Department of Computer Science University of Cyprus, Nicosia December 6, 2007

# Web 2.0, Social Programming, and Mashups (What is in for me!)

#### Dr. Mustafa Jarrar

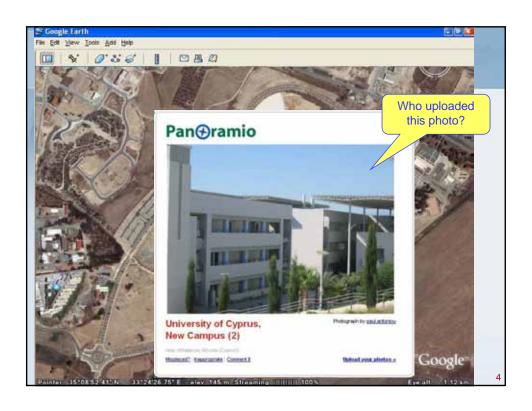
mjarrar@cs.ucy.ac.cy
HPCLab, University of Cyprus

# Social Community, Collaboration, Sharing



Back to the future...





## Outline

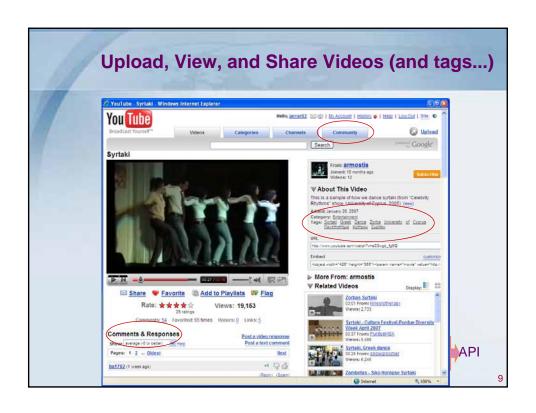
- What is Web 2.0? What is social Web?
- Web 1.0 vs. Web 2.0?
- How can I make my website web 2.0?
  - RSS, Atom
  - Mashups
  - Programmable web
- How can I build a mashup?

### What is Web 2.0?

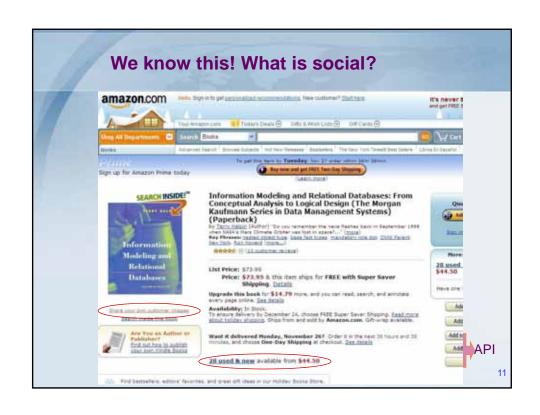
I cannot define it, let's see some examples..

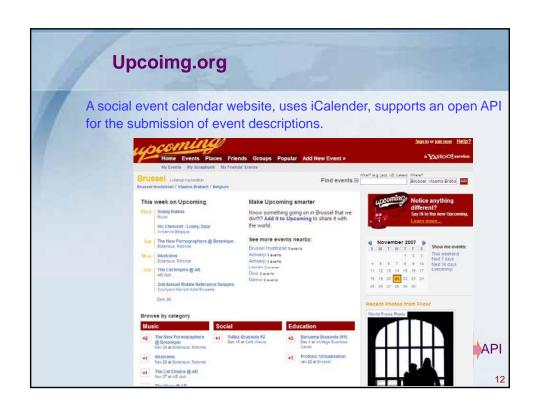








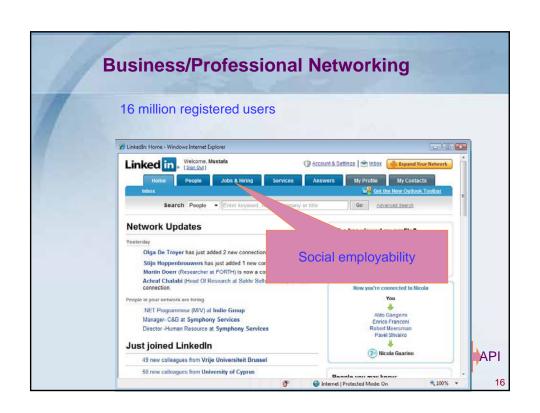
















## What is Web 2.0?

Web 1.0	Web 2.0
html, xml, cgi, php, portal, xform	Blog, Wiki, folksonomy, RSS, Atom, Mashup
Read	Read/Contribute
Page	Post/Record
Static	Live
"Client server"	"Web Service"
Dogmatic	Democratic
	Social aspects
	Community/collaboration
	Content sharing
	Users are its driving force
	very creative

19

## What is in it for me?

→ "Me", as a user?

I will join networks, learn, share, contribute...

→ "Me", as a programmers?

Ideas?

Let's see some of the Web 2.0 Technologies (to make your site web 2.0)

## Web 2.0 Technologies

#### **Content syndication**

How can you deliver recent news to your users without forcing them to visit your website?  $\rightarrow$  RSS, Atom

#### **Mashups**

How can you remix free content and make a new website?

#### Web APIs (programmable web)

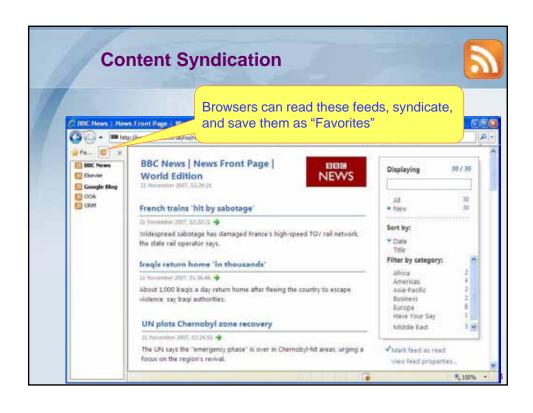
How can make use of the free content inside my website?

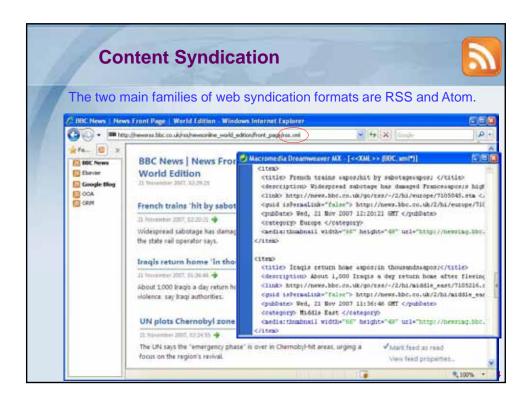
21

## **Content Syndication**

Millions of online publishers including newspapers, commercial web sites and blogs now publish their latest news headlines, product offers or blog postings in standard format news feed.







### **Content Syndication**



#### **RSS (Really Simple Syndication)**

- An RSS document is an XML (/sometimes RDF) document.
- An RSS document, (called a "feed"/"channel," contains a summary of content or the full text.
- · People are updated automatically.
- RSS content can be read using "RSS readers," "feed reader" or an "aggregator."

#### **Atom**

Same as RSS, but elements are typed, + some other features. See http://en.wikipedia.org/wiki/Atom

25

### **Content Syndication**



#### **Feed Aggregator**

A client software or a Web application which aggregates syndicated web content such as news headlines, blogs, podcasts, and vlogs in a single location for easy viewing.

#### For example:

- Akregator (KDE/Linux)
- Apple Mail (Mac OS)
- Attensa Feed Readers (cross-platform)
- BlogBridge (cross-platform)
- Feedview, a Firefox extension (cross-platform)
- FeedDemon (Windows)
- FeedGhost (Windows)
- Hubdog (Windows Mobile)
- Juice (cross-platform)
- Liferea (Linux)
- Mozilla Thunderbird (cross-platform)
- Microsoft Outlook 2007 (Windows)
- Internet Explorer 7 (Windows)
- ...

Google Reader

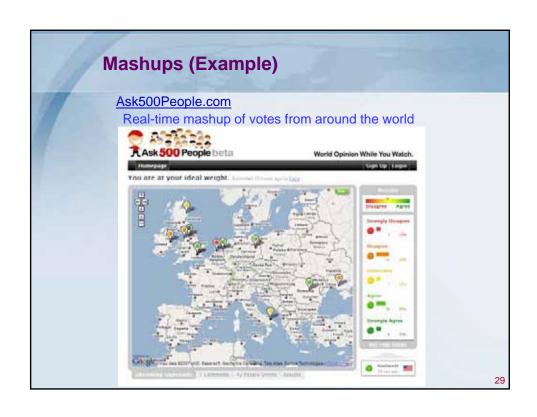
- Google News
- Netvibes
- Newshutch
- NewsIsFree



## **Mashups**

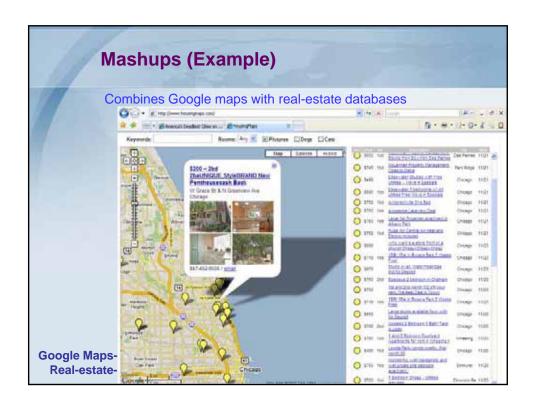
- A new breed of web applications.
- Combines data from more than one source into a single integrated tool.
- Creating a new and distinct web service that was not originally provided by either source.
- Content is typically sourced via an API\* or a RSS Feed

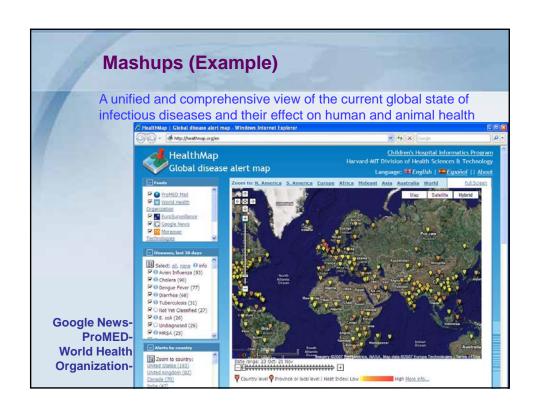
Let's see some examples..

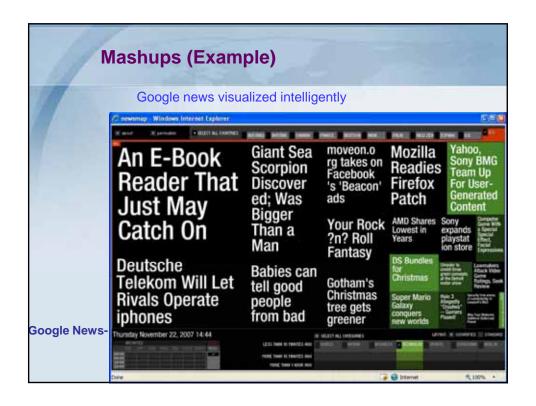




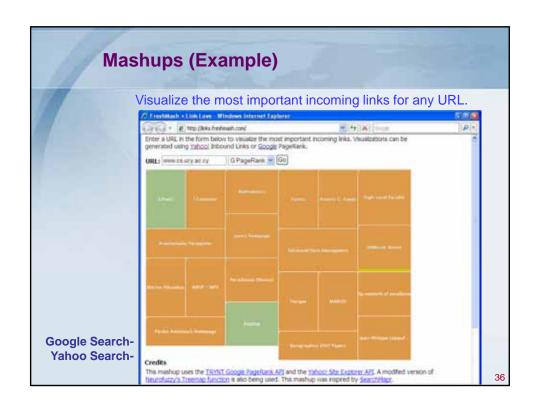




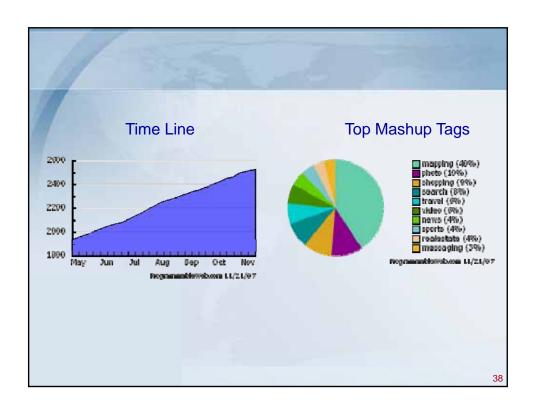


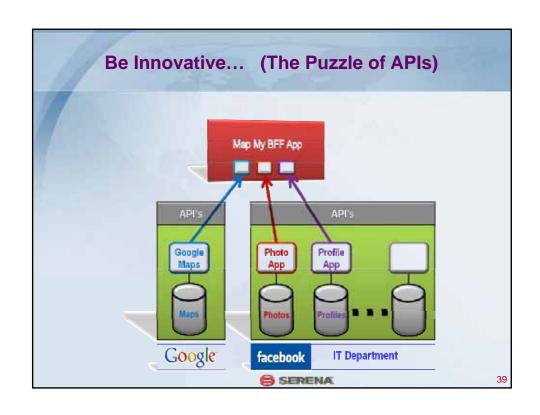


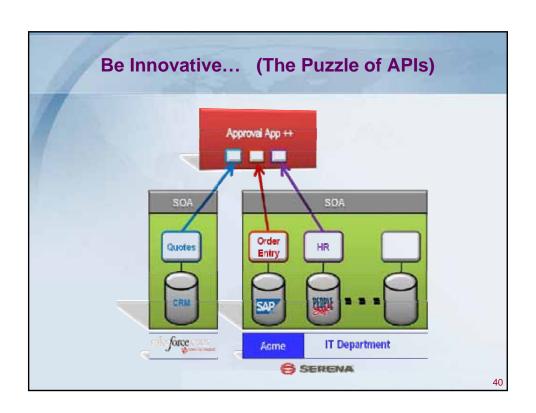




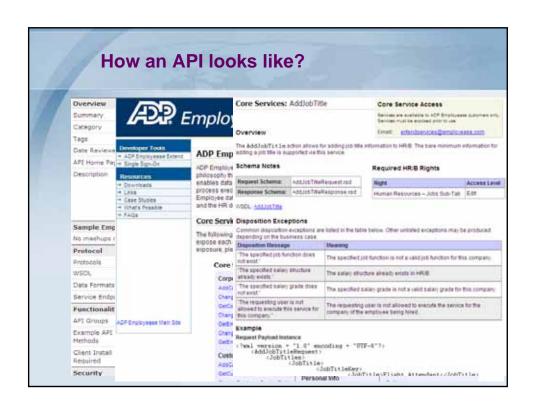


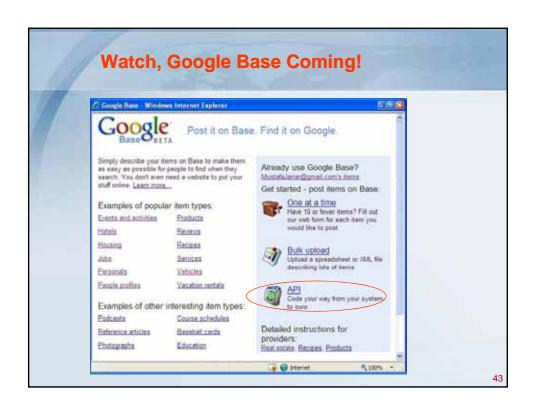






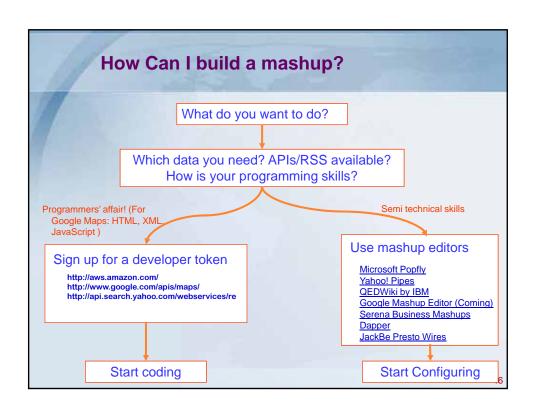


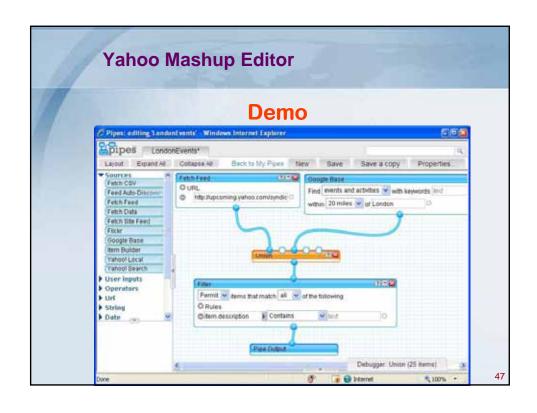


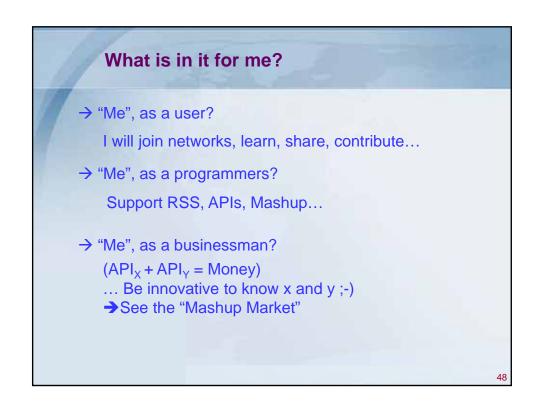






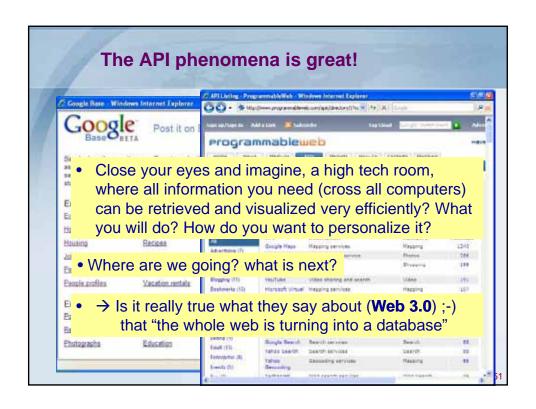


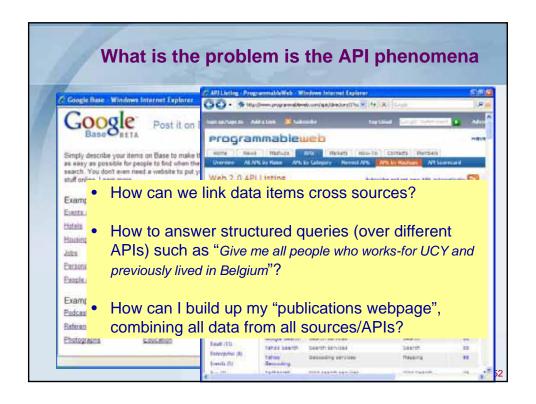












## Can RDF and SPARQL help Web 2.0/3.0?



- Feeds are published in RDF.
- SPARQL is used to query and combine RDF documents
- Does this technology really solve the problem?
- If so what are the challenges? ((((Let's discuss)))

53

#### **Thank You**

Download slides http://www.cs.ucy.ac.cy/~mjarrar

Contact me: mjarrar@cs.ucy.ac.cy
HPCLab, University of Cyprus