Outline

Course logistics
Introducing tools to be used in the course
Overview of Social Web and Web 2.0
  Definition
  History
  Key elements
  Example applications
LinkedIn

Social networking
User Interaction
Creating and Sharing of content
Purpose
About You
URL: www.linkedin.com

Wordpress Blog

Weblog
Software tools allowing easy creation of a website
Purpose
Personal learning journal:
Readings, seminars, thoughts
URL:
www.wordpress.com
Wiki

Collaborative development of a website

Purpose
Summary of lecture presentations

Sample wiki
http://ir.exp.sis.pitt.edu/paws_resources/index.php/Main_Page

BibSonomy

Purpose
Resource sharing
Research paper sharing

URL:
http://www.bibsonomy.org
Group: social_web
CoMeT and Eventur

Sharing, tagging, social networking, trust

Purpose
Post and share information about research talks and cultural events. Engage other users.

URL
- http://washington.sis.pitt.edu/comet
- http://eventur.sis.pitt.edu

Social Web

What do you think?
The New Web: the Web of People

Web 2.0

• Term was introduced following the first O'Reilly Media Web 2.0 conference in 2004
  • Web 2.0 video by Tim O'Reilly
• By September 2005, Google search for Web 2.0 returned more than 9.5 million results

http://datamining.typepad.com/data_mining/2005/12/the_rise_and_ri.html
What Web 2.0 is and what is not

<table>
<thead>
<tr>
<th>Innovative applications of existing technologies</th>
<th>Collection of new web technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>blogs, wikis, and RSS</td>
<td>Semantic web</td>
</tr>
<tr>
<td>Living Web</td>
<td>Read-Write Web</td>
</tr>
</tbody>
</table>

What is Web 2.0

Fun Video on YouTube
(http://youtube.com/watch?v=XPYLn2QblNI)
Social Web of Web 2.0?

The Social Web

- The social web can be described as people interlinked and interacting with engaging content in a conversational and participatory manner via the Internet
- Since social web applications are built to encourage communication between people, they typically emphasize some combination of the following social attributes:
  - Identity: who are you?
  - Reputation: what do people think you stand for?
  - Presence: where are you?
  - Relationships: who are you connected with? who do you trust?
  - Groups: how do you organize your connections?
  - Conversations: what do you discuss with others?
  - Sharing: what content do you make available for others to interact with
The Social Web

Next generation web
exploiting user-generated content in sophisticated and powerful way

Key Elements

What comes to your mind first when you think about web 2.0?
Key Elements

- User-Generated content
- The Users’ Web
  - Blogs
  - Resources
  - Video (YouTube)
- User as a first-class participant, contributor, author

http://www.masternewmedia.org/news/2006/12/01/social_bookmarking_services_and_tools.htm

Famous Web 2.0 Applications

Delicious & Flickr

Pioneered the concept of folksonomy
Collaborative categorization using freely chosen keywords (tags)

- all your bookmarks in one place
- bookmark things for yourself and friends
- check out what other people are bookmarking
Podcasting

iPod + Broadcast
A collection of digital media files which is distributed over the Internet using syndication feeds for playback on portable media players and personal computers

Key Elements

Collective Intelligence (Wisdom of Crowds)
• Critical mass of participation act as filtering what is valuable
• The web of connections grows organically as an output of the collective activity of all web users
User reviews on Amazon.com

Customer Reviews
Apple 8 GB iPod nano AAC/MP3 Player Black (3rd Generation)

The most helpful favorable review
140 of 172 people found the following review helpful:

Apple improves the Nano and delivers an enjoyable player.
Apple's new nano is designed to improve upon the past models and add some functionality.
The improved video, smaller thinner body and updated firmware are enough to make it stand out.
The slightly lower price tag is also sure to help sell more units.

The Locks

The most helpful critical review
98 of 116 people found the following review helpful:

I like it, but it has two major drawbacks for my needs.
If TV out isn't important to you, or you don't care about playing podcasts back to back
without fiddling with the ipod, then I'm sure you'll still love the new 3g nano.
I like the video feature, the size (great for commuting), style, and colors of the new nano 3g. and iPods have the nearest/best way of selecting and sorting through music of any MP3 player out there...

Read the full review

Google PageRank algorithm

Using the link structure of the web
Key Elements

- Large values created by the community of users through collaboration
- Applications powered by user community
- Stigmergy
Famous Web 2.0 Applications

SourceForge.net
Peer-production methods of open source software projects

Famous Web 2.0 Applications

Wikipedia
Launched in 2001
Largest and fastest growing, and most popular reference work
As of December 2007
9 ¼ million articles in 253 languages
2,154,000 articles in English
eBay

Collective activity of all its users

Cloudmark

Collaborative spam filtering
Aggregate the individual decisions of email users
Key Elements

Long Tail

First coined by Chris Anderson (2004)

“Businesses with distribution power can sell a greater volume of otherwise hard-to-find items at small volumes than of popular items at large volumes.”

Majority of truly relevant information available on the web is not on the well known web servers

- 25%-40% of Amazon’s sales
- 1/5 of Netflix rentals comes from not top 3000 movies

Key Elements

Data Reuse

Usage of APIs (Application Programming Interfaces)

Mash-ups

programming on the web

High level of abstraction
RSS Feeds, APIs and Mash-ups

Time-bar of Web 2.0

Created by Jürgen Schlüter Carola.
Social Web Technologies

Intelligence that emerges from collaboration of many individuals

Social navigation
- Navigation towards cluster of people
- Navigation because other people have looked at something
- Following footprint of others

Social Search
- Improving search using the data from past users

Social Web Technologies

Folksonomy
- Collaborative tagging
- The practice and method of collaboratively creating and managing tags to annotate and categorize content
Social Web Issues

- Community based Systems share many issues, which should be addressed to produce successful systems
  - Participation vs lurking
  - Social capital
  - Social networking
  - Trust and reputation
  - Privacy and presence

Social Web Programming

RSS
Really Simple Syndication
XML based metadata content
Provides updates when the content is modified

Web services
"a software system designed to support interoperable Machine to Machine interaction over a network."

SOAP
Simple Object Access Protocol
A protocol for exchanging XML-based messages over computer networks, normally using HTTP/HTTPS

Ajax
Asynchronous JavaScript and XML
A group of inter-related web development techniques used for creating interactive web applications

Mash-up
A web application that combines data from more than one source into a single integrated tool
Future

Social Navigation
1. Footprints: history-rich tools for information foraging (http://www.citeulike.org/user/brusilovsky/article/518781)

Social Search