Intro to CMS/ WordPress

Learning Outcomes

- Evaluate and demonstrate tools useful to web designers
- Define CMSes and their role in web design
- Explain the differences between WordPress.com and WordPress

Devserver

Devserver

- Allows you to set up a local web server on your computer
- This enables you to quickly test PHP and MySQL on your local computer without the delay of having to upload files to your web server all the time
- Devserver is free
- Devserver includes an Apache server, MySQL database, and PHP

Apache HTTP Server

- It is a web server that allows you to host your websites or any other content for that matter. Apache is available for Unix as well as Windows. Some of the most common server-side languages supported by Apache are PHP, Python, and Perl.
- It is free of charge.

MySQL

- It is the world's most popular open source database. It is a Relational Database Management System (RDBMS) – data and it's relationships are stored in the form of tables that can be accessed by the use of MySQL queries in almost any format that the user wants.
- MySQL is a database system used on the web server and ideal for both small and large applications.
- It is very fast, reliable, and easy to use. It compiles on a number of platforms and is free to download and use.

PHP

- PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language.
- A server-side programming language which is used to produce dynamic web pages. It is also free and platform-independent which means it can be installed on any operating system.

CodeAnywhere

CodeAnywhere

- CodeAnywhere is a Cross Platform Cloud IDE and it has all the features of Desktop IDE
- Easily setup your own customized development environment that you can access from anywhere
- Can connect to different clients so you can organize and store your files how you want them
- You can preview your website or application instantly inside CodeAnywhere IDE
- Containers are in essence your own Virtual Private Servers which run invisibly in the background of CodeAnywhere, each one with its own amount of RAM, Disk space and Processing power.
- You can drag and drop files and folders from your Desktop

Adobe Brackets

Adobe Brackets

- Modern, open source text editor
- Inline editors, edit CSS that applies to a specific element, class, or ID without having to change files
- Live preview provides a real-time connection to your browser. Make changes to CSS and HTML and instantly see those changes on screen.

Adobe Brackets

- Brackets is a lightweight, yet powerful, modern text editor. It is free and open source.
- Brackets features inline editors. Instead of jumping between file tabs, you can open a window into the code you care about most.
  - Want to work on the CSS that applies to a specific element, ID, or class?
  - Put your cursor on that element, ID, or class and press Command/CTRL + E and you will see an inline window showing all of the CSS selectors related to that element, ID, or class.
- It also allows for live preview and the ability to add extensions to expand what Brackets can do.

Toggl

Toggl

- Time tracking based on Client/Project
- Easy to run reports for billing/invoicing
- Easy-to-use to track billable/non-billable time
- Track time with you web browser, desktop app, and iOS and Android apps

Trello

Trello

- Useful as a project management application
- Create specific tasks on cards and move them among different lists on your board based on the status of the card
- Can be used via web browser as well as iOS and Android apps

Other Possible Tools

Other Possible Tools

- Code Repository – Subversion or Git
  - Allows you to track changes to your code over time and revert back to a previous state of your code
- Bug Tracker – Trac, osTicket, and many others
  - Allow you to track bugs, maintenance issues, or other client issues

Why use a CMS?

Scene 1 - Scenario

- PR department wants to get a press release on the web (i.e. ground beef may be contaminated)

Scene 1 – Current Process

- PR department writes the release and gets it approved
- PR department sends the release out on the wire
- PR department sends the release to the Web group who's in charge of posting it up on the web
- The web group converts the press release to HTML
- Most larger companies have a staging server (documents sit until they are pushed live)
- If press release has sensitive info --> can't be released to the wire until the Web group is ready to post on the Web

Scene 1 - Problems

- Everybody gets stressed out
- Too many hoops you have to get around (bureaucracy and red tape)
- Too many people involved
  - All these groups have a vision, but too many people
  - No one gets what they really want
- Most people don't know HTML

Scene 2 – Scenario and Problems

- Company wants:
  - To expand their $500 million company
  - There are problems going on currently
    - Customer can't find the product info
      - too deep in the system
    - Pages managed by different groups
      - broken links, unfinished pages
    - Group staff OUTSOURCED in order to get better handle
      - But some people keep it internal, so the info is scattered

Scene 2 - Changes

- Manage their content effectively
- When a page should get published
- Standardization of all pages
  - Look of all pages have to be consistent
- Easy update without knowing any HTML or having any form of training
- All info is available and accessible
  - Everyone knows where the info is stored

The Solution?

- Content Management System (CMS)

What is a CMS?

- A CMS is a Content Management System.
- It simply is a system that manages content.
- A more specific definition would be:
  - A content management system (CMS) is a system used to manage the content of a Web site.
  - It provides a collection of procedures used to manage work flow.
  - The procedures are designed to do the following:
    - Allows large number of people to share stored data
    - Control access to data, based on user roles
    - Aid in easy storage and retrieval of data
    - Reduce repetitive duplicate input
    - Improve the ease of report writing

Content Management Systems

- CMS are a single point of entry, providing consistency and the foundations for collaborative work with content
- CMS provide functionalities to handle large amounts of content:
  - Creation of new content
  - Editing of existing content
  - Organization and management of content
  - Presentation of content
- Media-neutral data management (separation of layout and content)

CMS Objectives

- Devolve content creation throughout the institution regardless of contributors' skills
- Provide security, governance and approval processes over content published on the web
- Enable the creation, management, and usage of standardized metadata
- Improve the quality of web sites through the implementation of standards across presentation, metadata, governance, discovery, and navigation

History of CMS

- 1995-2000
  - Explosion of propriety software
    - i.e. CMS was developed by a single corporation and licensed to clients that wished to use it
    - Customized for that client and workflow
    - Expensive $$$ and used by larger sites with big budgets

History of CMS

- 1998-2005
  - Release of PHP (Hypertext PreProcessor)
    - Free, general purpose scripting language available for web development
    - Led to explosion of Open Source Software
    - Lowered the cost of hosting dynamic websites
    - Explosion of CMS
      - Easier for individuals to bring content management to their orgs

Open Source Software

- Software designed to encourage collaboration and community development
- Released with licenses for distribution for free and without royalty fees
- With the development of PHP, came the advent of open source software
  - People were able to being coding for themselves
  - i.e. WordPres, Drupal, Joomla!

How are CMS Set Up?

- Most CMS can be used alone, or in conjunction (integrated) with other applications
- Can be set up directly on a network, the Internet, or even to run "locally" on your own computer.

CMS Features

- Integrated and online help
- Modular and extensible
- Easy user and group management
- Group-based permission system
- Full template support without changing a line of content
- Easy wizard based install and upgrade procedures
- Minimal server requirement
- Admin panel with multiple language support
- Content hierarchy with unlimited depth and size
- Integrated file manager w/ upload capabilities

Content Creation

- Aim: Simplify the processes of placing content on the web and obtaining approval to do so
  - Use templates to capture the content and to present it
  - Use workflow to simplify the upload, approve and publish processes

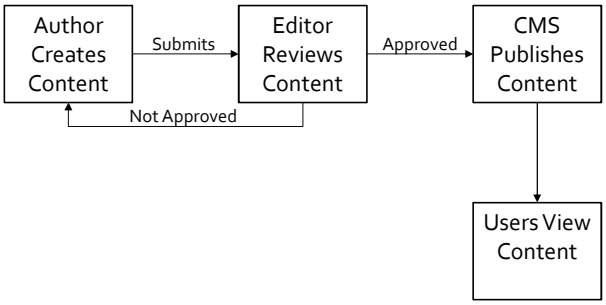
What can a CMS do for you?

- Keep content timely and accurate
- Delegate content creation & maintenance into the hands of the content owners
- Employ tools and features
- Gain more control over content, presentation
- Eliminate the file forest
- Separate content from presentation

What can a CMS not do for you?

- Write the content
- Quell mission and scope-creep issues
- Provide governance
- Set up a publishing process for writing, editing, and maintaining content
- Convince reluctant content providers to use the software

Common CMS Workflow



CMS Advantages

- Faster development
- Decentralized maintenance
- People with average knowledge of word processing can create the content directly
- Configurable access restrictions
- Consistency of design is preserved
- Navigation is automatically generated and adjusted
- Content is stored in a database
- Dynamic content
- Cooperation
- Security

CMS Disadvantages

- Potential to break your web site
- Lack of resources
- Lack of skills
- Overhead of server resources
- Extra maintenance
- Support

Examples of CMS

- WordPress
- Drupal
- Joomla!
- MediaWiki
- Magento
- Serendipity
- Moodle
- concrete5

WordPress

- Most popular CMS
- Originated for blogging, but has expanded into a full-fledge CMS
- Uses themes to control page layout
- Numerous free and premium themes for the layout of site
- Tons of hooks, actions, and plugins to extend the functionality and abilities of WordPress
- Easy for users, no coding experience required to install and set up a WordPress site
- Open source – active community for support

WordPress.com vs. WordPress

- Wordpress.com
  - Hosted server
  - Ease of CMS entry
  - Limited theme options
  - Inability to extend
  - Costs to customize CSS
- WordPress
  - Self-Hosted
  - Requires some technical skills
  - Unlimited theme options
  - Highly extendable
  - Highly customizable

Joomla!

- More complex than WordPress
- HTML structure
  - controls the layout
- Modules
  - menus, search boxes, plugins (control what you can do with the content)
- Content component
  - The actual content
  - Can only be one per page

Drupal

- Second most used CMS and originated before WordPress and Joomla!
- Much more difficult to learn and understand the templates
- More of a framework
- Modular workflow over architecture and functionality (build on themes, blocks and modes, and modules)
- Difficult to set up
- Not ideal for smaller sites but designed for large complex sites

Questions?

Homework