COMS W4170
Collaboration

Steven Feiner
Department of Computer Science
Columbia University
New York, NY 10027

(with thanks to Lena Mamykina)

November 9, 2017

CSCW
Computer-Supported Cooperative Work

- People working/playing/interacting together through or with the use of computers
  - HCI Human–Computer
  - CSCW Human–Computer–Human

- Groupware
  - Software / platforms to support group interaction
CSCW

What’s in a Name?

“Twenty-five years after its founding, the CSCW community concluded that... [i]ts name no longer reflects the group’s activity. Each word in “Computer Supported Cooperative Work” has lost its relevance.

C: Computers are no longer the only digital devices of interest.
S: Digital technology is no longer confined to a support role; it is integral to many activities.
C: The focus was initially on small groups for which cooperation was the norm, but today’s digital world features hacker attacks, spam, privacy concerns, conflict, and competition.
W: In 1985 systems capable of supporting groups were mainly affordable in corporate work settings. It’s different now.”


Collaboration: Human Interrelationships

- Focused partnership
- Lecture/demo
- Conference
- Ecommerce
- Online community/game
- Collaboratory
- Telepresence
- …

A computer-supported environment (typically virtual) for interaction among scientists to work together: share data and instruments, perform experiments…
Collaboration: Issues

- Who are the participants?
- What can participants do?
- When do participants interact?
- Where do participants interact?
- How do participants interact?
- How are participants represented?

Collaboration Issues (cont.)

- **How** do participants interact?
  - Computer-mediated communication
    - Text
    - Voice
    - Video
    - ...
  - Movement in 3D space
  - Coordination
  - Awareness
  - Privacy

Support for
- “Hand raising” and “calling on” participants in order
- Breakout rooms

Collaboration Issues (cont.)

- Pros and cons of different interaction modalities
  - Text
  - Voice
  - Video
  - ...