

# CHAPTER 5 - BUILDING A CONTENT MANAGEMENT SYSTEM



# INTRODUCTION

- To keep your users at your site, make it easy to navigate, make sure your pages load quickly, and give users a personal experience.
- Getting your users to keep coming back as new ones learn about your site is how you grow your web site over time.
- Each site is periodically updated with new information. (E.g. checking weather daily, learning daily horoscope, or checking an online message board to read latest posts)
- In each case, the content gets updated on a regular basis — sometimes weekly, sometimes daily, and sometimes even hourly.
- Now, imagine how much work the web site developers have to do to update their content every day!

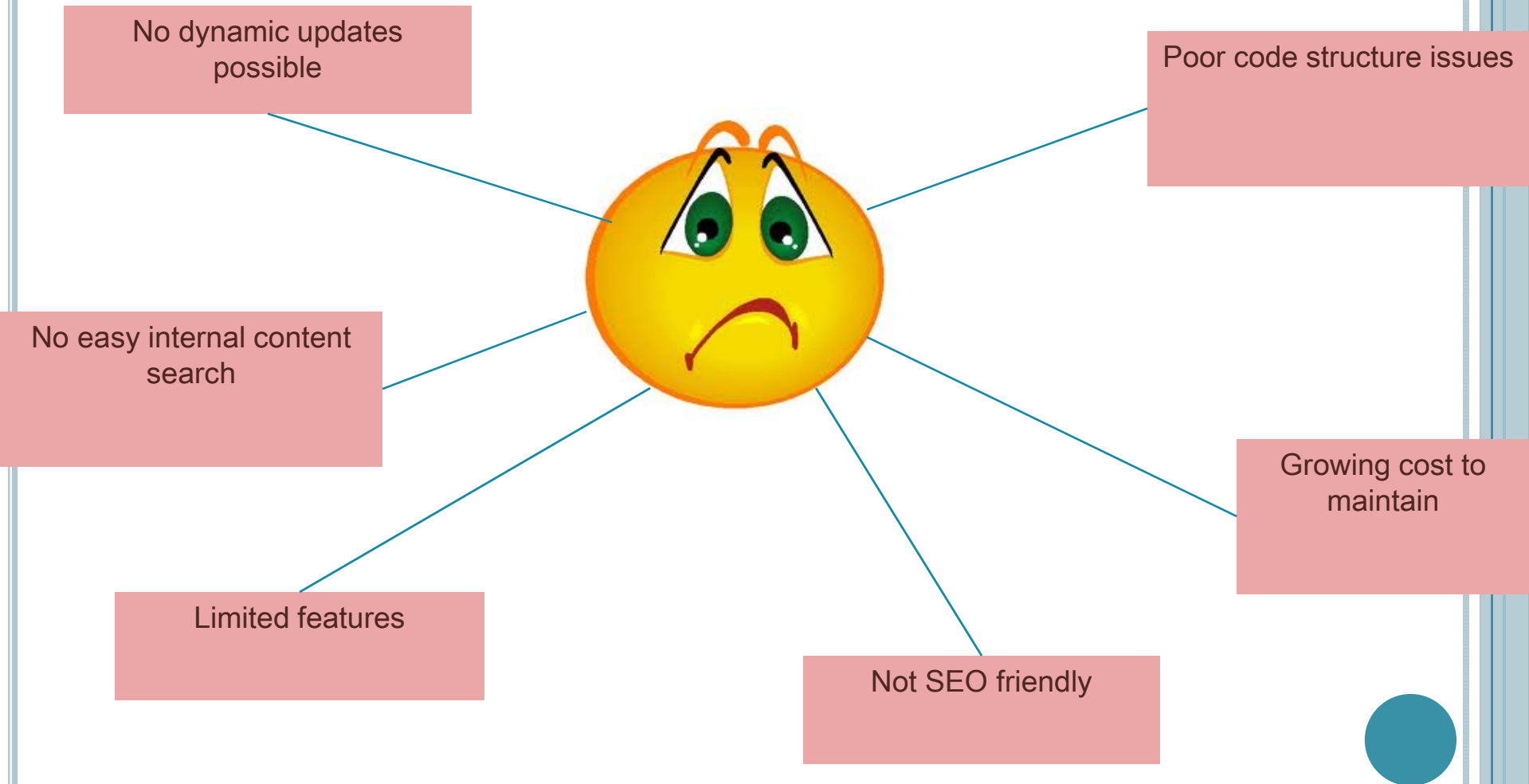


# INTRODUCTION

- The content should be completely separate from the design of the site so it can be maintained by other people.
- Because managing content is separate from design.
- The people that you assign the content management responsibilities to, don ' t have to know anything about web design!
- Depending on the amount of content you have, You need to come up with a way to organize it, categorize it, and push it to your web site
- Of course, you want this process to be efficient, so you definitely need to have the appropriate tools to do the job.



# COMMON WEBSITE PROBLEMS



# EASY SOLUTION - CMS

- ✓ Dynamic Content and Structure Handling using Content Manager
- ✓ Add additional features easily
- ✓ Low cost to maintain
- ✓ Search engine friendly structure
- ✓ Standardized Code
- ✓ Template Management
- ✓ Support for web services
- ✓ Powerful Extensibility
- ✓ MVC Architecture



# EASY SOLUTION - CMS

- You could easily create an application to allow users to create new content (authors), edit that content (editors), and publish it.
- By assigning users to certain roles, you can manage who has access to certain functions within the site.
- In other words, you need a system in place to allow you to manage your web site content separately from the site design.
- You need a content management system (CMS).
- CMS refers not only to the application used to manage content, but also to the people responsible for entering content and to the rules they must follow



# CONTENT MANAGEMENT SYSTEM

- A content management system is software that keeps track of every piece of content on your Web site.
- Doesn't require special software for uploading pages (e.g. Dreamweaver)
- Content examples:
  - simple text
  - Photos
  - Music
  - Video
  - Documents
- A major advantage of using a CMS is that it requires almost no technical skill or knowledge to manage.



# CONTENT MANAGEMENT SYSTEM

- A content management system (CMS) is a computer system that allows publishing, editing, and modifying content as well as site maintenance from a central page.
- It provides a collection of procedures used to manage workflow in a collaborative environment.





# WHAT CAN THE CMS DO?

- Allows web page updates using an ordinary web browser (e.g. IE, Firefox/ Mozilla, Safari, etc.)
- Reduces overall work as those responsible for content can update it directly and submit it for approval
- Allows different access levels for individuals with different roles (e.g. Authors, Editors, Managers)
- Enables documents to be published for fixed terms; older versions of documents can be re-used (versioning)
- Has Sitestat tracking code built-in
- Especially good for simple content pages.



# WHAT IT DOES NOT DO

- Does not write content!
- Does not create site structure – needs planning
- Is not a design tool
- Does not create images
- Does not automatically link pages in to a site and make them visible



# TECHNOLOGY PLATFORM

	Drupal	Joomla!	Plone
Operating System	*nix, Windows, OS X	*nix, Windows,	*nix, Windows, OS X
Programming Language	PHP	PHP	Python
Database	MySQL	MySQL	Zope (Object oriented)



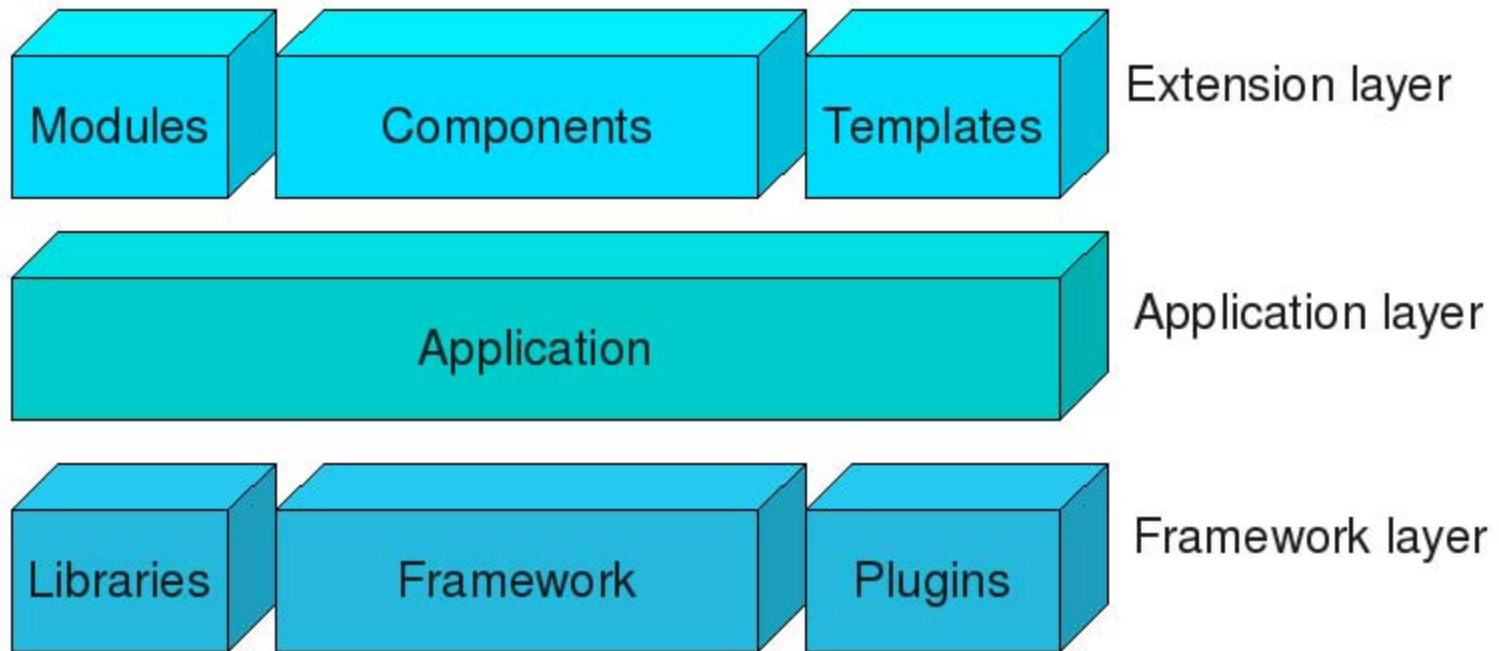
# WHAT IS JOOMLA!?



- Joomla! is considered as PHP based dynamic portal engine and content management system.
- The real power of Joomla! lies in the scalability
  - It can be achieved with the use of custom extensions which include templates, language files, plug-ins, modules and components.
- *Joomla* is a phonetic spelling for the Swahili word "Jumla," which means "all together" or "as a whole".



# JOOMLA FRAMEWORK



# JOOMLA! EXTENSIONS

- A Joomla! extension is a code package that extends the functionality or feature of default Joomla! installation.
- Type of Joomla! 2.5 Extensions:



# A BASIC, BUT FULLY FUNCTIONAL CMS

- *The feature list*
- Our first job is to work out exactly what we want our CMS to do. The CMS will have the following features:
- **Front end:**
- The homepage, listing the 5 most recent articles
- The article listing page, listing all articles
- The "view article" page, letting visitors see a single article



# A BASIC, BUT FULLY FUNCTIONAL CMS

- **Back end:**
- Admin login/logout
- List all articles
- Add a new article
- Edit an existing article
- Delete an existing article
- Each article will have an associated headline, summary, and publication date.





# PLANNING IT OUT

- Here are the steps we'll need to follow to create our CMS:
  1. Create the database
  2. Create the articles database table
  3. Make a configuration file
  4. Build the Article class
  5. Write the front-end index.php script
  6. Write the back-end admin.php script
  7. Create the front-end templates
  8. Create the back-end templates
  9. Create the style sheet and logo image

