Social Computing Systems

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(http://tiny.cc/socsClass)
Example Design Process Walkthrough

- We work in a hospital, and see that a large % of the mistakes made are made because one MD doesn’t know what the MD from the last shift did.
- Where do we start?
Example Process: Contextual Inquiry (CI)

- User-centered design method
- Observe the processes at the hospital. Watch an MD work.
- Understand the ‘pain points’, their causes, and the current state of the art
- Interview participants to understand the ‘why’ behind the ‘what’
- Understand broader context: stakeholders, organizational structure, etc.
Example CI Findings

- Doctors check patient charts at the start of their shifts to see history
- Doctors are overloaded, and often forget to take notes on the charts
- Nurses don’t always double-check charts until the end of their shift
- Nurses’ and doctors’ shifts are staggered to prevent high turnover
- Doctors know they sometimes miss recording information in general
- However, they can’t recall when exactly after the fact
Example Process: Example Profiles

- Create example profiles for relevant stakeholders.
Example Process: Brainstorming Solutions

- What could address the problems we see?
Example Process: Refining Solutions

- What technology could we leverage to help achieve our ideas?
- What is too far off in the future?
Example Process: Prototyping

- What could we build quickly to try out our top ideas?
Example Process: Refinement

- Using a wood-block prototype, we ask doctors to pretend it’s a real tool
- We find that MDs remember to use the device when they’re far from the chart
- What should we do next?
Example Process: User Study

- We’ve built a ‘real’ version of our device. Now we deploy it in the hospital.

- How do we measure success?

- How else can we find ways to improve?
Today

- Tools for connecting with others remotely
- Workplace tools for communication / collaboration
Challenge

Shorten distances by making “communication” possible from afar
Communication is key to socialization, but often hard. Technology gives us the means to transmit data far. … But how do we make this usable / effective? 

*Making and maintaining connections is important!* 

— (later: “onion” theory)
Communication
What is Communication

“[...] theory, tools, and techniques for analyzing, managing and improving communication in every arena of professional and personal interaction” - NU Comm
Communication Tools (examples)
Technology
Phones
Phones
Phones
Phones (now)
Phones (now)
Phones (now)
Phones (now)

Why?
SMS and Text Chat
Hangouts
Vine
Vine
Snapchat
Snapchat
‘Minified’ Communication

It's that simple.
‘Minified’ Communication
‘Minified’ Communication

(Formality level of a ‘hey’ message)
[credit: Business Insider]
Geolocation
Breaking Down Design Decisions
Design Considerations

Platform (as always)

User base (who?)

Use case (where/when/why?)

Interaction span (length of time)
(Some) Design Options

Interaction span (length of time)

Modality (text/voice/video/…)

Interaction type (2-way sync, 2-way async, 1-way, …)

Ephemerality (how long does an interaction remain?)

Privacy (what do we reveal to others)