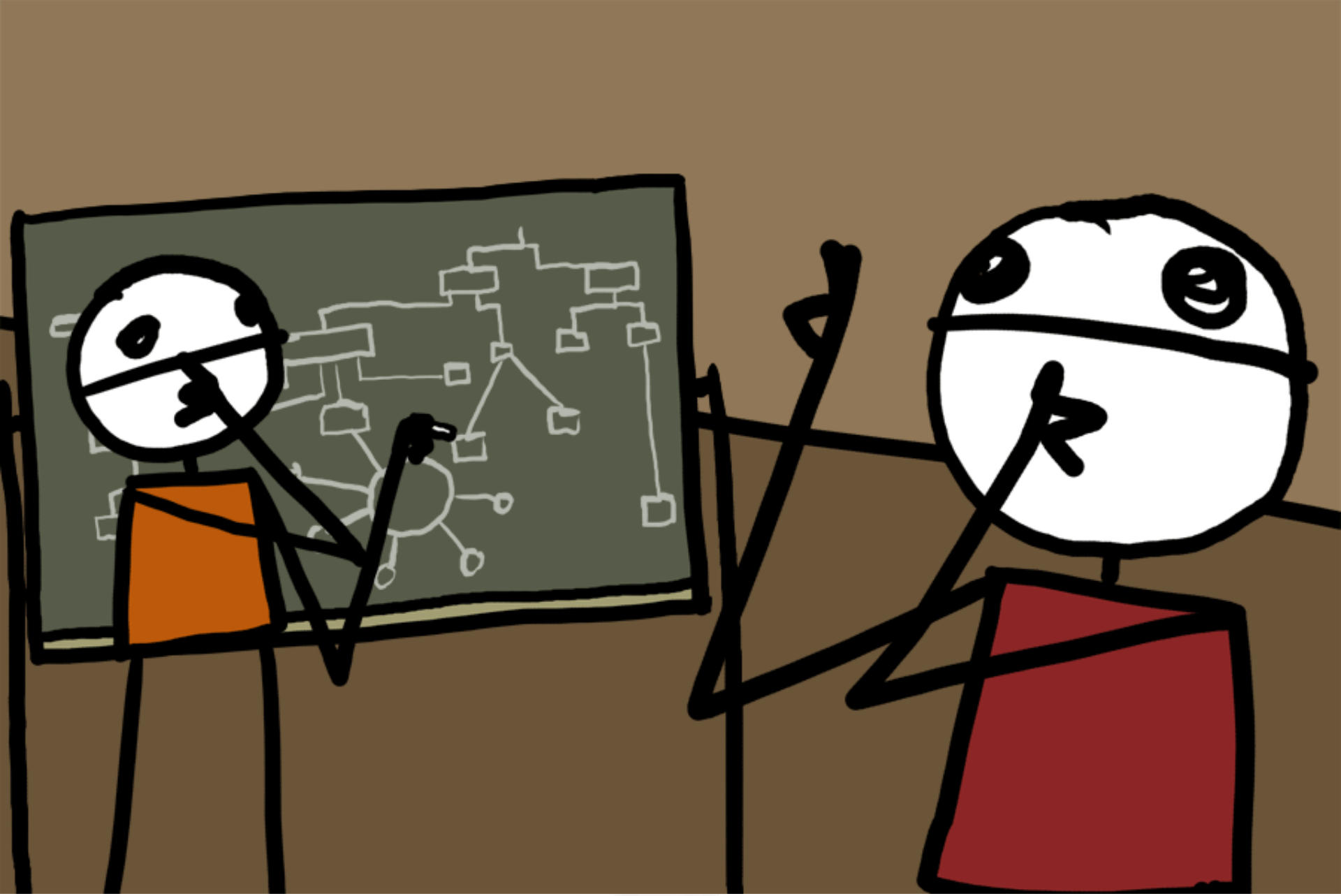
Introduction to Web Content Management Systems Site Development - DGMD E-25

Week 2: Installing and Configuring Joomla

Professor Jen Kramer

Agenda

- CMS terminology, including how it all works together (powerpoint)
- Installing Joomla on SiteGround
- Tour of Joomla and getting content into the system
- JCE (the Joomla Content Editor), images, video
- Backups!!!!



CMS: Content Management System

- A web content management system[5] (web CMS) is a bundled or stand-alone application to create, manage, store and deploy content on Web pages.
- Web content includes text and embedded graphics, photos, video, audio, and code (e.g., for applications) that displays content or interacts with the user. A web CMS may catalog and index content, select or assemble content at runtime, or deliver content to specific visitors in a requested way, such as other languages.
- Web CMSs usually allow client control over HTML-based content, files, documents, and web hosting plans based on the system depth and the niche it serves.
- http://en.wikipedia.org/wiki/Content_management_system#Web_content_management_system

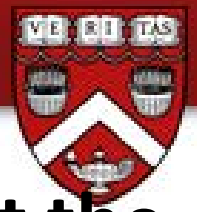
Static HTML vs. CMS

- **Static HTML: a series of individual documents**
  - HTML, CSS, JavaScript files all linked together
  - Want a nav change? Change every page on the site.
- **CMS: Look Ma, no pages!**
  - Every “page” generated on the fly, at the server request.
  - Pulls together content, theme, navigation, and additional functionality.
  - Can happen for every request for that “page” or can cache the results for improved performance.
  - Make one nav change, all “pages” updated immediately

Creating static HTML vs CMS sites

- **Static HTML: editor**
  - Your editor constructs and helps to link to each page
- **CMS: editors are optional**
  - Install the software on the server (hardware), then develop the site in your browser: **Chrome** or **Firefox**!!!

CMS Technologies



- **Middleware: programming language that the CMS is written in**
  - Joomla, Drupal, WordPress use **PHP**. Other middleware languages include ASP, .NET, ColdFusion, Python, Perl…
- **Database: Holds information for the website**
  - Joomla, Drupal, WordPress use **MySQL**. Other databases include MS-SQL, PostgreSQL, Oracle, etc. There are also non-relational databases like MongoDB that might be used.
- **You'll also encounter HTML, CSS, JavaScript, and occasionally XML.**

Other important terms

- **Server**
  - Hardware: the big computer that holds the website
  - Software: the software that receives and processes requests for web pages. Ex: Apache, IIS
- **Client**
  - CMS: The computer that's in front of you.
  - People: The person that hires you to do web work
- **Front end**
  - The public facing side of the website
- **Back end**
  - The administrative side of the website, accessible via login

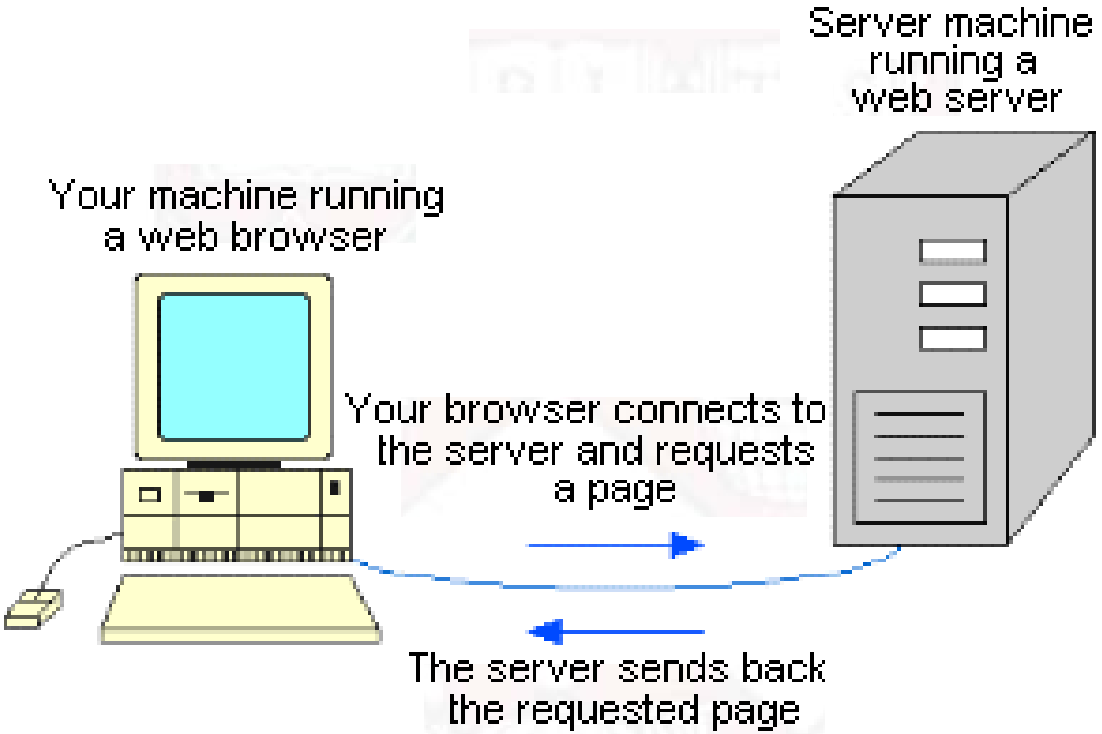
Web host vs. server

- **Server**
  - Hardware: the big computer that holds the website
  - Software: the software that receives and processes requests for web pages. Ex: Apache, IIS
- **Web host**
  - A service providing servers (hardware) to the public.
  - Generally provides maintenance and troubleshooting to the servers, keeping the server (software) up to date, helping with issues.
  - SiteGround is offering shared hosting, meaning there are hundreds to thousands of sites on a single server (hardware).

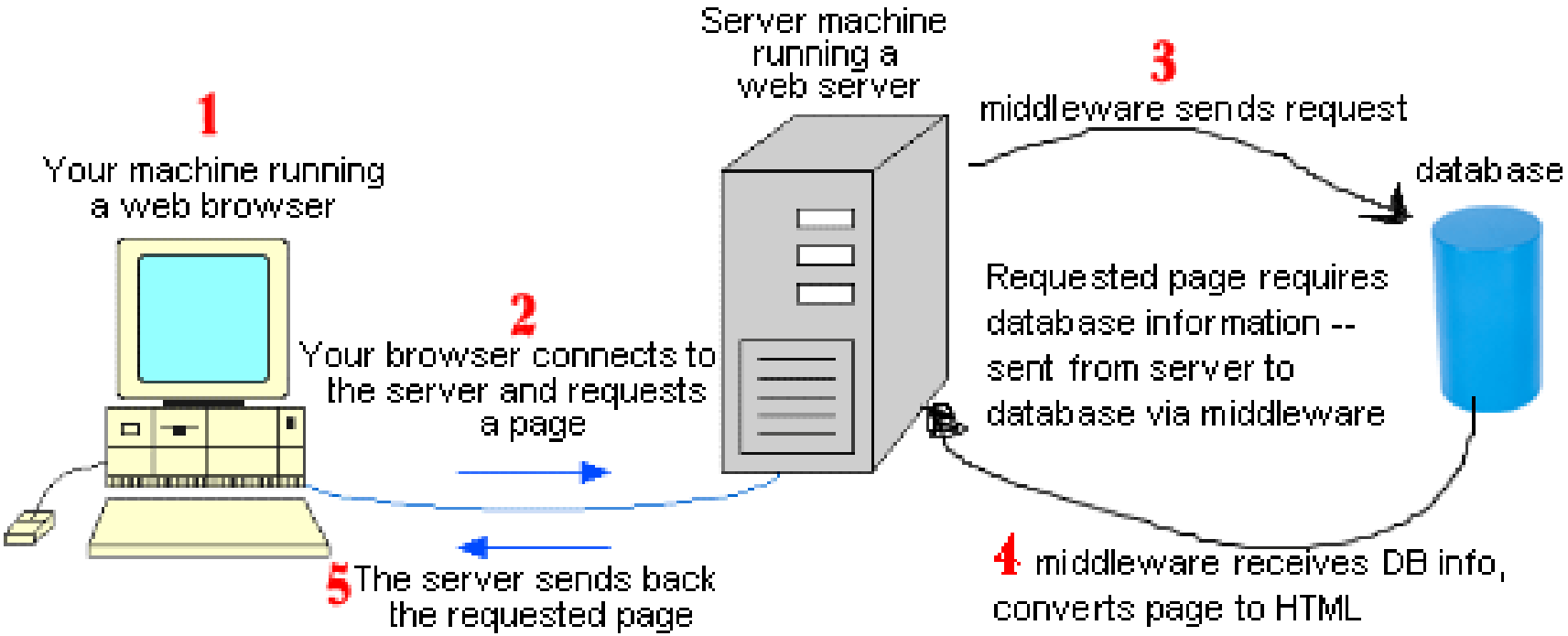
LAMP

- **Linux**
  - Open source operating system for the server (hardware).
- **Apache**
  - Open source server software for running a website.
- **MySQL**
  - Open source database
- **PHP**
  - Open source middleware language that works particularly well with HTML and MySQL.

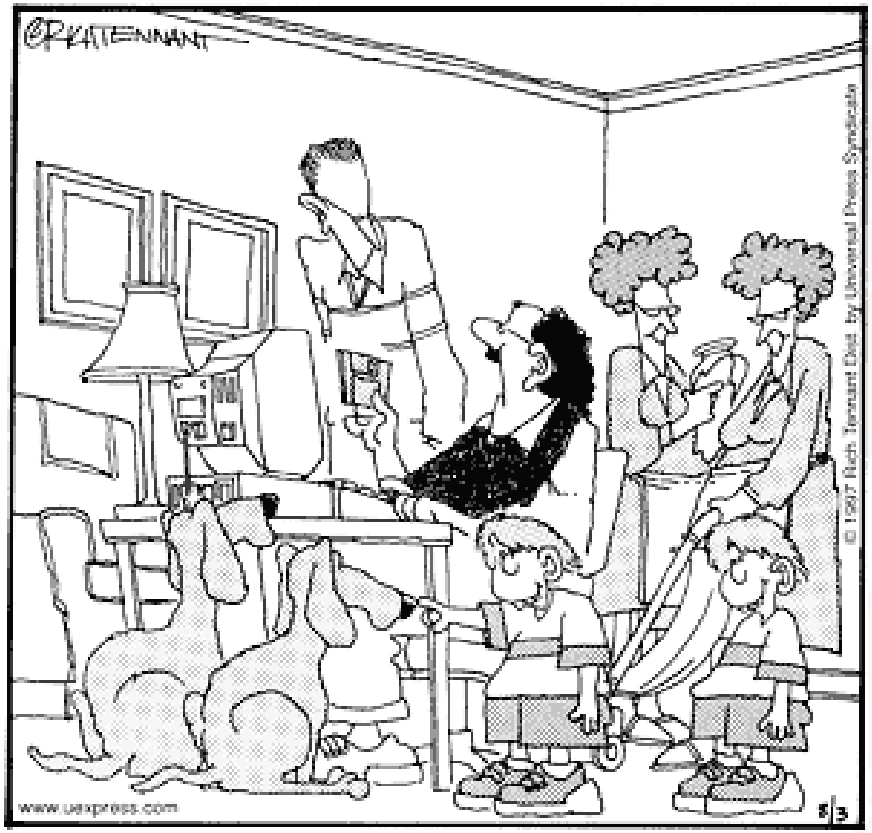
How this works: Static website



CMS site


Server machine running a web server
1
Your machine running a web browser
2
Your browser connects to the server and requests a page
3
middleware sends request
database
Requested page requires database information -- sent from server to database via middleware
4 middleware receives DB info, converts page to HTML
5 The server sends back the requested page

Backups!!!



"I ALWAYS BACK UP EVERYTHING."