

# HELLO DRUPAL

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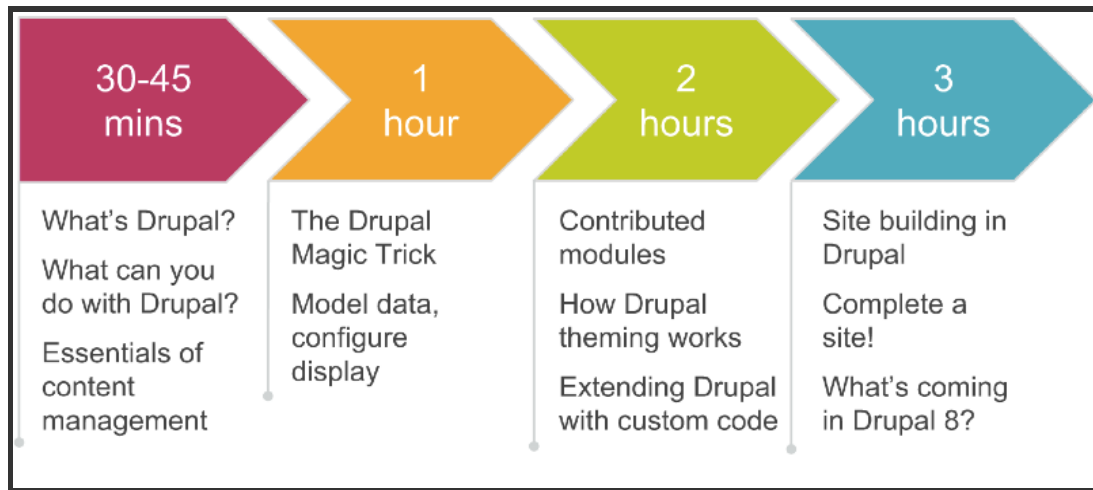
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More info at <http://training.acquia.com/hellodrupal>  
(<http://training.acquia.com/hellodrupal>)

CONTACT HEATHER JAMES AT @LEARNINGDRUPAL  
([HTTP://TWITTER.COM/](http://twitter.com/))

# WHAT WE'LL DO IN THIS COURSE

Depends on how much time we have!



- Learn concepts
- Watch demos
- Try it yourself

# GETTING TO KNOW YOU

## ABOUT ME

- Why I use Drupal
- What I do with Drupal

## ABOUT YOU!

- What other systems have you used?

# WHAT YOU ABSOLUTELY MUST KNOW

1. What is Drupal?
2. Admin tour: Managing content with Drupal
3. Thinking like Drupal: The Drupal Magic Trick
4. Extending Drupal: The Big Three

# READINESS CHECK!

## TOOLS YOU NEED

1. A working copy of Drupal 7
  - Local install (Try Dev Desktop) OR
  - Acquia Free Tier OR
  - Account on Drupal Gardens
2. Online exercises.

## NICE TO HAVE

1. Browser inspection tool, such as Firebug for Firefox; or "Developer mode" in Chrome
2. Lorem ipsum generator

# 1. WHAT IS DRUPAL?

# WHY DO WE HAVE CMSS?

## OLD DAYS: JUST HTML

- Sites were mainly text and images
- Hierarchical site structure.
- Sites were assumed to be accessed mainly from their front pages.
- Site maintenance consisted of updating text files.

## TO DATABASE-DRIVEN!

- Templating languages like PHP.
- Separate data and business logic separated from display.
- Users, logging in and interacting.
- Non technical staff managing websites



# IN COMES DRUPAL!



- Founded by Dries Buytaert in his college dorm, circa 2001.
- **Popular:** 1 out of every 50 websites
- **Flexible:** From programmable API to UI tools for modeling data and display
- **OSS:** Open source software (GPL v 2+)
- **CMS:** Content management system

Photo by Kathleen Murtagh Dries' State of Drupal keynote

(<http://www.flickr.com/photos/ceardach/4540450692>)

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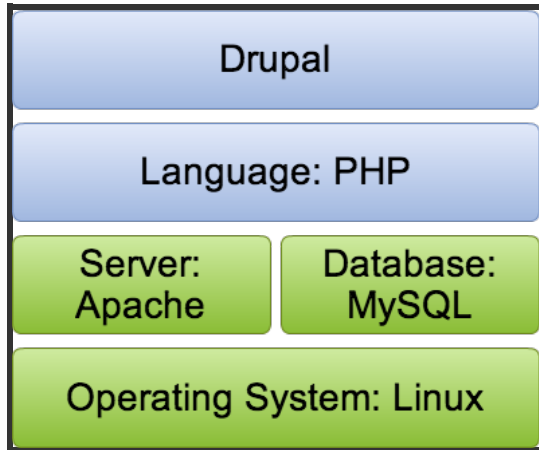
# USED WORLDWIDE

Many cases: Publishing, Community, Apps, Web presence.  
Visit [drupalshowcase.com](http://drupalshowcase.com) (<http://drupalshowcase.com>)



Economist.com, Dev.twitter.com, Whitehouse.gov, The King Center

# WHAT DOES DRUPAL RUN ON?



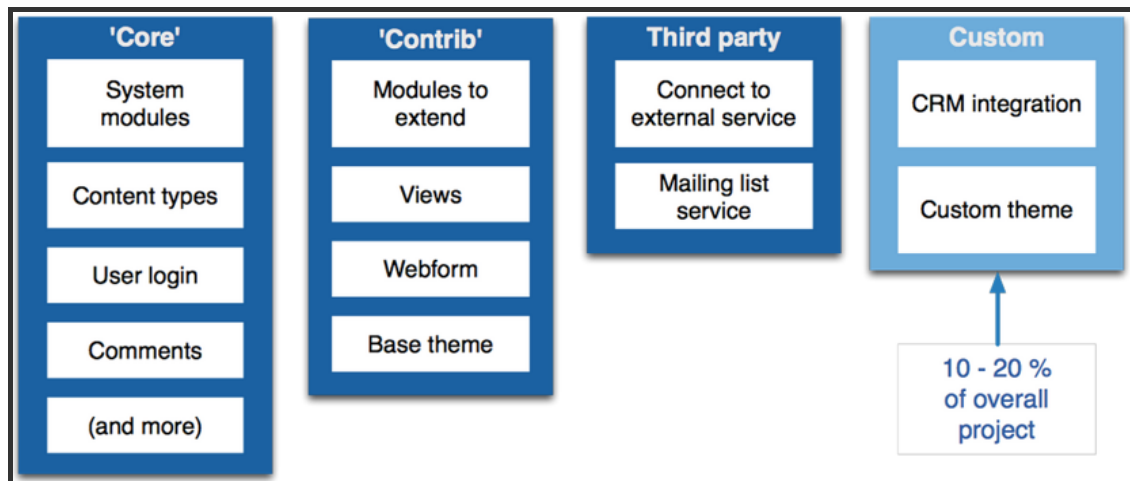
## REQUIREMENTS AND FLEXIBILITY

- Details [drupal.org/requirements](https://drupal.org/requirements) (<https://drupal.org/requirements>)
- Built in PHP, HTML, CSS, JS.
- Other OSs, other servers, other DBs possible (in green)

LAMP stack is most widely used and tested.

# BUILDING WITH DRUPAL

Drupal functionality is easily extended with contributed and custom code



About 80-90% of a typical project is done with contributed code!

# DRUPAL.ORG (HTTP://DRUPAL.ORG)

HOW MANY DEVELOPERS HAVE *CONTRIBUTED* TO DRUPAL? (HINT: CHECK "D.O")



1,006,096 people in 229 countries\* speaking 181 languages power Drupal.

Gábor Hojtsy updated State API in Drupal 8

News ● Docs Updates ● Forum Posts ● Commits

**Drupal.org D7 upgrade live!**  
November 1, 2013

If you are reading this announcement right now, then we did it! Drupal.org runs on Drupal 7! This was a big and complicated project, which took longer than we expected. [Read more](#)

Drupal.org downtime: 31st of October 2013, 15:00 UTC (08:00am PDT)

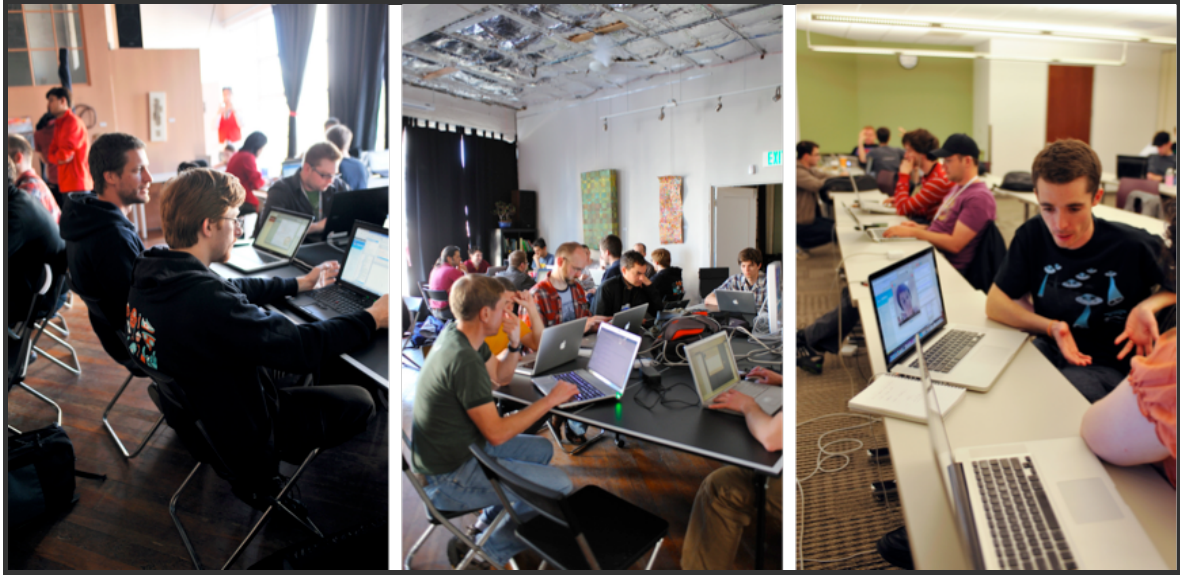
Drupal 8 UX research studies: how you can help improve Drupal?

[More news...](#)

Drupal.org (<http://drupal.org>) is the canonical location for collaboration, support, downloading code, accessing documentation and connecting to regional and working

# DRUPAL IS BUILT BY PEOPLE

DRUPAL IS SOFTWARE BUT ALSO A COMMUNITY.



All photos by Kathleen Murtagh code sprints (<http://www.flickr.com/photos/ceardach/>)  
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# DRUPALCON

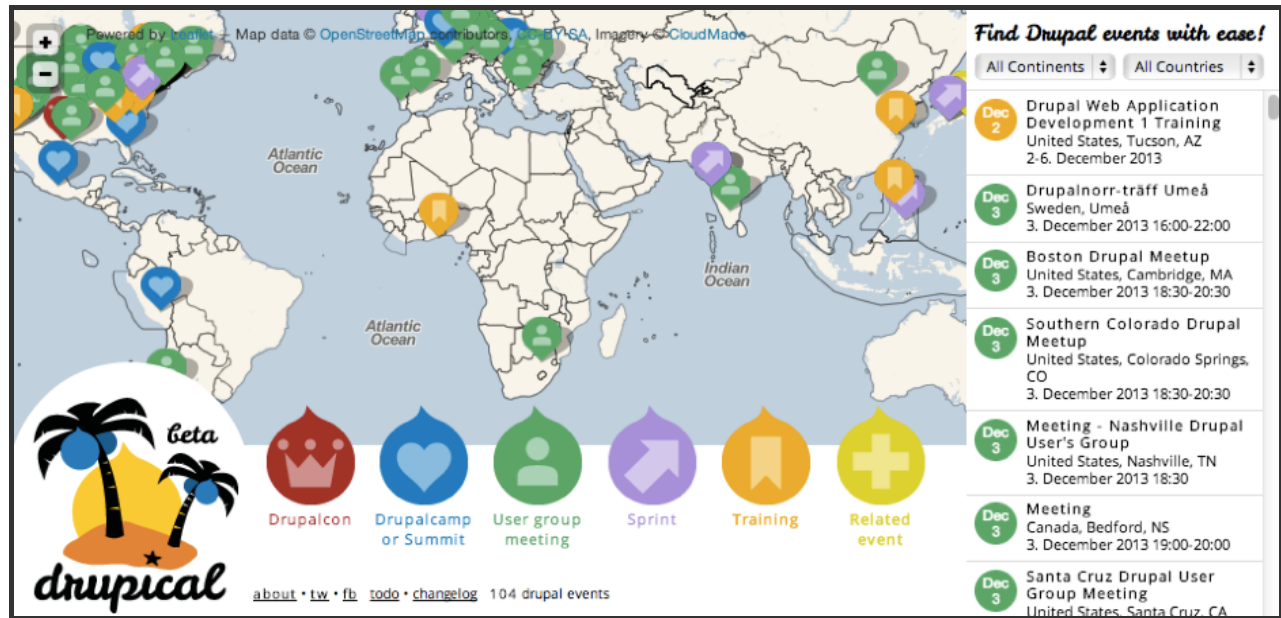
- Held in Europe, North America and Australia
- From 1500-3000 people
- 5 days of learning and collaboration
- Affordable ticket prices; also Scholarships!

WHERE'S THE NEXT DRUPALCON?

Hint! Check [association.drupal.org/drupalcon](https://association.drupal.org/drupalcon)  
(<https://association.drupal.org/drupalcon>)

# CONNECT LOCALLY

Attend meet-ups, DrupalCamps (local conferences) and training



The screenshot displays the Drupical website interface. At the top, it says "Powered by Drupal" and "Map data © OpenStreetMap contributors, Imagery © CloudMade". The main feature is a world map with various colored markers representing different types of events. Below the map, there is a legend with icons and labels: Drupalcon (red crown), Drupalcamp or Summit (blue heart), User group meeting (green person), Sprint (purple arrow), Training (orange book), and Related event (yellow plus). To the right of the map, there is a sidebar titled "Find Drupal events with ease!" with filters for "All Continents" and "All Countries". Below the filters, a list of events is shown, each with a date, location, and time. The events listed are:

- Dec 2: Drupal Web Application Development 1 Training, United States, Tucson, AZ, 2-6, December 2013
- Dec 3: Drupalnorr-träff Umeå, Sweden, Umeå, 3. December 2013 16:00-22:00
- Dec 3: Boston Drupal Meetup, United States, Cambridge, MA, 3. December 2013 18:30-20:30
- Dec 3: Southern Colorado Drupal Meetup, United States, Colorado Springs, CO, 3. December 2013 18:30-20:30
- Dec 3: Meeting - Nashville Drupal User's Group, United States, Nashville, TN, 3. December 2013 18:30
- Dec 3: Meeting, Canada, Bedford, NS, 3. December 2013 19:00-20:00
- Dec 3: Santa Cruz Drupal User Group Meeting, United States, Santa Cruz, CA

At the bottom left, there is a logo for "drupical beta" featuring two palm trees and a star. At the bottom center, there are links for "about", "tw", "fb", "todo", and "changelog", followed by the text "104 drupal events".

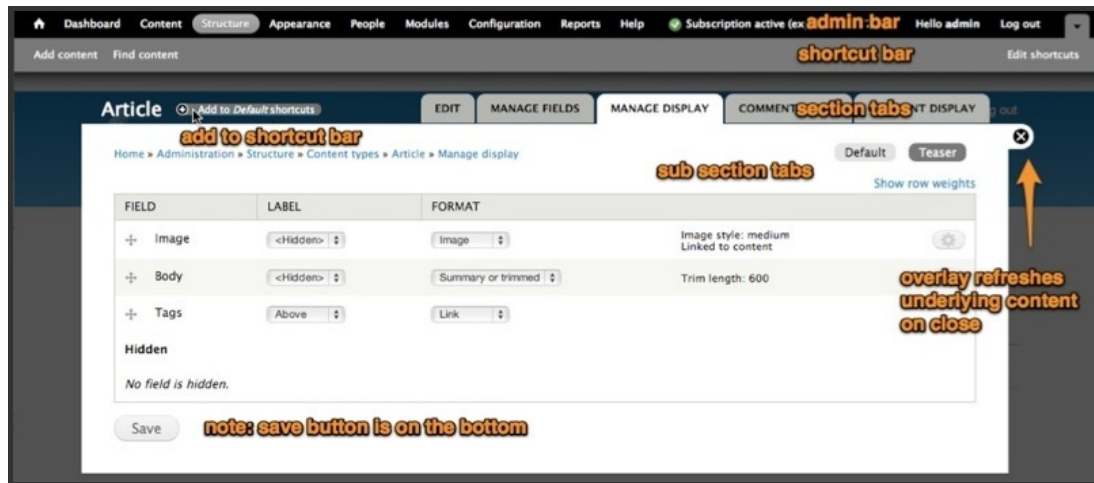
Drupical (<http://drupical.com>) hosts and up to date listing of events across the world.



## 2. THE DRUPAL ADMIN TOUR!

# DRUPAL AS A CMS

DEMOS BY YOUR DRUPAL GUIDE; YOU TRY THE TASKS.



In Drupal 7, most of the editing in the admin area is done in the "overlay".

# MANAGING CONTENT WITH DRUPAL

## DEMO

1. A quick tour of the admin UI, the overlay and menus.
2. How to add content?
3. Where to find content?

## TASKS

1. Change your site title!
2. Add a basic page
3. Add an article
4. Bonus: Main menu link
5. Bonus: Comments

# HOW DID YOU DO?

Which of these tasks did you complete?

1. Changed site title.
2. Added a Basic page titled "About".
3. Created an article with tags.
4. Bonus: Added a comment.
5. Bonus: Added link to Main menu.

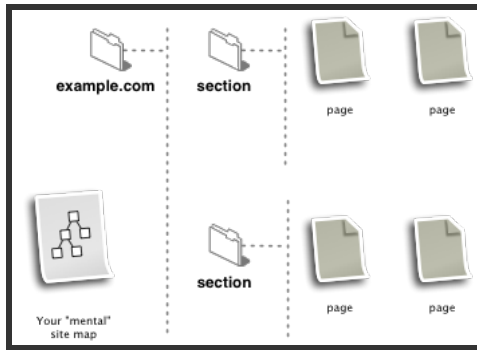
# IMPORTANT TO KNOW!

The Drupal content editing experience can (and should) be customized by the developers for users.

1. Custom administration pages
2. Improved UI for editing content
3. WYSIWYG configuration

# 3. THINKING LIKE DRUPAL

# ASSEMBLING YOUR WEBSITE



(images/mental-sitemap-  
full.png)

Your mental model might be  
like this.

- You use Drupal to assemble sites with data.
- Drupal surprises users who expect "structure first". Drupal is "data first".
- The computing metaphor of "folders" and "documents" is compelling. Beware!

# STRUCTURED DATA

Compare these two data models. How can you control content input and display with either?

Title	Title
In HTML:  Body text Tags Location Media (video, images)	Image upload  Body text  Location  Tags

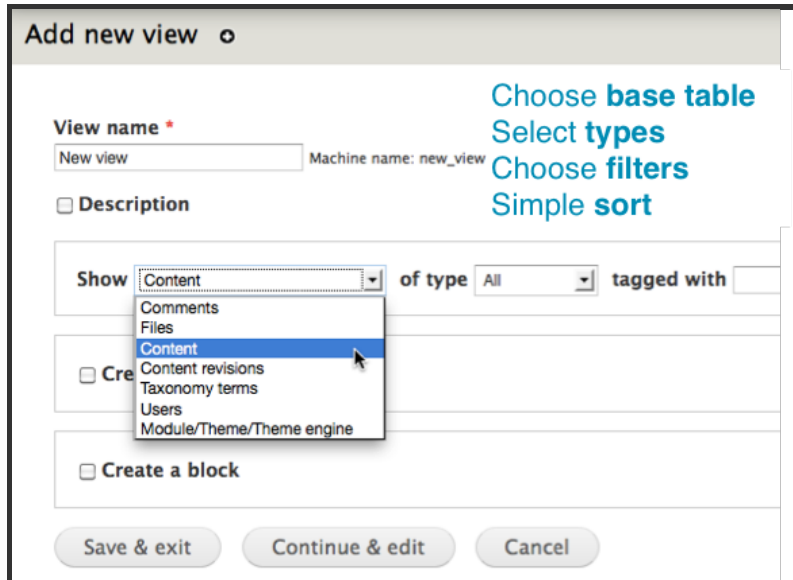
Unstructured text on the left, structured data (fields) on the right.



# INTRODUCING VIEWS!

Views is a query builder.

It's the most popular **contributed module**.



The screenshot shows the 'Add new view' wizard interface. At the top, there's a title bar 'Add new view' with a close button. Below it, the 'View name' field is set to 'New view', and the 'Machine name' is 'new\_view'. To the right of these fields are four blue links: 'Choose base table', 'Select types', 'Choose filters', and 'Simple sort'. Below the name fields is a checkbox for 'Description'. The main section is titled 'Show' and features a dropdown menu currently displaying 'Content'. A mouse cursor is hovering over the 'Content' option in the dropdown list, which also shows other options like 'Comments', 'Files', 'Content revisions', 'Taxonomy terms', 'Users', and 'Module/Theme/Theme engine'. To the right of the dropdown are 'of type' (set to 'All') and 'tagged with' (empty) fields. Below this is a checkbox for 'Create a block'. At the bottom, there are three buttons: 'Save & exit', 'Continue & edit', and 'Cancel'.

This shows the Views wizard screen which we'll use in the demo.

# DRUPAL MAGIC TRICK!

## DEMO

1. Add a **content type**
2. Add an **imagefield**
3. Create content (add a **node**)
4. Create lists of content with **Views**
5. Place a **block** into a **region**
6. Fix the **imagestyle**

## TASKS

1. Use Views!
2. Make a page of articles at /articles

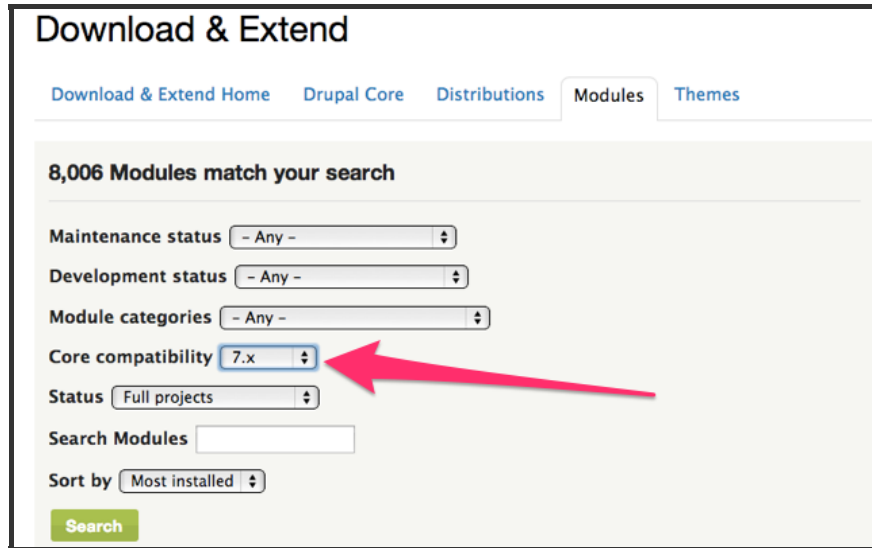
# HOW DID YOU DO?

Which of these tasks did you complete?

1. Created a view
2. Added a page of articles at /articles
3. Bonus: Did you try something else?

# IMPORTANT TO KNOW!

CONTRIBUTED **MODULES** EXTEND WHAT DRUPAL CAN DO.

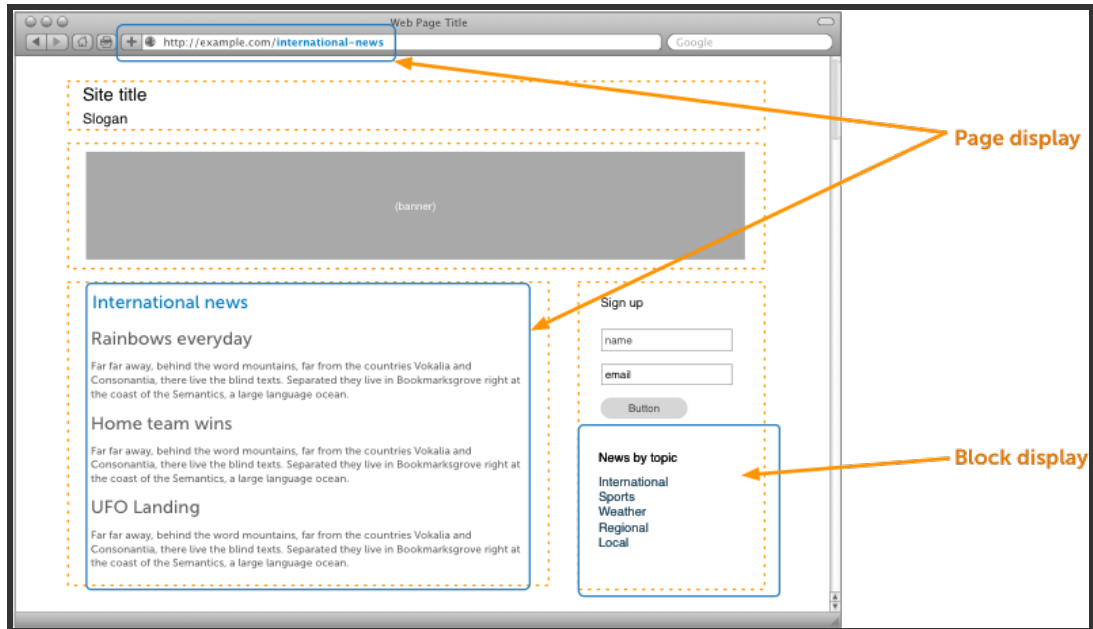


The screenshot shows the 'Download & Extend' interface for Drupal modules. At the top, there are tabs for 'Download & Extend Home', 'Drupal Core', 'Distributions', 'Modules' (which is active), and 'Themes'. Below the tabs, it states '8,006 Modules match your search'. A list of filters is provided: 'Maintenance status' (set to '- Any -'), 'Development status' (set to '- Any -'), 'Module categories' (set to '- Any -'), 'Core compatibility' (set to '7.x'), 'Status' (set to 'Full projects'), a 'Search Modules' text input, and 'Sort by' (set to 'Most installed'). A red arrow points to the 'Core compatibility' dropdown menu, which is currently set to '7.x'.

Many modules like **Views slideshow** extend Views. Guess what it does?

# 4. EXTENDING DRUPAL: THE BIG 3

# FIRST: SITE BUILDING

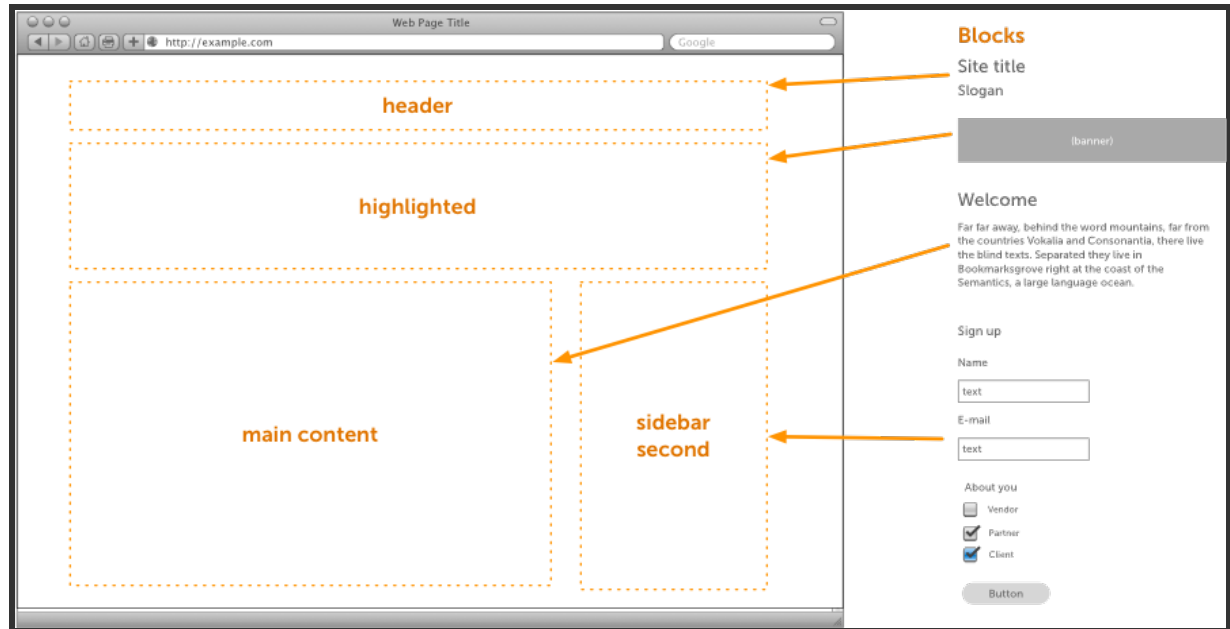


Site building is everything you can do in the UI layer of  
Drupal

# WHAT IS SITE BUILDING?

- Selecting and configuring **contributed modules**.
- Modeling **content types**, users, etc with **fields**.
- Configuring **display** of content, users, terms, etc.
- Configuring lists (**views**) of content, users, terms, etc.

# SECOND: LAYOUT AND THEMING



Layout and theming combines Drupal site building and coding in PHP/HTML/CSS/JS.



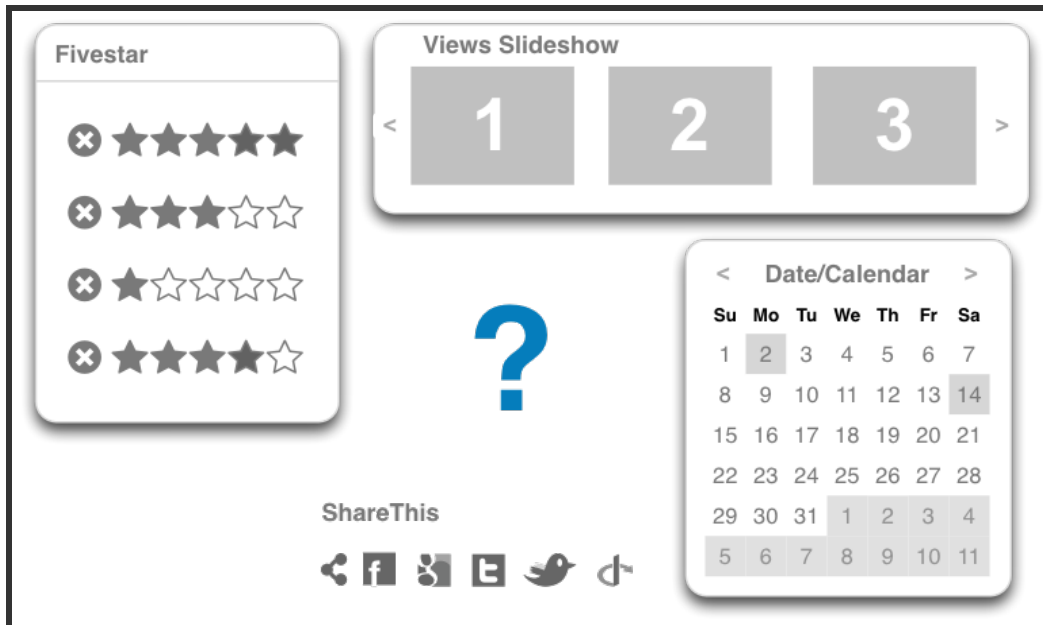
# WHAT IS LAYOUT AND THEMING?

1. **Layout:** Where things appear on the screen
2. **Theming:** How they look

TASKS INCLUDE:

- Various approaches for different use cases.
- **Contributed modules** for configuring layout.
- Extending **base themes**
- Creating **custom themes**

# THIRD: CUSTOM CODING WITH MODULES

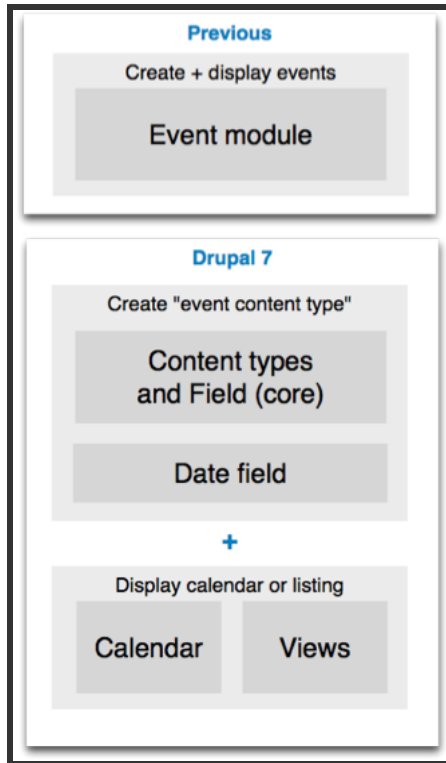


Modules answer questions such as "Can Drupal do X?"

# WHAT IS MODULE DEVELOPMENT?

- Knowing the landscape of contributed modules and roadmaps.
- Extending existing modules and contributing **patches**.
- Use Drupal's API to write new modules in PHP/HTML/CSS/JavaScript/etc.
- Custom modules for new functionality and integrations.

# DRUPAL EMPHASIZES FLEXIBILITY



## DRUPAL 7

- More generic, flexible solutions.
- Don't duplicate effort.
- Standardize administration.
- Less dependence on custom code.

(images/big3-smallpieces-

# TIPS ON MODULE SELECTION

## REPUTATION

- Maintainers other contributions and involvement,
- IRC, word of mouth, appearance in case studies and blog posts.

## REACH

- Community around module?
- Related modules?
- Number of installations?
- Integrate with other modules?

## CURRENCY

- Recent commits (last 4-6 weeks)?
- Recent release? (green/stable)
- Issue queue responsiveness and maintenance?

# READING A PROJECT PAGE

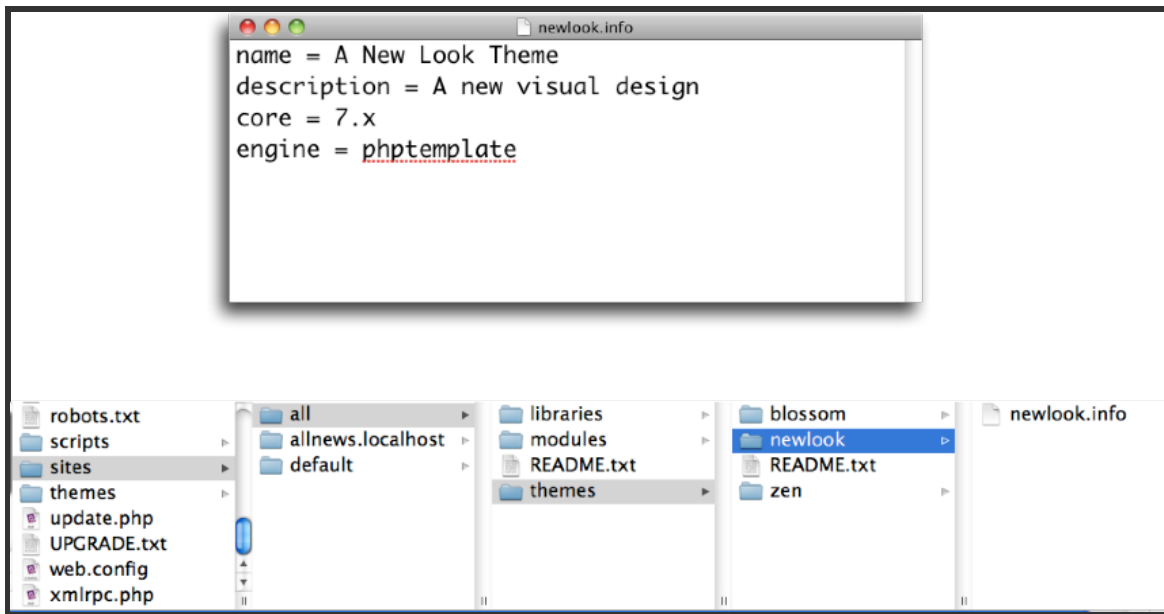
## DEMO

1. Compatible version for Drupal 7?
2. How many installations?
3. Who maintains this?
4. What are current issues?
5. Is Documentation available?

## TASK

1. Come up with an idea for some functionality you'd like on your site. (No ideas? How about allowing users login with Facebook.)
2. Search for a module.
3. Evaluate it against the criteria we used: Reputation, reach, currency

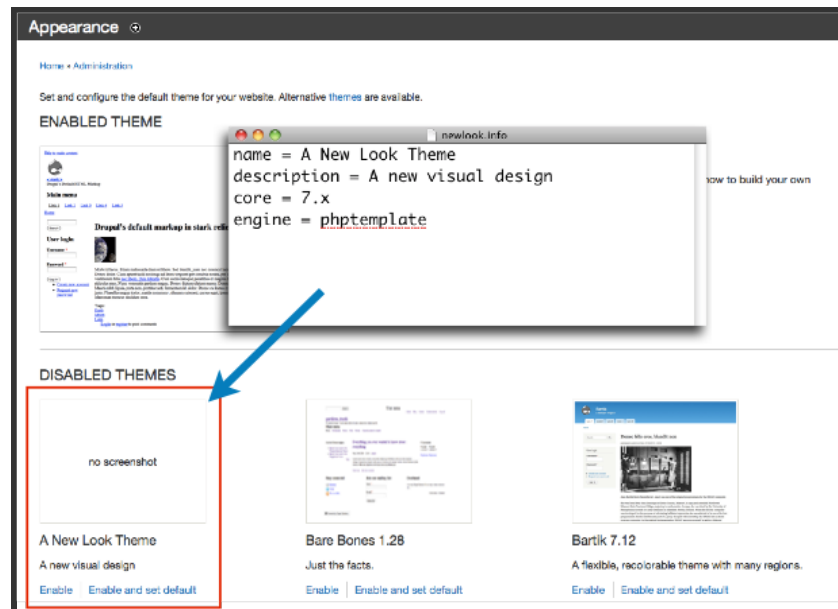
# A BASIC THEME



This is the bare minimum you need for a theme in Drupal 7.

# WHAT WILL HAPPEN?

What do you think the site will display when we enable this theme?



Enable themes under "Appearance"



# DEMO: STARK THEME

This core theme is basically what you'll get!

- Go to "Appearance"
- Under "Stark" click "Enable and set as default"
- Visit your site

# RECAP

## SITE BUILD- ING

- Everything you can do in the UI,
- Content and site architecture,
- Module selection and config,
- Permissions.

## LAYOUT AND THEM- ING

- Configuring Drupal to control markup,
- Using modules for layout management,
- Custom themes with CSS,
- JavaScript etc.

## MODULE DE- VELOPMENT

- Knowing the contrib / core modules landscape and roadmap,
- Writing custom code to create new functionality.

# SKILLS YOU NEED

## SITE BUILD- ING

Web developers

- No prior experience required.
- Knowledge of HTML and CSS helps!

## LAYOUT AND THEM- ING

Front end  
developers

- HTML, CSS, JavaScript.
- Minimal PHP knowledge.

## MODULE DE- VELOPMENT

Back end  
developers

- HTML, CSS, JavaScript.
- PHP experience
- Programming experience