Lecture 20:
CSCW and Social Networks

April 28
What is CSCW?

- **Computer Supported Cooperative Work**
- A.k.a. groupware

- Study how **people** work together as a group and how **technology** affect this
Examples

• Authors editing the same documents
• Designers working on the same design
• Programmers developing software remotely
• Buyers and sellers meeting on eBay
• Gamers cooperating for an epic win
Question

• What technologies does your team use to coordinate for your group project in the class?
Community

Organization

Team

Small Group

Individual

CSCW

HCI

Computers
Small group and team

• Characteristics
  – Members know each other
  – Collaborate to achieve a common goal
  – Highly focused, interactive
  – Strong need for communication

• Examples
  – Software development team, proposal writing, conference program committees,
    small operational groups such as customer support, research project teams
Organization

• Characteristics
  – Geographically distributed
  – Hierarchical management structure
  – Strong need for coordination

• Examples
  – Companies, governments or government agencies, non-profit organizations
Community

• Characteristics
  – Members do not [all] know each other
  – Common interests or preferences
  – Loose structure & interactions

• Examples
  – Citizens of a city or neighborhood
  – Newsgroups
  – Virtual world citizens
  – Auction participants
Question

• Consider the user population in your Design Assignment 1

• Is it a small group, large team, organization, or community?
CMSC 434 Introduction to Human Computer Interaction

Spring 2010

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Face to Face interactions
Continuous Tasks

Remote Interactions
Communication + Coordination

Same Time
synchronous

Different Time
asynchronous

Same Place
Collocated

Different Place
Remote

Time/Space Matrix
Question

• Which time/space quadrant does each belong to:
  – Mario Party
  – Geo-caching
  – The Infinite Cat Project
  – World of Warcraft
Facilitating communications

• Making references
  – General ("north by north west")
  – Definite ("meet at the STAMP")
  – Detailed ("get the blue ball")
  – Deixis ("that one" while pointing)

• Taking turns

• Maintaining eye contacts
Group awareness

- Knowing others’ activities
  - E.g., “X is typing a message”, diff

- Informing others about one’s own activity
  - E.g., status message, commit log

- Following the workflow
  - E.g., a document should be read by Tom then by John

- Avoiding or resolving conflicts
  - E.g., lock, merge
Face to Face interactions

Continuous Tasks

Time/Space Matrix

Remote Interactions

Communication + Coordination

Same Time
synchronous

Different Time
asynchronous

Same Place
Collocated

Different Place
Remote
Same time/same place: Face to face interactions

- Decision rooms
- Single display
- Shared table
- Roomware
Face to Face interactions

Continuous Tasks

Remote Interactions

Communication + Coordination

Time/Space Matrix
Same time / different place: Remote interactions

- Video-conferencing
- Messaging (IM, Email)
- Virtual worlds
- Multi-user editors
- Shared screen (VNC)
Face to Face interactions
Continuous Tasks

Time/Space Matrix

Same Time synchronous
Different Time asynchronous

Same Place
Collocated

Different Place
Remote

Same Time
Different Time

Same Place
Different Place

Collocated
Remote

Face to Face interactions
Continuous Tasks

Remote Interactions
Communication + Coordination
Different time / same place:
Continuous tasks

- Shift-work groupware
- Public display
- Physical bulletin board
Face to Face interactions

Remote Interactions

Continuous Tasks

Communication + Coordination

Same Time
synchronous

Different Time
asynchronous

Same Place
Collocated

Different Place
Remote

Time/Space Matrix
Different time / different place: Communication + Coordination

- Wiki
- Blogs
- Version control
- Group calendar
CMSC 434 Introduction to Human-Computer Interaction

Class hours: Mon & Wed, 2pm - 3:15pm
Room: 1121 CSIC

Topics: Science base (theories, models, and studies) and user interface design and development. Graphical user interfaces for desktop, web, and mobile devices. Assess usability by quantitative methods. Conduct task analyses, usability tests, expert reviews, and continuing assessments of working products by interviews, surveys, and logging. Apply design processes and guidelines to develop professional quality user interfaces. Build low-fidelity paper mockups, and a high-fidelity prototype using contemporary tools.

Contents [hide]
1 Upcoming Due Dates
   1.1 Past Due Dates
2 Latest Announcements
3 People & Projects
4 Schedule
5 General information
6 Resources
Google Wave
Microsoft Surface
MultiView
Love Board
Question

• Consider the “Family Reunification” application you are designing for Design Homework 2

• Which time/space quadrant does it belong to?
Social Networks
1. Gather
2. Share
3. Self-Express
4. Feedback
5. Communicate
6. Collaborate
7. Know
University of Maryland: Maryland Women's Lacrosse Team Repeats as ACC Champs---Led by Caitlyn McFadden and Brittany Dipper, Maryland upended No. 1 North Carolina, 10-5, to win its second consecutive ACC Championship title Sunday.
13 hours ago

95 people like this.

View all 15 comments

Yahel Melendez: Go Terps! Haha I don't even go to this school!
about an hour ago · Report

Celina Alvarez: Go Lady Terps!!
41 minutes ago · Report

University of Maryland: Maryland Day was a great success...the rain held off for quite a while. If you came, did you eat any of the Mochalotta Mote Ice Cream at the Dairy...made especially for President Mote!
Sat at 10:51pm

35 people like this.
Can your tribe survive?
Some observations on the life cycles of online communities

Kris M. Markman, Ph.D.
University of Memphis
Tribe Camp Memphis 2010
Design patterns: Gather

• Save
• Favorites
• Gallery
• Add/Subscribe
• Tagging
Design patterns: Share

- Send this
- Share this
- Give gift
- Social bookmarking
- Embedding
Design patterns: Self-express

- Blog
- Microblogging
Design patterns: Feedback

• Vote to promote
• Thumbs up/down
• Ratings
• Comments
• Reviews
• Surveys
• Questionnaire
Design patterns: Communicate

- Forum
- Public/Private/Group chat
Design patterns: Collaborate

- Manage project
- Voting
- Collaborative editing
- Wiki
- Crowd sourcing
Design patterns: Know

- Following
- Filtering
- Get recommendations
- Search
- Real-time search
- QA