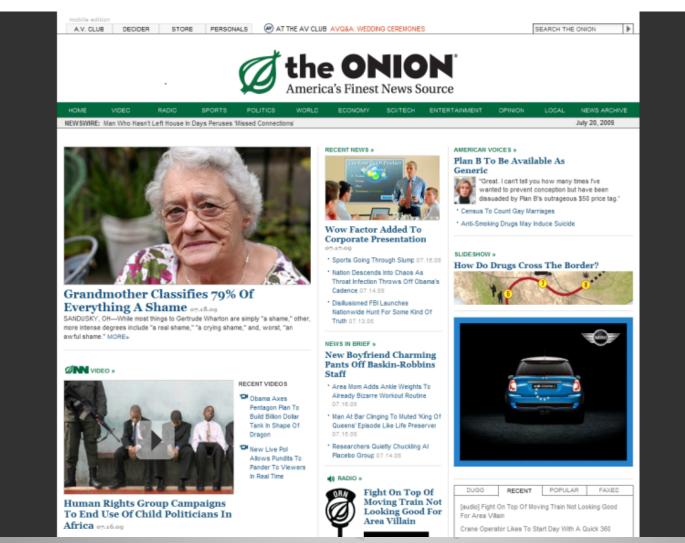


- ► The Onion
- ► The New York Observer
- ► MTV UK
- Recovery.org
- Amnesty International
- Amherst College
- ► Sadtu
- Abahlali
- ▶ Campbell Collections



The Onion

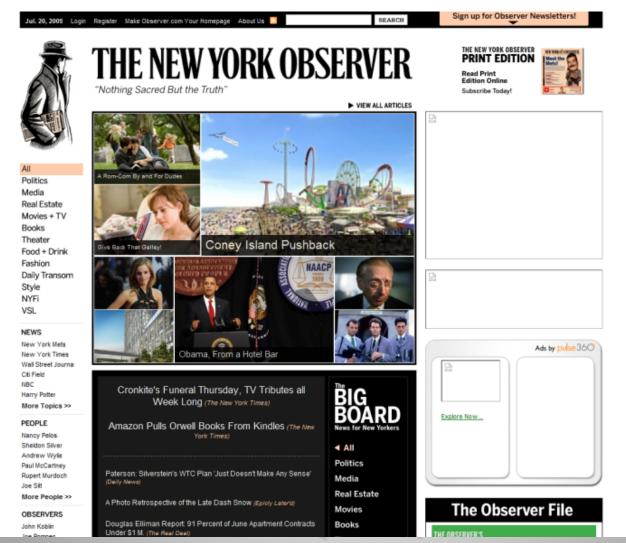






The New York Observer

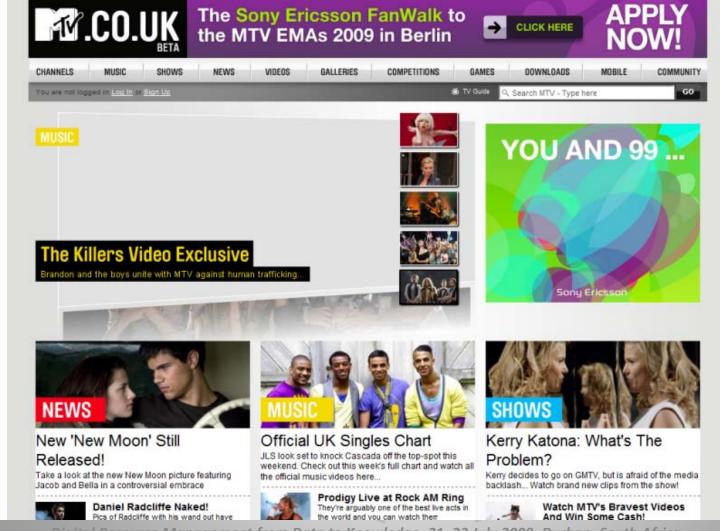






MTV UK







Recovery.org

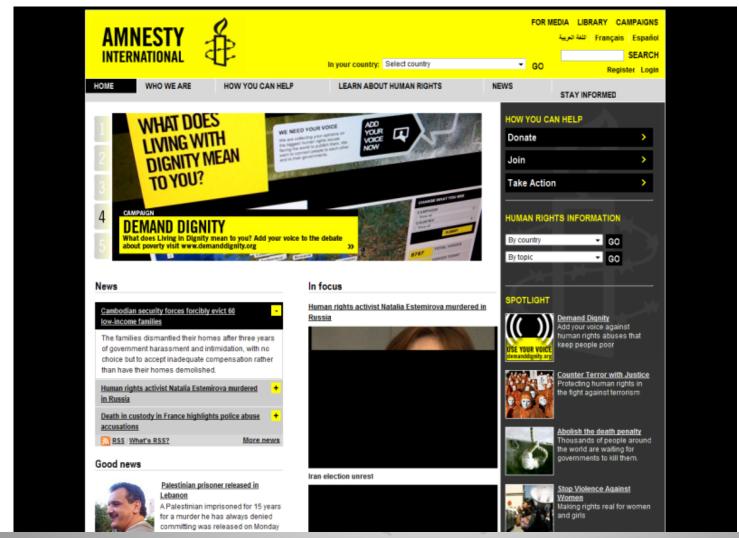






Amnesty International







Amherst College







SADTU





EVENTS 1 2 3 4 6 7 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 TRI - PARTITE NEWS ANC COSATU WHAT DO YOU THINK OF THE NEW SADTU SITE? Prefer the old site Could do with more work 34% Total votes: 584 Older polls



Abahlali baseMjondolo







The City of Cape Town is Politicising Flood Aid & Failing to Deal with the Structural Issues

Submitted by Abaniall_3 on Thu, 2009-07-16 09:37 | Roods | Western Cape Anti-Eviction Campaign

Anti-Eviction Campaign Press Release Thursday 16 July, 2009

More than ten Cape Flats informal settlements hardest hit by last week's floods did not receive any emergency assistance at all from the City of Cape Town or the Provincial Government. This include Tambo Square, Barcelona, New Rest and Gxa Gxa Square in the Gugulethu area. In addition to this, the city continues to ignore the plight of vulnerable backyard dwellers whose homes have been flooded.

Many AEC communities as well as communities other poor settlements are now in dire straights as a





Campbell Collections





Campbell Collections University of KwaZulu-Natal

Search Museum and Collections | UKZN iLink

Search

KC Africana Library ▼ WC Furniture and Pictures ▼ Mashu Museum ▼ Research Projects ▼ Muckleneuk Tours ▼ Staff Contact List

Welcome Visitor!

If you wish to view the Historical Photographs or the Manuscript Inventory, please login or create new account

Announcements

· Our new address: 220 Gladys Mazibuko Road (formerly 220 Marriott Road)

User login

Username: * Password: *

Create new account Request new password

Login

Campbell Collections

The Campbell Collections are housed in a neo-Cape Dutch style house, Muckleneuk, formerly the home of Natal sugar farmer and politician Sir Marshall Campbell (1848 - 1917). The Campbell Collections were established by Marshall's son William (1880 - 1962) and his daughter Killie Campbell (1881 - 1965). Killie Campbell, a well known africana collector, lived in Muckleneuk until her death in 1965 when her collections were begueathed to the University of Natal.







Shaka kaSenzangakhona

Muckleneuk

Killie and William Campbell

Campbell Collections holds major resources for research into the history and culture of southern Africa and KwaZulu-Natal.

The Collections comprise of:

Killie Campbell Africana Library (KCAL)



Installation requirements PHP-triad



- Web server (Apache)
- Database (MySQL)
- ▶ PHP



Drupal.org





Drupal Security Team - July 1, 2009 - 20:18 News and announcements - Drupal 5.x - Drupal 6.x - Drupal News Drupal 6.13 and 5.19, maintenance releases fixing problems reported using the bug tracking system, as well as Download Drupal 6.13 critical security vulnerabilities, are now available for download. Both releases fix some other smaller issues **Download Drupal 5.19** Upgrading your existing Drupal 5 and 6 sites is strongly recommended. There are no new features in these releases. For more information about the Drupal 6.x release series, consult the Drupal 6.0 release announcement, more information on the 5.x releases can be found in Drupal 5.0 release announcement. - Read more Pre-Freeze Code Testing Sprint - Los Angeles - August 15-16, 2009

highermath - July 15, 2009 - 16:45

News and announcements - Drupal 7.x

Code freeze begins September 1st. During this period, we fix bugs and when Drupal 7 is stable, we release. In the past, we have done manual testing. This time we have an automated testing framework and already a large number of tests. In an ideal world, we would only release when all code is touched by tests. While this won't guarantee that Drupal will be bug free, every test contributes to the overall quality of Drupal.

Two weeks before the code freeze, we will gather in Los Angeles to write tests. This will take us into the darker corners of core, so we also get the chance to fix bugs and, because this precedes the code freeze, we have greater freedom in how to fix them.

Since this sprint is so dose to the code freeze, it's an excellent time to raise the test coverage ratio as there will be little new development in the final two weeks.

Please join us! Go to the sprint sign-up page at http://groups.drupal.org/node/22652

Food, beverages, power, IP and chocolate will be provided by our sponsors, Causecast and the The Cherry Hill Company.



Contributor links

- · Community initiatives
- · Queues
- · My issues
- 358 Pending bugs (D7)
- . 325 Critical issues (D7)
- 1639 Patch queue (D7)
- . 201 Patches to review (D7)
- · Performance issues (D7)
- Usability issues (D7)
- Fields in Core issues (D7)
- · Play patch bingo!
- · Drupal core
- Contributions
- · Play bug bingo!
- · Drupal core
- Contributions
- · Mailing list archives
- · Drupal.org webmasters



Download statistics



- ► From July 2007 to June 2008, Drupal core was downloaded more than 1.4 million times
- ► The year before, from July 2006 to June 2007, Drupal core was downloaded 620,000 times
- The number of downloads doubled in a year



Google Insights



Web Search Volume: drupal vs. joomla vs. wordpress Worldwide, 2004 - present





Source: http://www.google.com/insights/



What makes Drupal special?

Drupal Taxonomy: the power to organize and reorganize



The key difference that distinguishes Drupal from traditional CMS is Drupal's system for classifying content – known as taxonomy and implemented in the core Taxonomy module.

- You can define your own vocabularies (groups of taxonomy terms), and add terms to each vocabulary. Vocabularies can be flat or hierarchical, can allow single or multiple selection, and can also be "free tagging"
- Content in your site can be grouped into categories, tagged, or classified in any way you choose

Drupal's dynamic taxonomy management module empowers non-technical users to define and change the structure of their websites

Source: http://drupal.org/node/19828

Source: http://digitalsolutions.ph/couchkamotereviews/newCMS





Part 2

Drupal Concepts and Terminology



Node



A node in Drupal is the generic term for a piece of content on your web site.

- Some examples of nodes:
 - Page content type
 - Discussion topics in forums
 - Entries in blogs
 - News article stories



Module



- A module is software (code) that extends Drupal features and/or functionality.
- Core modules are those included with the main download of Drupal, and you can turn on their functionality without installing additional software.
- Contributed modules are downloaded from the <u>Modules download section of drupal.org</u>, and installed within your Drupal installation.
- ➤ You can also create your own modules; this requires a thorough understanding of Drupal, PHP programming, and Drupal's module API.

Source: http://drupal.org/node/19828



Blocks and Regions

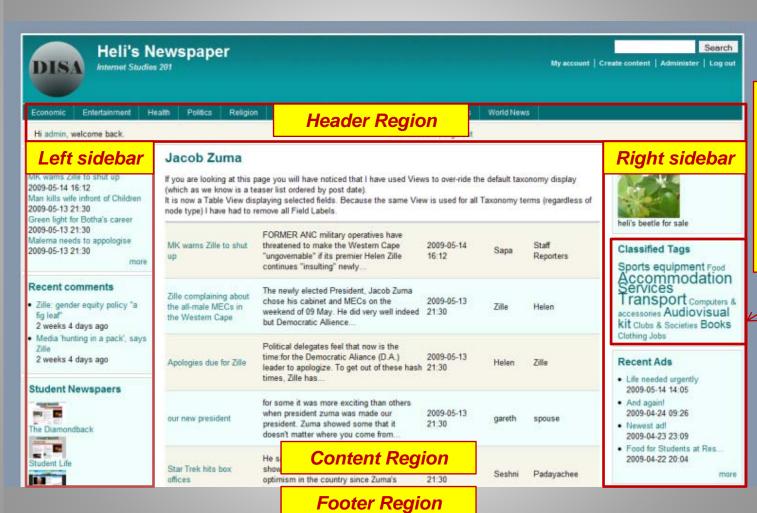


- ► Pages are laid out in regions, which usually include the header, footer, sidebars, and main content.
- ▶ Blocks are chunks of information that are displayed in the regions of your site's pages. Blocks can take the form of menus (which are concerned with site navigation), the output from modules (e.g., tagadelic), or dynamic and static chunks of information that you've created yourself (e.g., a list of upcoming events).



Internet studies 201 Regions and blocks





Tag cloud generated by the Tagadelic module displayed in a block in the Right sidebar Region



Menus

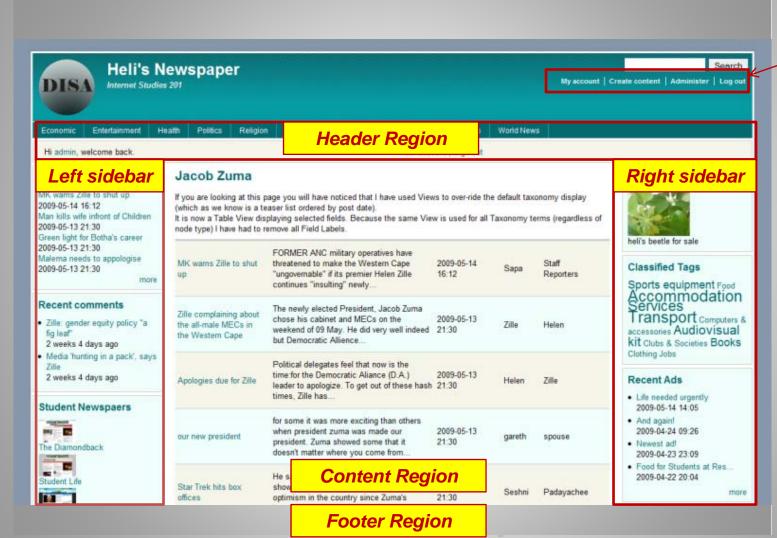


- ► There are three standard menus in Drupal: Primary Links, Secondary Links, and Navigation.
 - Navigation is the catch-all menu that contains your administration menus.
 - Primary and Secondary links are built by site administrators, and displayed automatically in the page header of many themes
 - You can create custom menus, and menu items and display them by enabling their blocks.
- Menu items will only be shown to a visitor if they have the rights to view the page it links to; e.g., the admin menu item is not shown to visitors who are not logged in.
 Source: http://drupal.org/node/19828



Internet studies 201 Menus





Navigation menu displayed in Primary links



User, Permission, Role



- Every visitor to your site is a user. Non-anonymous users have a user name and an email address.
- The user account you create when you install Drupal, is special: this user has permission to do everything on the site.
- ▶ Other users on your site can be assigned permissions via roles. To do this you create a role, assign permissions to that role, finally, you add certain users on your site to the new role. This means that when those users are logged in, Drupal will let them do the actions you gave that role permission to do.
- Drupal permissions are flexible you can assign permission for any task to any role.

Source: http://drupal.org/node/19828



Campbell Collections (anonymous)





Create new account

Request new password

The Campbell Collections are housed in a neo-Cape Dutch style house, Muckleneuk, formerly the home of Natal sugar farmer and politician Sir Marshall Campbell (1848 - 1917). The Campbell Collections were established by Marshall's son William (1880 - 1962) and his daughter Killie Campbell (1881 - 1965). Killie Campbell, a well known africana collector, lived in Muckleneuk until her death in 1965 when her collections were begueathed to the University of Natal.







Search Museum and Collections | UKZN iLink

Search

Shaka kaSenzangakhona

Muckleneuk

Killie and William Campbell

Campbell Collections holds major resources for research into the history and culture of southern Africa and KwaZulu-Natal.

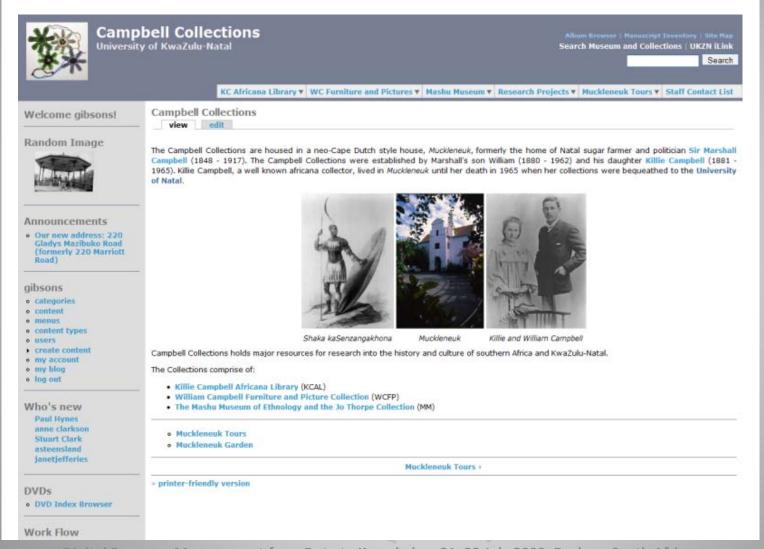
The Collections comprise of:

Killie Campbell Africana Library (KCAL)



Campbell Collections (user - gibsons)





Campbell Collections (edit tab)





Theme



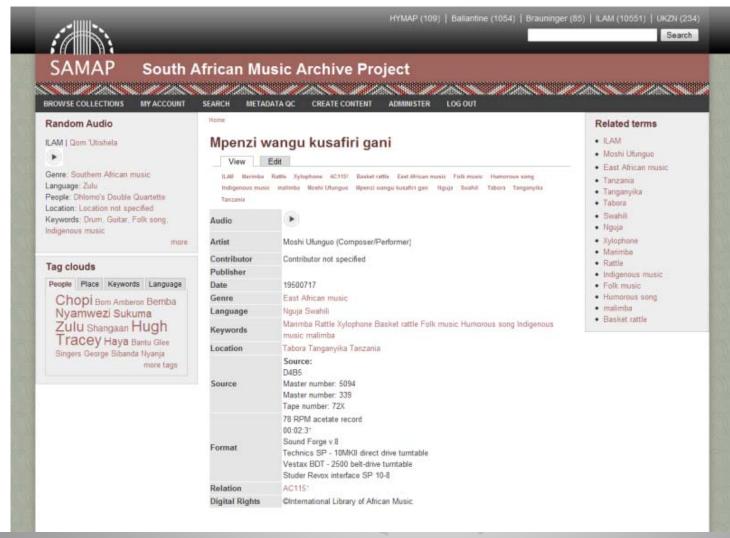
- ► The theme controls how your site is displayed, including the graphic look, layout, and colours.
- ► A theme consists of one or more PHP files that define the HTML output of your site's pages, along with one or more CSS files that define the layout, fonts, colours, and other styles.

Source: http://drupal.org/node/19828



SAMAP theme 1







SAMAP theme 1

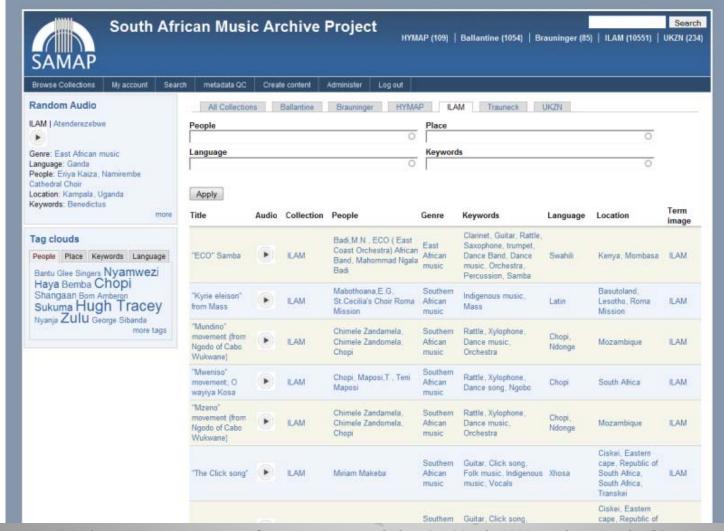


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	A plea for Africa	٠	UKZN	Hope Fountain Native Girls Choir	
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	Afrikaans wiegeliedjie (lullaby)	•	UKZN	Steyn,Betty	
	Amadevu	•	UKZN	Bantu Glee Singers	
	Amafuto mkovu	•	UKZN	Amanzimtoti Zulu Choir	
	Amagundane ehlez' ebandhlala lawo	•	UKZN	Stuart, James	
	Amtambo amhlophe		UKZN	Bantu Glee Singers	



SAMAP theme 2







Digital Resource Management from Data to Knowledge, 21–23 July 2009, Durban, South Africa

SAMAP theme 3



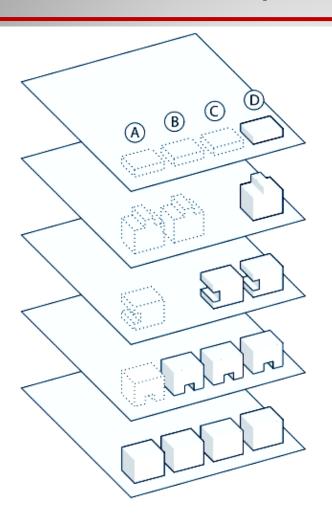
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RSS publishing					
Taxonomy					
Site building			Dropat		
Blocks					



Digital Resource Management from Data to Knowledge, 21–23 July 2009, Durban, South Africa

Drupal flow





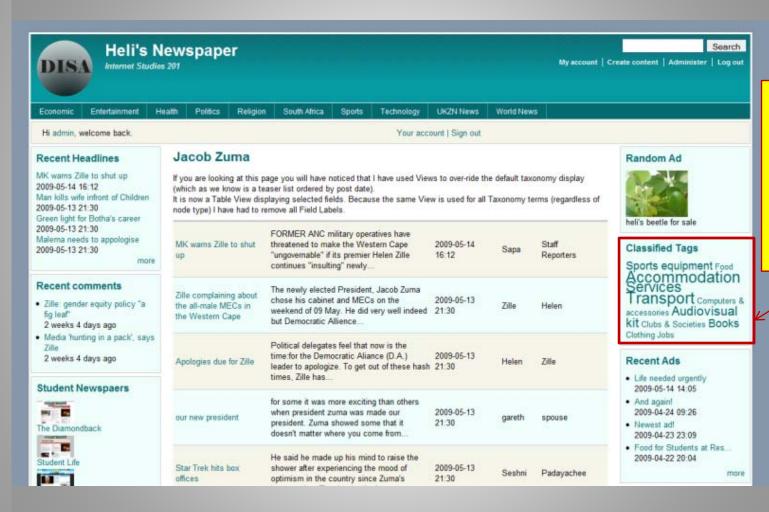
- 5. Template
- 4. User Permissions
- 3. Blocks & Menus
- 2. Modules
- 1. Data (Nodes etc)



Source: http://drupal.org/getting-started/before/overview

Internet studies 201 Regions and blocks: Tagadelic





Tag cloud generated by the Tagadelic module displayed in a block in the Right sidebar Region



Database



Drupal stores information in a database; each type of information has its own database table.

For instance:

- The basic information about the nodes of your site are stored in the Node table
- Comments and Users also have their own database tables
- Roles, Permissions, and other settings are also stored in database tables.
- Many modules their own tables to the database
- Drupal users (including administrators) need never interact with the database directly.

Source: http://drupal.org/node/19828



Taxonomy?



- Drupal's system for classifying content, is known as taxonomy and is implemented in the core Taxonomy module
- You can define your own vocabularies (groups of taxonomy terms), and add terms to each vocabulary. Vocabularies can be flat or hierarchical, can allow single or multiple selection, and can also be "free tagging" (meaning that when creating or editing content, you can add new terms on the fly)
- Each vocabulary can then be attached to one or more content types, and in this way, nodes on your site can be grouped into categories, tagged, or classified in any way you choose



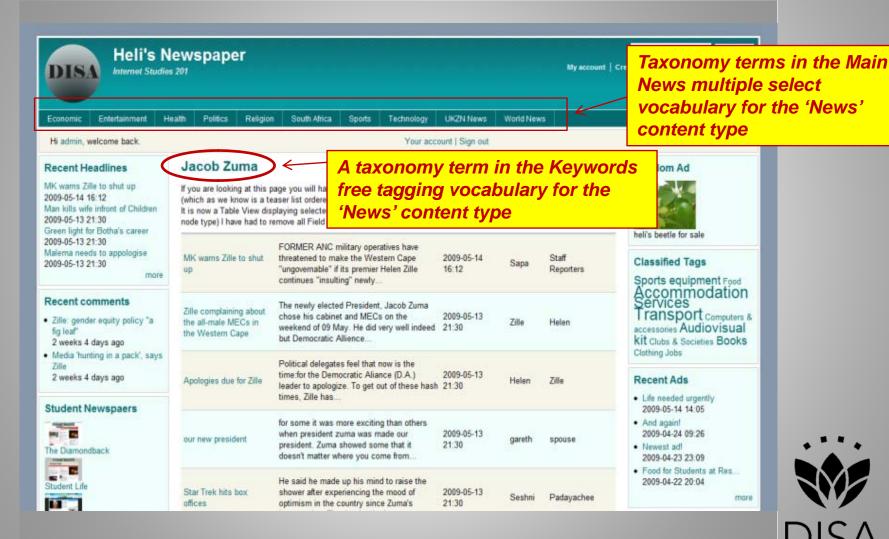
Internet studies 201 Student newspaper front page





Internet studies 201 Jacob Zuma taxonomy term











Concluding comments



Paradigm shift?



Rapid reorganization and dynamic taxonomy management

Drupal's Taxonomy module allows administrators to organize and reorganize content easily.

- Content can be filtered and retrieved in numerous ways
- Drupal starts with content, not with structure. What is perceived as structure is an overlay – which can be changed as needs arise without requiring major reprogramming
- Complex websites can be built with no programming knowledge



Source: http://digitalsolutions.ph/couchkamotereviews/newCMS

Drupal Paradigm

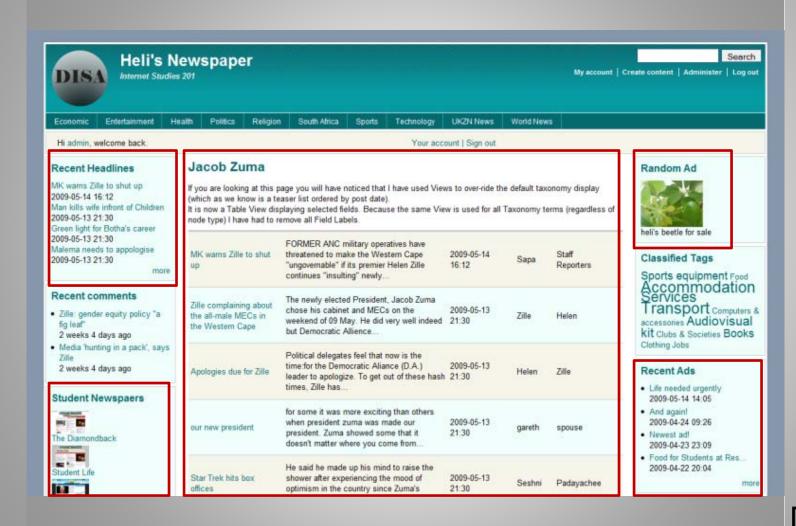


- Separate content from layout (html mark up)
- Separate content from structure (not limited to a static hierarchical tree like structure)
- Abstraction (generalised systems and methodologies rather than specialised solutions)



Abstraction in action Same methodology - different results







Key contributed modules



- Content Construction Kit (CCK)
 - Create a custom content type specific to your content management needs (web form)
- Views
 - generates queries with different display, filtering and sorting options for content

- Node import
 - Import TSV or CSV text files into Drupal nodes. (This is the module I use to import content from legacy systems into Drupal)



Drupal's mission and values



To develop a leading edge open-source content management system that implements the latest thinking and best practices in community publishing, knowledge management, and software design.

We value:

- Flexibility, simplicity, and utility in our product;
- Teamwork, innovation, and openness in our community;
- Modularity, extensibility and maintainability in our code.

Source: http://drupal.org/mission

