Weekly Syllabus

1. Scalability: (Jan.)
2. Agile Practices
3. Ecology / Mashups
4. Browser / Client
5. Data / Server: (Feb.)
6. Security / Privacy
7. Analytics
8. Cloud / Map-Reduce
9. Personalization & Published APIs: (Mar.)*
10. Future

* assignment due
Administrative Stuff

- Grades to be sent out today
- Final assignments due on Friday
- Demo lunch details firmed
  - several more guests added
Must Dos for Friday

- Push your code frequently
  - good comments important
  - discipline for coding incrementally
- Testing demonstrates APIs & functionality
  - enables quicker fixes
Topics

- Why personalization?
- Identity
- Self expression
- Marking territory
- Games and play
Personalization & Scaling

- Significant user activity now requires
  - ability to customize
  - iGoogle, est. 40,000,000 users

- Blogging as an identity building exercise
  - customization is self expression
  - marking territory extends identity
Real World Examples

- Graffiti, custom plates
- Custom bikes and cars
- Clothing, make up, luxury items
- Landscaping
- School / company swag, affiliation symbols
Custom Features

- Background color, design, image
- Font, line styles
- Widget placement
- Style sheet, template, theme
- Embedding, drag and drop editing
- Avatar
Post Anonymous Web

- Historically voluntary identity disclosure
  - professional IDs often leaked
- Facebook, LinkedIn, Google Buzz
  - first global systematic ID establishment
Very Diverse People

- Last person who should lecture about this
- Unimaginably different mental models
  - observation of computer/browser operation
  - academic apprenticeship of the web
- Humbling rule of thumb
  - everyone is irreconcilably different
Second Life Example

- 2003 launch (1999 founding), after There.com
- Second mover advantage?
- Customization and market economy
  - programmer API + currency = trade
  - end user ownership of goods
Game Dynamics

- Game economy
  - user interaction is a reason to stay
  - the more direct the communication the better
- (Repetitive) entertaining activity
  - online activity is real world entertainment
- critical to business monetization
User Profiles

- Becoming an online proxy for the user
- Enable people to be found
- Define automated activity to support user
  - RSS subscriptions, Twitter feeds
  - Alerts to new web content, email, etc.
- Support self expression
Targeting

- Potential drawback of personalization
- AdWords validates targeting
- Spyware, malware
  - VCs have praised spyware targeted ads
  - Can free web accounts be spyware?
Wiki Editable Content

- Self expression enabled
  - many rich text toolkits for in app editing
- In place editing vs. separate edit page
  - pop ups also user friendly
- Counter example
  - Twitter
Geotagging

- GPS / cell tower coordinate metadata
- On line expression of territory
  - FourSquare simplifies this dramatically
  - RunThere makes it easy to track exercise
  - EveryTrail records trips, photos, video
Augmenting Real Life

- flickr - photo blogging
- meetup - connecting online and in the
- yelp - rating places, food
- foursquare - squatting places
- loopt - locating friends
- plentyoffish - dating
Magnetic Content

- Holy grail
  - never search for anything
  - the info you want is already waiting for you
- State of the art
  - news aggregators, RSS readers, feeds, Buzz
  - search alerts, email monitoring
Profile clustering

object ownership

Spatial indexes

interleaved coordinates

Information alerts

Feeds
Global Database

- Git highlights shared data management issues
- Local repo is owner of your content
- Push synchronizes rest of world
- Pull synchronizes local repo
- Manual prior resolution vs. undo conflict
- Google Docs model
Z-ordered Curve
Rule Engines

- Set trigger conditions to get information
  - inserts, updates, searches, deletions

- Powerful functionality
  - in general difficult to guarantee performance
  - simple (non-cascading) triggers sufficient
Feeds

- RSS readers easily overwhelm users with info
- Social media sites often provide these
  - Top 10 ...
  - Recent
  - Commented
  - Headlines
Worth Checking Out

- Web 2.0 exercising
  - http://runthere.com/

- Virtual worlds
  - http://secondlife.com/
  - http://www.there.com/
Q & A Topics

- Future of personalization
- Personas, avatars
- Agents
Scalable Web Programming

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