

## 91.113 Exploring the Internet, Fall 2011

### Lecture 8 Web 2.0 (4) Social Tagging, Bookmarking, and More



Some slides courtesy of Eugene Barsky and Suite101.com

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## Tagging

- **History of Tagging**
  - Tagging, or labeling content, is part of the collaborative nature of Web 2.0
  - Tag is any user-generated word or phrase that helps organize web content and label it in a more human way
- **Tag Clouds**
  - Visual displays of tags weighted by popularity.
- **Folksonomies**
  - Classifications based on tags
  - Formed on sites such as Flickr, Technorati and del.icio.us
- **Flickr**
  - Flickr—a popular photo-sharing site—was launched in February 2004 and acquired by Yahoo! in 2005
  - Key content-tagging site
- **Technorati**
  - Social media search engine that uses tags to find relevant blogs and other forms of social media

37Signals™ AdSense™ AdWords™ affiliate programs agile development  
**Ajax** Amazon™ Mechanical Turk Amazon™ Web Services™ APIs  
**architecture of participation** **Attention Economy** blog  
 search engines **blogging** **blogosphere** **broadband Internet** citizen  
 journalism **collaborative filtering** **collective intelligence** contextual  
 advertising **Craigslist** Creative Commons™ default to share Deitel™ del.icio.us™  
 democratization of media **Digg**™ Digital Millennium Copyright Act Dojo DoNotTrack™ DRM  
**eBay**™ **Facebook**™ federated Media™ Feedburn™ findability Firefox® 2 Flash™  
 Flex™ **Flickr**™ folksonomies *Getting Real* globalization **Google Maps**™  
**Google**™ Google™ Gears GPS hives.infragistics.com **Internet advertising**  
 Internet business models Internet Explorer® 7 Internet TV Internet video iTunes™  
 iTunes® JavaServer™ Faces Jost™ JSDN Last.fm® lightweight business models link popularity  
 LinkedIn® location-based services **mashups** Metcalfe's Law microlanterns Microsoft® adCenter  
 netlogging monetization Moore's Law Mozilla® MSN® **MySpace**® MySQL®  
**network effects** O'Reilly® **Media** ontologies **open source** outsourcing  
 premarket perpetual beta PPHWike podcasting premium content ProgramableWeb.com™ RDF  
 recommendation systems remixing reputation systems REST **RIAs** RSS/Atom Ruby on Rails™  
 Salesforce.com® Script.aculo.us **search** Search Engine Marketing (SEM) Search Engine  
 Optimization (SEO) **Second Life**™ Semantic Web Silverlight™ Skype™  
**social bookmarking** **social media** **social networking**  
**Software as a Service (SaaS)** tag clouds **tagging** TechCrunch  
 Technorati™ **The Long Tail** *TIME* Person of the Year trackbacks trust Twitter  
**user-generated content** vertical search virtual worlds vlogging YouTube  
**Web 2.0** Web 2.0 Internet Business Initiative **Web 2.0 Summit** Web  
 3.0 web as a platform **web services** web-scale computing wektop widgets and gadgets  
 Wikinomics **Wikipedia**™ wikis **wisdom of crowds** XML® Yahoo!®  
 Yahoo!® Publisher Network Yahoo!® Search Marketing **YouTube**

Text cloud of major Web 2.0 terms from this chapter. You may generate a text cloud using Wordle: <http://www.wordle.net/>

## Social Bookmarking

- Social bookmarking sites = share your Internet bookmarks (e.g., your favorite websites, blogs, and articles) through a website.
  - del.icio.us
  - Diigo
  - Reddit
  - Ma.gnolia
  - Blue Dot
  - StumbleUpon
  - Simpy
  - Furl

## Web Services, Mashups, Widgets and Gadgets

- Incorporating web services into new programs allows people to develop new applications quickly
- *APIs*
- Provide applications with access to external services and databases
  - Examples: Sun's Java API and Web Services APIs
- *Mashups*
  - Combine content or functionality from existing web services, websites and RSS feeds to serve a new purpose
    - Housingmaps.com
    - Yahoo! Pipes

- *Widgets and Gadgets*
  - Mini applications designed to run either as stand-alone applications or as add-on features in web pages
  - Personalize your Internet experience by displaying real-time weather conditions, aggregating RSS feeds, viewing maps, receiving event reminders, providing easy access to search engines and more.
- *Amazon Web Services*
  - Amazon is a leading provider of web services
- *REST (Representational State Transfer)-Based Web Services*
  - Architectural style for implementing web services
  - Identified by a unique URL
  - RESTful web services are alternatives to those implemented with SOAP

## Location-Based Services

- **Location-Based Services (LBS)**
  - Applications that take your geographic location (city, state, location of your mobile device, etc.) into consideration
  - Global Positioning System (GPS)
  - Local search
- **Global Positioning System (GPS)**
  - Uses numerous satellites that send signals to a GPS receiver to determine its exact location.
- **Mapping Services**
  - Google Maps is one of the most popular mapping applications available online.
  - Google Earth provides satellite images of virtually any location on the planet
  - MapQuest provides similar mapping services
  - Additional mapping services include Yahoo! Local Maps and MSN Live Search
  - Companies such as NAVTEQ and Tele Atlas provide digital map data for in-vehicle and portable navigation devices, websites, location-based services and more
- **GeoRSS and Geotagging**
  - Set of standards for representing geographical information in an RSS feed (GeoRSS)
  - Geotagging can be used to add location information (longitude, latitude, etc.) to websites, images, RSS feeds, videos and more
- **Foursquare:**
  - <http://foursquare.com/>

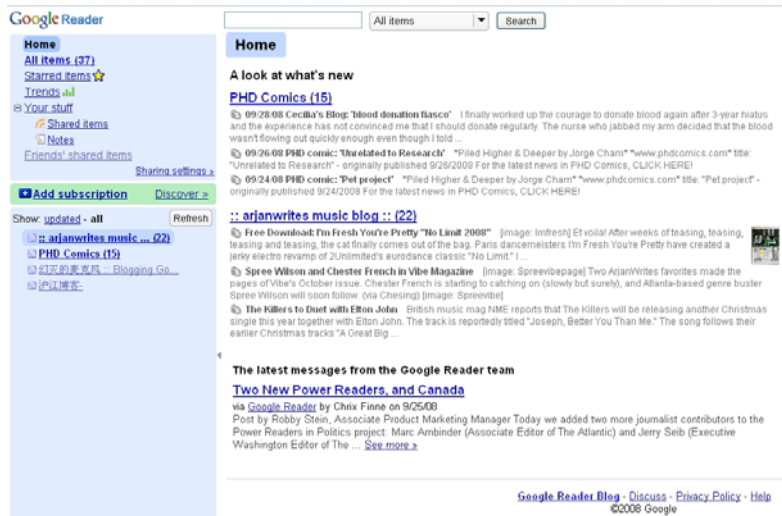
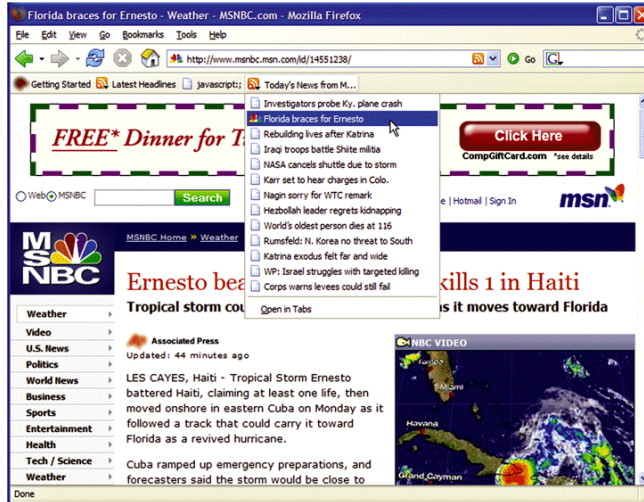
## RSS

- A Web 2.0 server technology that allows users to “syndicate” their posted material
- Syndicated content is “polled” by an RSS client
- RSS clients display a time ordered list of publications featuring new or updated content
- Similar to a bookmark, except for the time ordering of the syndicated content
- RSS feeds are updated dynamically
- Syndicated content can include any type of electronically recorded material
- Syndicated audio content originally known as a podcast

- Viewing RSS content:
  - RSS clients (aka Aggregators) can be standalone applications (FeedReader),
  - A browser feature or add-on (IE v7+, Firefox 1.5+)
  - Web site aggregator services (Google Reader, NewsGator Online)
  - Add-ons to older browser or mail clients
- IE/Firefox includes an integrated RSS client

- Feedreader is a standalone RSS client





- Finding RSS feeds:
  - <http://www.syndic8.com/>
  - <http://newsisfree.com/>
  - <http://www.feedster.com/feedster.php>
  - <http://blogstreet.com/>
- Many Web sites (and browsers) now include RSS feed support
  - Look for these icons in/near the URL field:



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## Lecture 8. Software on the Internet



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## Learning Objectives

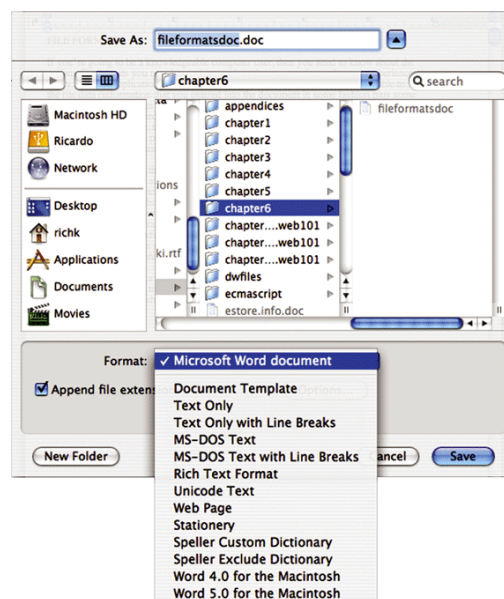
- Learn about file formats.
- Learn how to navigate FTP servers and download files from them.
- Learn to manage your software

## File Formats

- Each software product that allows users to create files has its own method of storing the file contents.
- Usually in the form of *meta-data* plus user data.
- Meta-data - information about the contents and organization of the user data.
- In some cases, the meta-data may also describe how the user data should be displayed.



- Applications are often unable to decipher the meta-data and understand the organization of a file created by a different application.
- Some file formats are intended to be universal, like *rich text format* (rtf) files - most word processors can read these.
- Some applications allow you choose the specific file format you wish to use.



- File extensions can be used to identify the particular file format and the type of application that created it.
- File extensions are typically three characters preceded by a period appended to the file name.
- Changing the extension on a file does NOT change the file format!

- Some common file formats:
  - .exe (Windows executable file, installer)
  - .js (Javascript file)
  - .sea (Mac self-extracting archive)
  - .tar (UNIX, Linux archive file)
  - .zip (compressed file format)
  - .wma (Windows media player)
  - .bmp (bit map image)
  - .png (portable network graphic)
  - .tif (tagged image file)

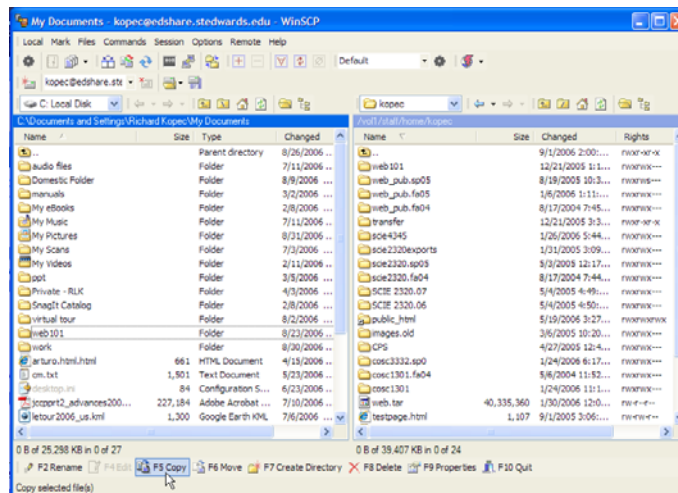
- Some common file formats:
  - .css (cascading style sheet)
  - .pdf (portable document format)
  - .csv (comma-separated value, spreadsheet)
  - .tab (tab-separated value, spreadsheet)
  - .avi (Windows media player - audio/video)
  - .asp (Microsoft active server page)
  - .html (hypertext file - Web page)
  - .shtml (secure Web page)
  - .doc (Microsoft Word file)

## FTP Software Archives

- File Transfer Protocol (FTP): An Internet protocol that makes it possible to transfer files between two host machines.
- FTP has been used since before the Web to share files on the Internet.
- To reach an FTP server you can use your browser or an FTP client (Fetch or WinSCP).
- A mirror site is an alternate FTP site that contains the same files as the main FTP site.

- If you aren't sure where to go on an FTP server, look for files named index, welcome or readme.
- Read everything available that could help you navigate the site.
- If you get an error when trying to download a file, try again later.
- If mirror sites are available, use the one closest to you.

- Web browsers can be used to download files from Web and FTP servers.
- Browsers can also upload files to FTP servers.
- If you use FTP servers a lot, a graphical FTP utility will save a lot of time.



## Managing Your Software

- Now that you are ready to download lots of software, you need to learn to manage it all
- If your computer becomes unusually sluggish or unable to open new applications, try restarting it.
- Restarting your computer can recover RAM and speed up processing.
- When programs start, they set aside RAM.
- When they quit, they are supposed to release the RAM (they don't always)

- Running a disk optimizer on your hard drive may improve performance by reducing file fragments.
- Fragmented File: A file that does not occupy contiguous space on a hard drive.
- Some books recommend defragmenting your hard drive once a month. (At least once a year is good)

## Finding Good Software Reviews

- **General sites:**
  - ZDNet Reviews <http://review.zdnet.com/>
  - CNET <http://www.cnet.com/>
- **Windows sites:**
  - Win Planet Reviews <http://www.winplanet.com/> or <http://cws.internet.com/>
  - PC Magazine <http://www.pcmag.com/>
- **Mac sites:**
  - MacReview Zone <http://macreviewzone.com/index.php>
  - MacDirectory <http://macdirectory.com/mewmd/mac/>



# Hands-on Exercises

## Exercise 1

- Learn to use SSH Secure Shell to download and upload files from a FTP site.
- Learn to submit files on `mercury.cs.uml.edu` using your CS account.