



# Getting Started with Drupal

Building your First Site

By...  
Bill Papoutsakis ([Zekvyrin](#))  
Bill Seremetis ([bserem](#))

Feel free to edit and spread :-)

# What is Drupal?

- FOSS (Free & Open Source Software)
- Community Software
- Content Management System
- Web Development Platform / Framework
- Written in PHP

# Why Drupal?

- FOSS => Secure, Community Available Resources
- **For Site Builders/Hobbyists:**  
Easy to implement logic & able to customize & extend functionality.  
No need to code for common tasks.
- **For Developers:**  
Easy to add custom code & logic everywhere needed, without hacking.  
Stable & Secure APIs for Forms, Databases, Entities etc
- **For End-Users:**  
Easy to manage without IT Knowledge.  
Low ownership, maintenance, development costs. Shorter time to reach market.

# Who uses Drupal?

## Examples:

- Small business sites & Blogs: Android Central
- FOSS: Linux Foundation, Ubuntu, opensource.org
- News: LeFigaro, Economist, Examiner Gazzeta.gr, iefimerida, TVXS
- Corporate: Warner, Sony, Unity3D
- E-Commerce: Royal Mail, The Doors
- Universities: Stanford, Harvard, UPatras, CEID
- Governments: Whitehouse, Australia, NASA
- Applications: DrupalGap, Bettracks

Sites	Usage
Top 10k	14.33 %
Top 100k	11.05 %
Top Million	5.80 %
Entire Internet	2.74%

source: builtwith.com 2014

# Installation

## Requirements:

- Web Server (e.g. Apache, Nginx, Microsoft IIS)
- MySQL 5.0.15+ with PDO or PostgreSQL 8.3 with PDO or SQLite 3.3.7+ (also Oracle or MS SQL with contrib modules)
- PHP 5.2.5+ (5.3+ recommended)

## Steps:

- Download & Extract Drupal
- Create Database & grant permissions
- Create files folder & settings.php file
- Install using Web Installer

More Info: <https://www.drupal.org/documentation/install>

# Themes & Modules

Drupal's functionality can be extended using modules and website's appearance may be altered using themes.

Modules can be core, contrib or custom.

To add a module simply add it (unzipped) to sites/all/modules and to add a theme to sites/all/themes.

Popular modules: Views, Pathauto, Date, CKEditor (WYSIWYG)

# Content

- A web site may have different types of content. (e.g. blogposts, informational pages, events etc).  
In Drupal each type is called a "Content Type".
- Each item containing a single piece of information (e.g. A single event) is called a "Node" and belongs to a single Content Type.
- All Content Types have some attributes (title, author, creation date) and more attributes can be added using Fields.
- Administrator/Site Builder can easily create Content Types and add Fields to them without needed to code. Fields can be for example: Lists, Images, Files, Textfields, Long Texts, Integers, Boolean etc..
- Nodes can also support comments (and they have fields too!)

# Taxonomy

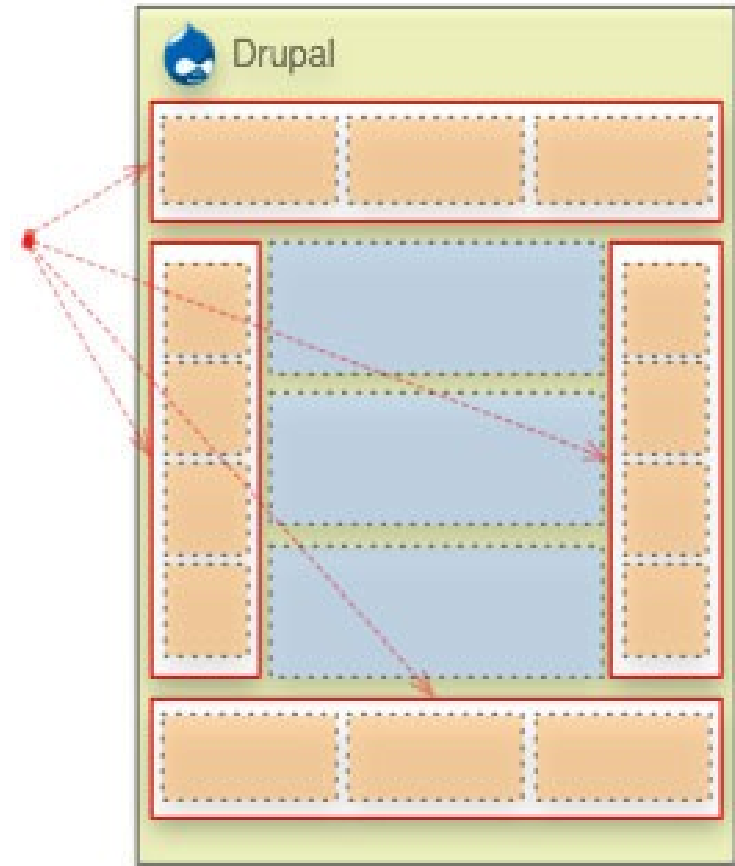
- Core module, that provides a mechanism for categorizing content.
- Vocabularies: Hold a collection/group of related Taxonomy Terms.
- Taxonomy Terms: A word or phrase that described a distinct aspect of a vocabulary. Like nodes and comments, they can have fields too! Do you see where this is going?
- Taxonomies can have a flat structure without hierarchy (e.g. tags), or can have ordering and/or multi-level hierarchy.

# Menus

- Menus are collections of links used to navigate through website.
- Default Menus: Main Menu, Management (admin), User Menu, Navigation
- Able to create a custom menu easily

# Anatomy of a Page

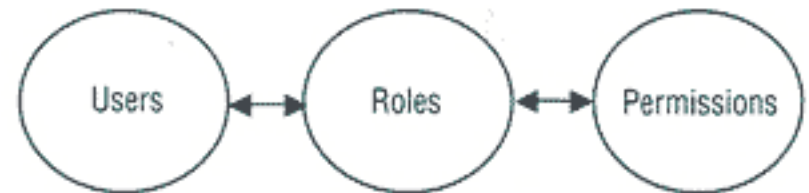
- Blocks: any kind of self-contained piece of content or information. Can be system blocks, modules, custom, or programmatically build blocks.
- Regions: An area that contains block(s). Regions are provided from the theme.
- Also, a page has other elements the theme provides.



# User Management

All Drupal websites have at least 1 account: system administrator.

## Role-based Access Control Model



- Roles: Categorization for users.  
2 main types: Anonymous & Authenticated Users
- Each Authenticated User may be assigned to 1 or more Roles.  
(e.g. Administrator, Manager, Editor)
- Permissions: mechanism of controlling Access.
- Each Role may have permissions to do something  
(e.g Create a Page, edit own pages, edit all pages)
- Access control check: if a user's role has the permission to do something.

# Views

The most popular Drupal contrib\* module.

Enables regular(non-technical) users to make lists, tables and other output of database queries.

Examples:

- Latest events (All nodes from content type “Events” ordered by creation date descending).
- About us section with all team members.
- Randomly ordered events with the same type as the displayed event

Can also page results (with ajax too!), filter them, relate and many more advanced capabilities.

\*will be core in D8!

# Useful Tools

## Drush

- Drush = Drupal Shell : a CLI Toolbox with useful utilities.
- More production than GUI

Example commands:

- `drush user-login (uli)`
- `drush pm-enable(en)` or `pm-disable (dis)`
- `drush cache-clear (cc)`
- `drush pm-update (up)`
- `drush sql-cli (sqlc)`
- `drush sql-dump`
- `drush pm-list (pml)`

## Devel

A drupal module for developers with helper functions & tools for development

- Can generate dummy content
- Display Page load timer, Memory Usage, SQL Queries
- `dpm()` / `dvm()` / `dvr()` functions
- `dd()` / `ddebug_backtrace()`
- Compatible with drush

Other tools: Base themes, Style Guide, Masquerade, Coder, Features

# Sum Up

- Drupal: a CMS/Framework to create dynamic websites
- Themes & Modules to customize appearance and extend functionality
- Content Management: Content Types / Nodes / Fields
- Taxonomy: Vocabularies & Terms
- Menus
- Blocks & Regions
- User Management: Roles & Permissions
- Views: An ace up drupal's sleeve
- Useful Tools: Drush, Devel & more

# Questions?

