



ICS 4

Design and Usability for the Web

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<http://www.ics.uci.edu/~kay/courses/4/slides.pdf>

Personalization

- “Welcome back, Joe.”
- “Weather in Irvine, California”
- “Here are some recommendations for you”
- “View your order history”
- “Save your ordering information?”
- Web sites that know something about you can be useful

Privacy

- But what if that information falls into the wrong hands?
- Security breaches: rogue or careless employees, system break-ins, laptop theft
- Identity theft, embarrassment, unwanted ads
- The laws regulating privacy are a patchwork
- Practically, it's about trust, not law: If users don't trust you, they won't use your site

What affects trust?

- If less is at risk, less trust expected
- Perceived similarity: Users trust sites they think reflect concerns similar to their own
- Status or standing: Social leader endorsement
- Consistent behavior: Actions match words?
- Certification: Doctors, e.g., are licensed
- Referrals: Users are likely to trust someone they know (or someone like them, as above)

How to foster trust

- List what security precautions the site takes
- Observe good business practices (follow through on delivery dates, return policy, ...)
- Have a privacy statement: what info is gathered, how it will be used, allow opt-in or opt-out of use

Privacy more broadly

- Why it's a particular issue with IT
- Computer matching and inferences
- Privacy advocates' principles
 - Data used only for purposes it was collected for
 - No systems whose existence is secret
 - Subject's right to see/correct/amend (exceptions)
 - Responsibility of record-keeper to safeguard security and integrity

Copyright law and the web

- Don't count on any of these to excuse you from copyright infringement:
 - I could view it and download it, so I can put it on my own web page
 - I'm not doing it for money
 - It's for educational purposes
 - I copied less than 10% of what's there

Intellectual property law

- Patent law and copyright law: From the U.S. Constitution, to promote progress
 - Patents: Inventions
 - Copyrights: Any form of expression (not the underlying idea)
- Trademark and trade secret law: To promote “fair play” in business
 - Trademark: I can’t call my company “Microsoft”
 - Trade secret: I can’t steal your business secrets

U.S. Constitution

The Congress shall have power “to promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.” [Article 1, sec. 8, cl. 8]

- Financial incentive to create
- Authors can make a living, quit their day jobs
- Works are published, so others can learn

Copyright protections

- Automatic once work is in tangible form
- Copyright notice helpful, not required
Copyright © 2010 by Willa Webmaster. All rights reserved.
- Registration optional (but easy, cheap, useful)
- Author exclusively may: reproduce, distribute, create derivative works, display publicly
- Infringement is unauthorized copying or use, typically inferred from evidence of access and substantial similarity between the works

Defenses to copyright infringement

- Copyright protects expressive form, not underlying ideas
- Independent creation
- Public domain
- Aspects dictated by external constraints
- Copying by “implied license”
- “Fair use” ...

The “fair use” defense

- Doesn't just mean it's okay if it seems fair
- Precise meaning is not cut and dried
- Courts consider four aspects:
 - Purpose/character of use (profit? convenience?)
 - Nature of the work (fiction? fact?)
 - Amount/substantiality of copied portion
 - Effect of copying on work's value/potential market

Copyright issues

- How far are user interfaces protected?
- Enforcement, especially across the web
- Ownership and “works for hire”
- Expanding copyright terms
- Content providers vs. content consumers
- Digital Millennium Copyright Act
- Framing and linking

Copyright references *[not required]*

- Copyright office, www.copyright.gov
- Electronic Frontier Foundation, www.eff.org
- UC Copyright Education Web Site,
www.universityofcalifornia.edu/copyright
- Lawrence Lessig, www.lessig.org

The web's near-term future

- Web-based applications
- Cloud computing
- Mobile devices
- Continuous sensing

ICS 4 Overview

- The field of HCI
- Human characteristics
- User-centered design
- Content organization and navigation
- Evaluation strategies
- Building blocks (color, typography, ...)
- The broader context

End-of-quarter logistics

- Review session
 - Monday 15 March, 12:40–2:20, DBH 1420
 - Admission price: At least one written question about the course material
- Final exam
 - Tuesday 16 March, 10:30–12:30, DBH 1300 (here)
 - Covers the whole course, more or less evenly
 - Mostly similar to midterm in form
 - You may bring any paper materials, as before
- Please do the course evaluation on EEE

Looking forward

- ICS 3, Internet & Social Impact (F '10)
- ICS 5, Environmental Issues in IT (S '10)
- ICS 6, Modern Computational Tools (S '10)
- ICS 10, How Computers Work (W '11)
- ICS 11, The Internet and Public Policy (W '11)
- Informatics 131, Human-Computer Interaction
- Informatics 133, User Interaction Software

Questions?

