

DrupalCon, Chicago 2011-New Developments in Drupal 7 and Fast-Forward to Drupal 8

Buswell Memorial library at Wheaton College is planning to upgrade its Drupal 6 software to Drupal 7 and is also planning to develop a mobile website. The DrupalCon conference focusing on issues such as the changes and new features in Drupal 7 and designing and developing for mobile websites provided an ideal opportunity for staff to “upgrade” their skills.

Drupal is a content management system, built with PHP and MySQL databases, used to develop websites. As described on drupal.org, Drupal is an “open-source software distributed under the GPL (“GNU General Public License”).” Drupal was developed by Dries Buytaert in 1998 and 1999 at the Universities of Antwerp and Ghent in the Netherlands. About 2001 Buytaert decided to open source Drupal so that other developers could work collaboratively on the software creating Drupal modules, themes, and other software products.

Drupal’s modularity, extensibility and flexibility make it an ideal choice for website development. Libraries, for instance, can create customized modules. Ann Arbor District Library customized a module called SOPAC (Social Online Public Access Catalog) that integrated their OPAC into the website.

Many large organizations are beginning to adopt Drupal including grammy.com which must manage seasonal traffic increases at various points of the year. The US House of Representatives 520 websites will be standardized on Drupal. Drupal is so scalable and flexible that people can build any kind of website. The majority of Drupal installations are on a LAMP (Linux-Apache-MySQL-PHP) server which is also the server used for the Buswell Memorial Library’s Drupal installation. A Drupal website can also be downloaded and setup on a Windows desktop. The downloadable distribution with a number of Drupal modules is available (free) from <http://network.acquia.com/downloads>

The latest software release, Drupal 7, has been in development for three years and has 1000 contributors, 7925 modules, 947 themes, and 4322 developers. Drupal, according to Dries Buytaert's keynote session, is used by every “major government in the world.” Drupal 7 development began in 2008 and the software was released in January 2011.

Buytaert, hired a usability team for Drupal 7 development to make Drupal 7 easier to use. The usability team looked at the design, the information architecture, and other factors to make the system easier to use. Drupal now has a usability team that the developers can call on in the development process. The “usability enhancements provide easier administration, update management, accessibility, and content creation,” according to the Drupal 7 press release. Modules, for instance, can now be easily installed just by uploading a zip file on a web interface.

Commenting on future Internet and device trends, Buytaert stated, “The future is being anywhere at anytime reaching any information or people needed at any device.” The number of devices that we can connect to the Internet with is increasing. Most of the devices are mobile devices. People want to access consumer apps to do their banking and so on, social and networking sites as well as enterprise applications from their mobile device. They want it to be a user friendly experience. People increasingly expect their experience of connecting to their enterprise applications to be “very nice, very consumer oriented” which is part of a larger trend called the consumerization of IT. The iPhone is the most powerful cell phone that Dries ever had but also the easiest to use. People expect good end-user experience or a consumer experience.

Buytaert, in his keynote presentation, outlined the strategic direction for Drupal 8. Drupal 8 will be developed to accommodate multidevice publishing including mobile phones. Mobile interoperability with mail systems and authentication systems will also be developed. The emphasis will be on creating a delightful experience. “If it’s not fast, it’s not a delightful experience,” stated Buytaert. Accessibility, usability, and performance management features will also be developed and enhanced for Drupal 8. The implications of the strategic direction lead to a focus on HTML 5 support

for Drupal 8 as HTML 5 is ideal for developing for mobile browsers.¹ Video Sessions on HTML 5 as well as JQuery Mobile² which is optimized for mobile devices can be found on the websites listed below.

Steve Fischer's *Designing for Mobile* session outlined the best practices for user experience design³ on the mobile web and emphasized that the web designs that are used today could be "antiquated" in a few years as "we've got to think about mobile first." He outlined principles for designing for mobile devices such as "distilling things down to a core message," the core or most important user experience, and testing the newly designed mobile website with users. The main question that needs to be asked is what the user needs. Users who tap instead of click need to be accommodated as the mobile devices do not use a computer mouse. "Tap is the new click," according to Fisher.

When working on a mobile website, the interactions need to be simple, according to Fischer. If the user interaction is not simple, the user will not have time to work with it. If a website feature is not needed then it should not be included in the mobile design. For instance, the Kinetix website (<http://kxme.com/>) has a video that is not displayed on the mobile version of the website. Customers can access their dieting results almost immediately on the mobile iPhone site. On a mobile, the user needs the ability to do something. People glance at their mobile screens especially when traveling and our mobile design needs to accommodate "glancing" users so if there are no headings users may find it difficult to get to the information that they need. Some implications for libraries include not using videos on the library's mobile website and ensuring that users can get to the library catalog immediately on their mobile device.

The Coder module session on easily porting modules to Drupal 7 focused on the new Coder module for Drupal 7. This module allows developers to "to ensure that their code meets the Drupal coding standards." The module will now upgrade modules, for instance, from Drupal 6 to Drupal 7 and run a series of code tests. Many modules have not yet been developed for Drupal 7 so the Coder module will provide developers with an essential tool for upgrading. The code review and code upgrade process can also be run from a live site at <http://upgrade.boombatower.com/>

The Drupal 7 theming basics session explained the changes in theming between Drupal 6 and Drupal 7. Hosted by trainers and themers from Chapter Three and Lullabot, the session also explained the best practices for upgrading from Drupal 6 to Drupal 7. The session was designed for people who have not created a theme. Drupal themes control the look and feel of the website and comprise a number of files including CSS files. The .info file has few changes from Drupal 6. However, primary links in the Drupal 6 .info file become the main menu in Drupal 7. New regions are also required for Drupal 7 in the .info file. Over 50 changes have been made to the theme files as listed on <http://drupal.org/node/254940> Many HTML ID's and classes have been changed. Developer/programmer Jennifer Lampton from Chapter Three recommended (because of changes) that themers "start from scratch" with a theme like Zen in Drupal 7 rather than trying to update a theme in Drupal 6 to a theme in Drupal 7

An upgrade from Drupal 6 to Drupal 7 will need to be planned carefully. Themes, for instance, have undergone major changes. Although, Drupal 7 is more usable it is not yet optimized for mobile websites which are of growing importance. However, Drupal 8 will focus more on mobile devices and is a great future option for many libraries.

Resources

[Videos from DrupalCon Chicago 2011](#)

[Real-Time Statistics on Mobile Browsers](#)

[Presentation on Drupal in Libraries](#)

[HTML 5 for Drupal](#)

¹ The HTML 5 tools kit module for Drupal 6 enables Drupal sites to be built with HTML 5.

² A JQuery Mobile module is being developed for Drupal 7 but it has yet to be reviewed and ported to GIT.

³ User experience design focuses on how a user feels about a system. It examines such things as ease of use and task efficiency.