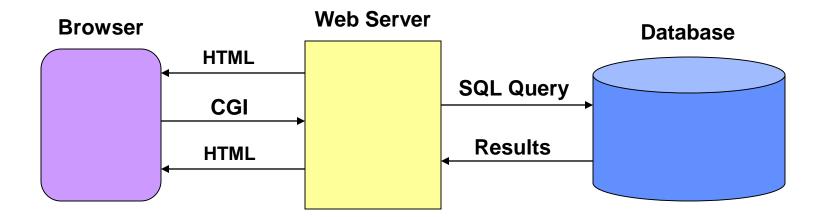
Content Management Systems

Session 15

INST 301

Introduction to Information Science

Putting the Pieces Together



Why Database-Generated Pages?

- Remote access to a database
 - Client does not need the database software
- Serve rapidly changing information
 - e.g., Airline reservation systems
- Provide multiple "access points"
 - By subject, by date, by author, ...
- Record user responses in the database

Why Content Management Systems?

- Separation of content and appearance
- Separation of roles
- Standardization of common "design patterns"
 - Login and password recovery
 - Headlines and drill-down
 - Site map
 - Search
 - Shopping cart

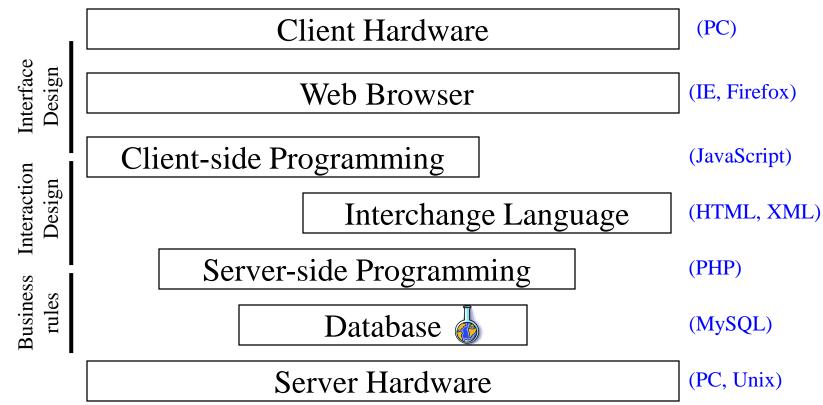
Content Management Systems

- WordPress
 - http://wordpress.org
- Joomla
 - http://www.joomla.org
- Drupal
 - https://drupal.org

Roles

- Information architecture design
- Task assignment
- Content generation and modification
- Approval for "publication"
- Publication
- Error correction
- Tracking task progress

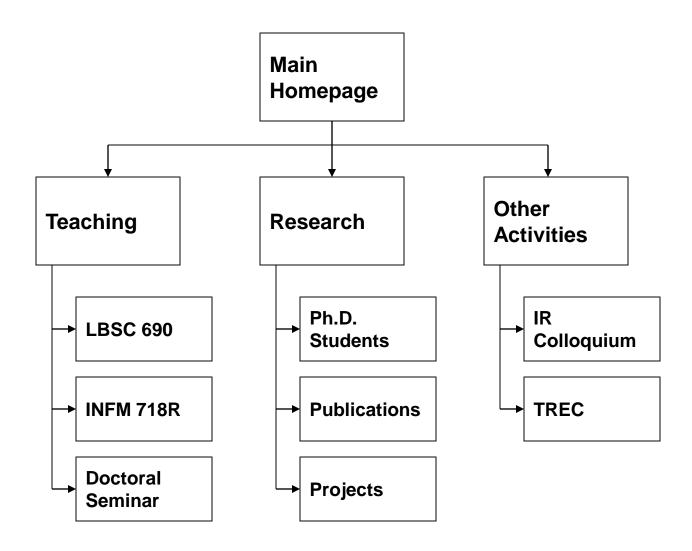




Content Management System Structure

- Database stores the content
 - And access control data and parameters
- Server scripting controls the user experience
 - PHP reads database, generates HTML
- HTML conveys the user experience
- User-side scripting enhances interactivity
 - JavaScript may be used for form validation

"Site Blueprint"



Grid Layouts

Navigation Bar

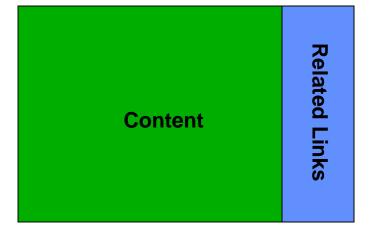
Navigation Bar

Content

Navigation Bar

Navigation Bar

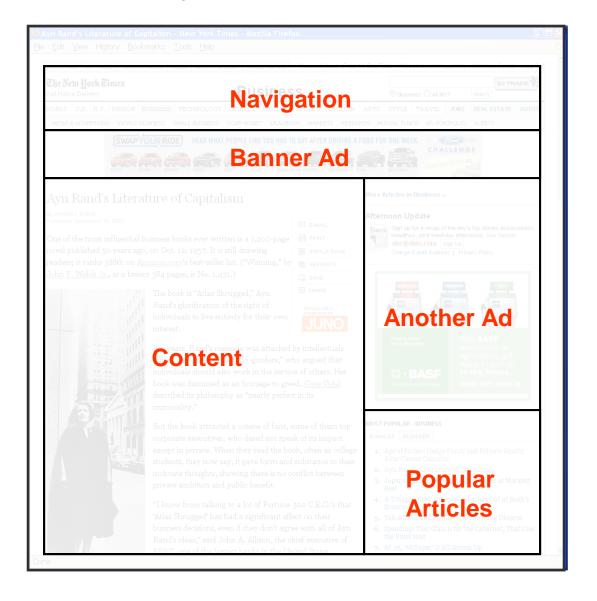
Content



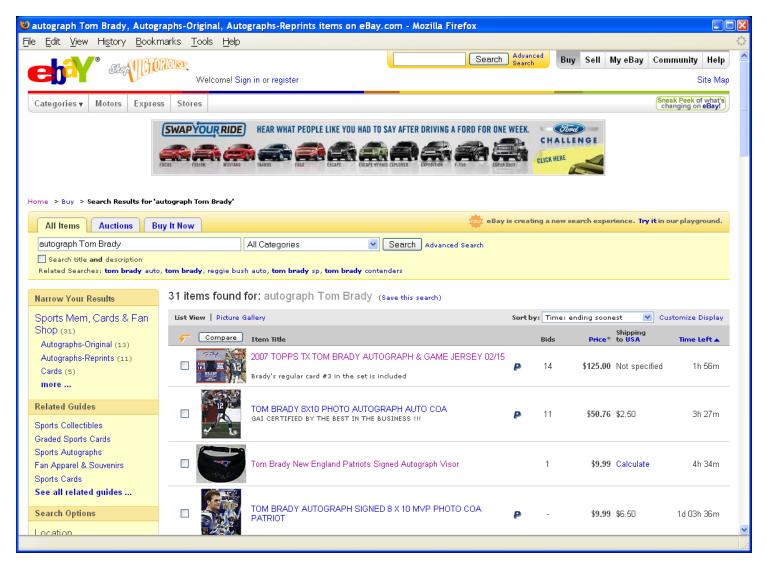
Grid Layout: NY Times



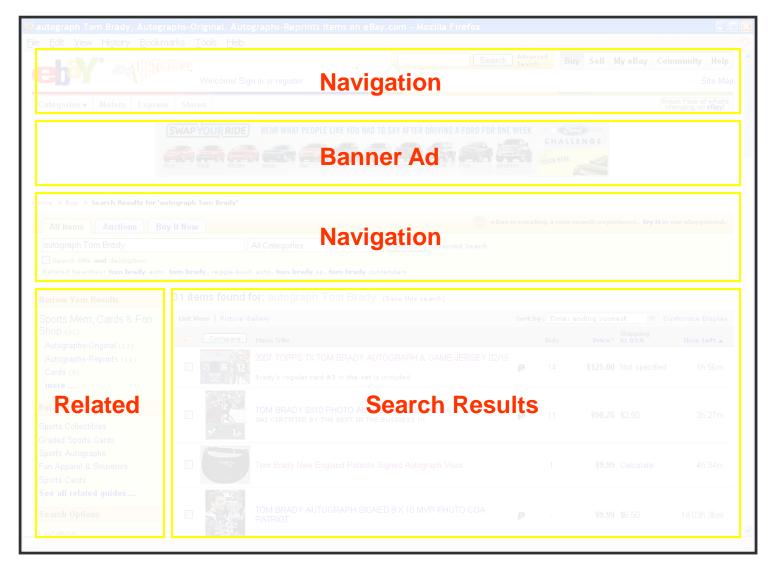
Grid Layout: NY Times



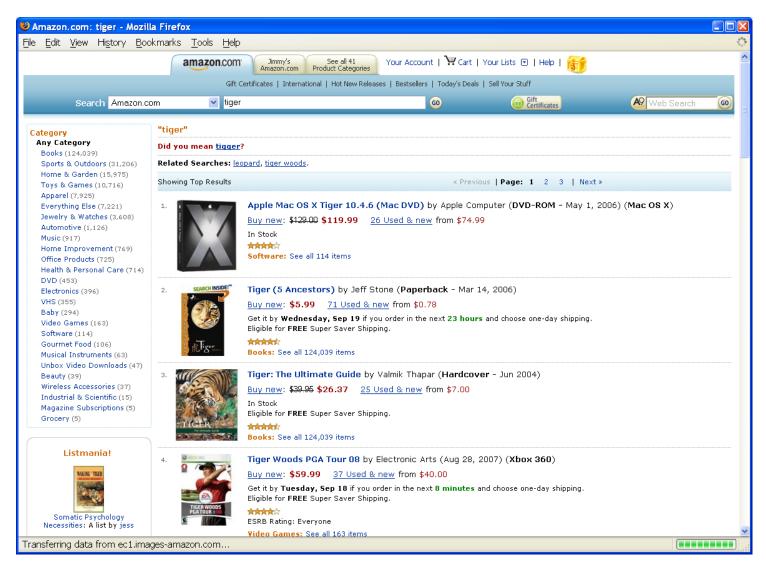
Grid Layout: ebay



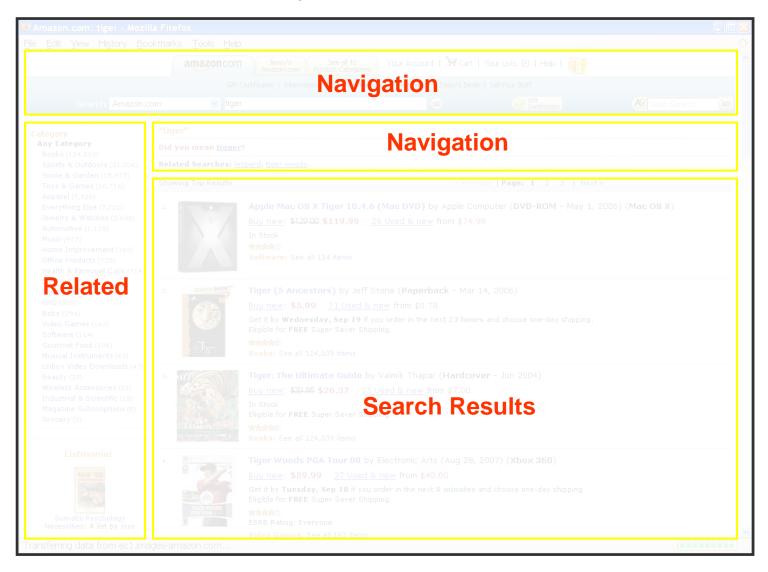
Grid Layout: ebay



Grid Layout: Amazon



Grid Layout: Amazon



Drupal Structure

- Front end
 - The Web site
- Back end
 - Where the Web site is defined

Drupal Structure

Regions

- Header, left sidebar, content, right sidebar, footer
- Structure->Blocks->Demonstrate Blocks Region

Blocks

- Navigation, login, Drupal, help, content, search
- Optional: who's online, recent comments, ...

Menus

- Main, navigation, user

Drupal Content ("Nodes")

- Basic Page
- Article
 - By default allows comments
- Blog entry
- Forum topic

Optional Drupal Modules

- Aggregator
- Blog
- Forum
- Book
- Contact form
- Poll
- Search
- Statistics
- Trigger
- Translation

Some Downloadable Modules

- Content Construction Kit
- Views
- OpenLayer
- Dynamic Display Block
- Embedded Media
- Image Cache
- Calendar
- Share

Installing Drupal

- Download and install XAMPP
 - Add c:\xampp\mysql\bin to your path
- Download and install Drupal
 - Configure for local use ("first time user guide")
 - Ignore SMTP error messages
- Configure your site
 - Add some "splash page" content
 - Set user permissions

Drupal's Use of MySQL

USE drupal;

SHOW TABLES;

SELECT * FROM users;

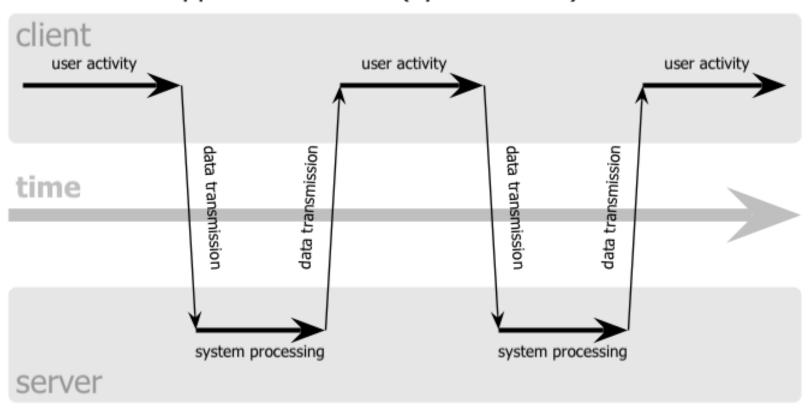
SELECT * FROM nodes;

SELECT * FROM node_revisions;

Ajax Applications

- Google Maps
 - http://maps.google.com
- Google Suggest
 - http://www.google.com/webhp?complete=1&hl=en
- Sajax Tables
 - http://labs.revision10.com/?p=5
- Sajax
 - http://www.modernmethod.com/sajax/

classic web application model (synchronous)



Ajax web application model (asynchronous)

