Social Computing

Quiz 5

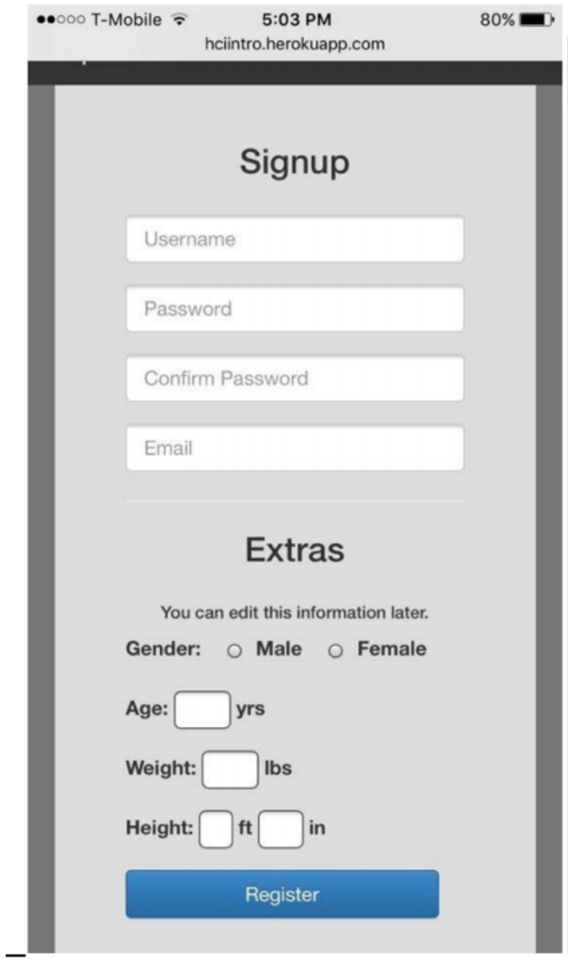
- Keep quizzes face down, and don’t start until instructed to do so
- 12 mins

A9 Example

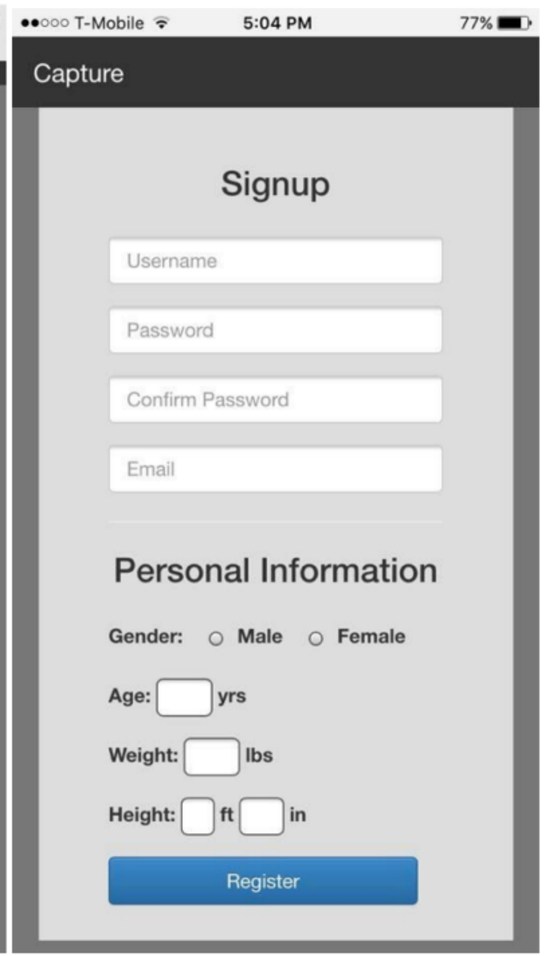
Aamir Rasheed, Jason Wu, & Edward Lau

Experiment 1: Filling out Personal Information

Original

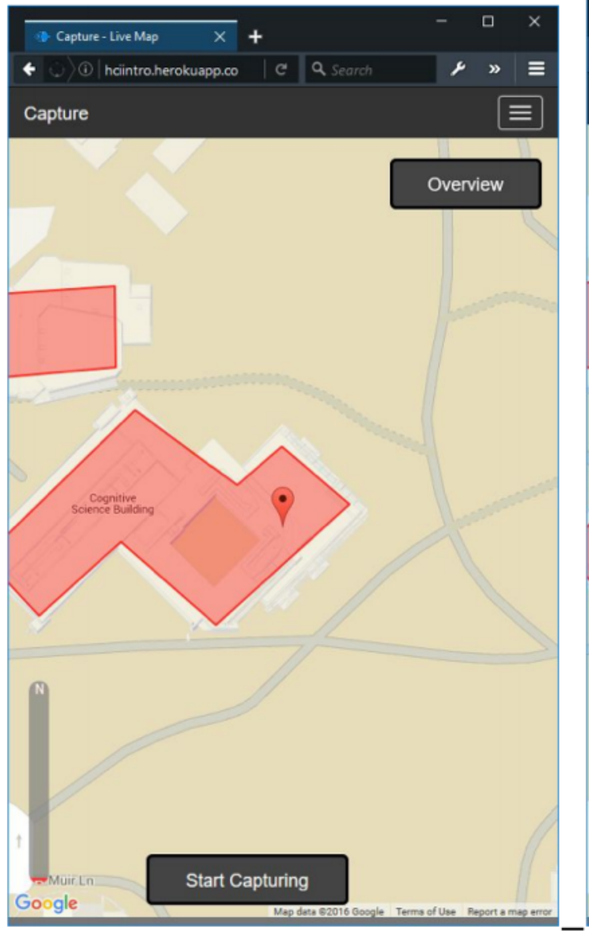


Variation

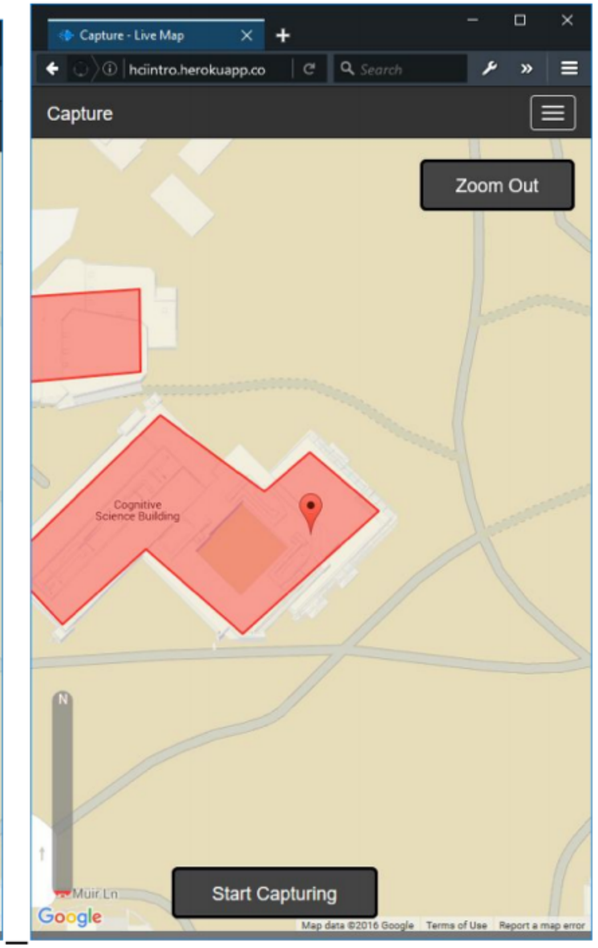


Experiment 2: Overview Vs Zoom Out

Original



Variation



Select 30 second clip
to show. Craft intro/

What makes for effective *online* communities?

Same Time

Different Time

Collocated
(Same Place)

Remote
(Diff’t Place)

Same time / same place

- Face to face interaction
- Roomware
- Shared tables, wall displays
- Group Decision Support Systems (GDSS)
- Single display groupware

Source: Wikipedia.

Example : same time / same place

Sources: Kinect: http://cdn.fansided.com/wp-content/blogs.dir/281/files/2014/02/kinect_002.jpg Microsoft Surface: http://files.tested.com/uploads/0/5408/31690-microsoftsurface_teaser.jpg , & http://news.microsoft.com/2011/11/17/new-samsung-sur40-for-microsoft-surface-is-available-to-pre-order-starting-today/

Different time / same place

- Message Boards
- Dedicated Team rooms
- Large displays

Source: Wikipedia.

Example: Ideas for Different Time / Same Place

Airport Display:
Arrival/Departure Information

DEPARTURE	CARRIER - FLIGHT - PARTNER		GATE	TIME	STATUS
Dallas /Ft	American	AA 1783	B71	4:30P	On Time
Dallas /Ft	QANTAS	QF 4594	B71	4:30P	On Time
Dallas /Ft	UNITED	UA 7681 US 7619	A2G	4:50P	On Time
Dayton	UNITED	UA 7989 QR 5649	C26	5:30P	On Time
Daytona Beach	DELTA	DL 1449	B76	4:06P	On Time
Denver	UNITED	UA 517 US 6257	C23	2:40P	On Time
Denver	UNITED	UA 903 US 6259	C19	4:22P	On Time
Denver	UNITED	UA 937 LH 9058	C4	5:28P	On Time
Denver	SOUTHWEST	WN 2683	B50	5:40P	On Time
Detroit	NORTHWEST AIRLINES	NW 3721	B72	4:45P	On Time
Detroit	UNITED	UA 7348 US 7608	A3	5:09P	On Time
Frankfurt	UNITED	UA 916 LH 9051	D3	5:26P	On Time
Frankfurt	Lufthansa	LH 419 UA 8832	B49	5:50P	On Time
Frankfurt	Lufthansa	LH 419. UA 8832	B51	5:50P	On Time
Ft.Lauderdale	JetBlue	B6 309	B62	3:15P	Delayed
Geneva	UNITED	UA 974 LX 3203	C6	5:41P	On Time
Greensboro	UNITED	UA 7842 BD 4626	A4	4:46P	On Time
Greenville	UNITED	UA 7954 BD 4436	C20	5:28P	On Time
Harrisburg PA	UNITED	UA 7952 US 7492	C28	5:25P	On Time
Hartford-BDL	UNITED	UA 312 US 6161	D21	5:22P	On Time
Houston	Continental	CO 3011	B25	2:35P	On Time
Houston	UNITED	UA 965 US 6191	C9	5:22P	On Time
Huntsville AL	UNITED	UA 7343 BD 4442	A4	4:50P	On Time
Indianapolis	UNITED	UA 7317 US 7150	A2	4:45P	On Time
Jacksonville	UNITED	UA 7422 NH 7550	A2	12:15P	Now 3:10P
Jacksonville	UNITED	UA 7451 BD 4238	C28	4:45P	On Time
Johannesburg	SOUTH AFRICAN	SA 208 UA 9818	B14	5:40P	On Time
Johnstown, PA	UNITED	UA 6937	A5	5:32P	On Time
Kansas City	UNITED	UA 7411 US 7902	A1	3:39P	On Time
Knoxville	UNITED	UA 7983 US 7406	A6	4:50P	On Time
Las Vegas	SOUTHWEST	WN 3674	B50	4:15P	On Time

Source: http://wandertherainbow.com/wp-content/uploads/2010/12/ShanghaiPudongAirportFlightsBoard.jpg, http://commons.wikimedia.org/wiki/File:Departure_And_Arrival_Board_At_Dulles_Airport_(4128589658).jpg

Same time / different place: Technologies

- Remote interaction
- Video-Conferencing,
- Real-time groupware
- Messaging (Instant messaging, Email)
- Virtual worlds
- Multi-User editors
- Shared Screen (vnc)

Source: Wikipedia.

Same time / different place: Affordances

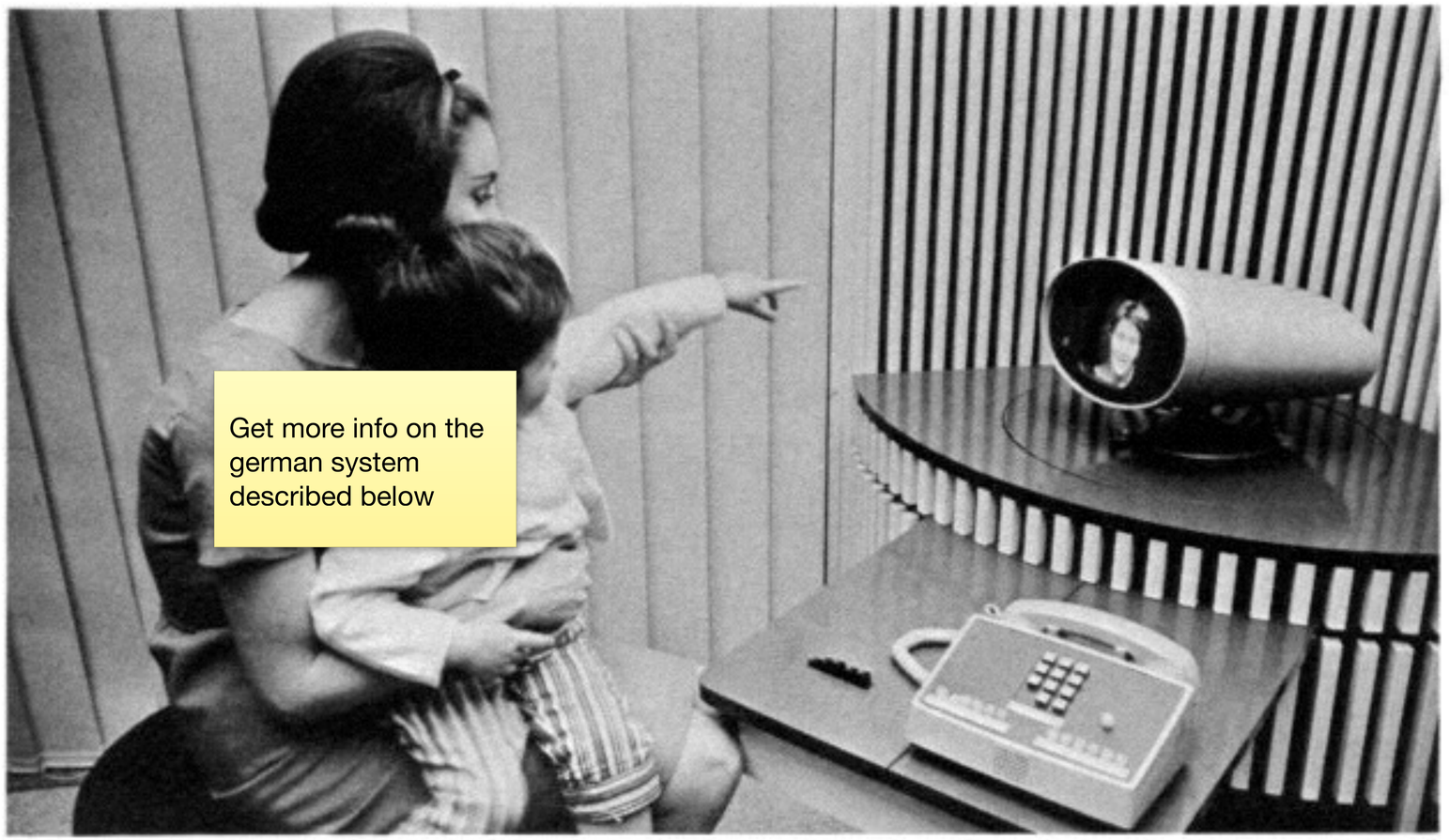
- Multi-user participation
- Nonverbal cues
- Differing levels of fidelity (text, voice, avatar)

The Picturephone, 1964

A logical extension of today's telephone service

Bell System introduces PICTUREPHONE service

Bell System

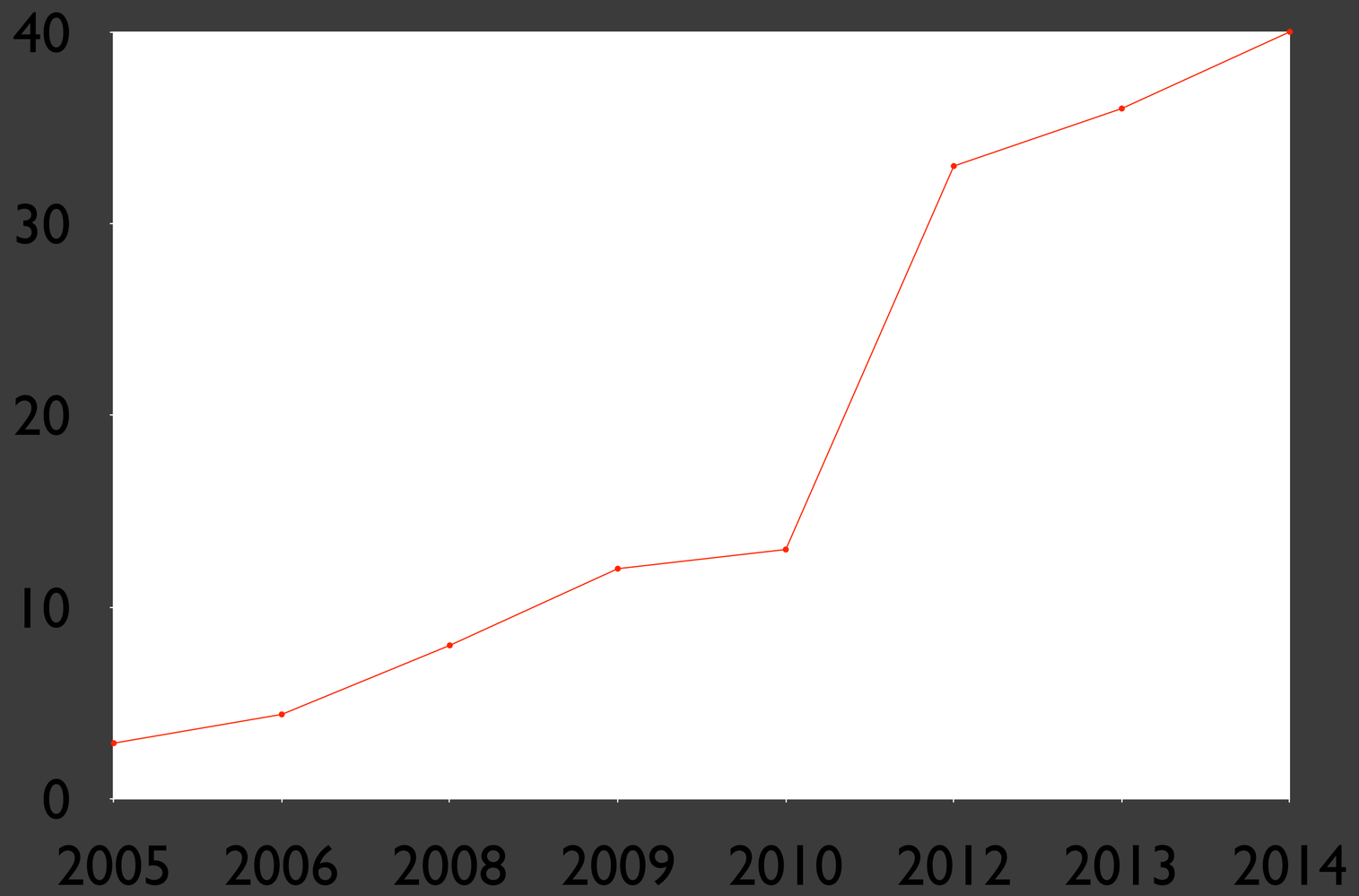


Get more info on the german system described below

Picturephone® installation showing Touch-Tone® control console.

Example: Skype

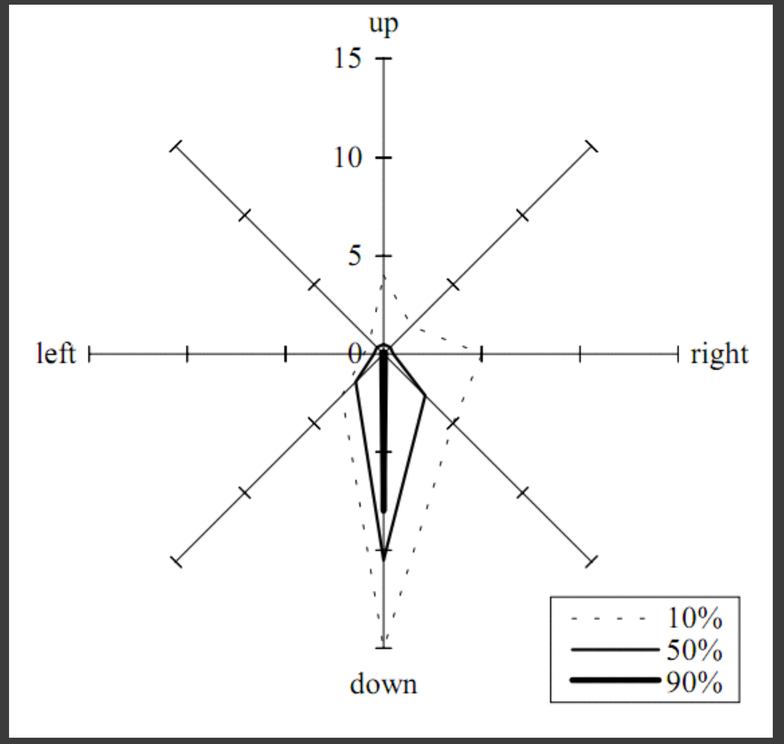
Year	International call market share
2005	2.9%[62]
2006	4.4%[62]
2008	8%[61]
2009	12%[60]
2010	13%[63]
2012	33%[64]
2013	36%[65]
2014	40%[66]



Source: Wikipedia.

Gaze Parallax

- "we are an order of magnitude less sensitive to eye contact when people look below our eyes than when they look to the left, right, or above our eyes." –Milton Chen



Source: http://www.hp.com/hpinfo/newsroom/press_kits/2008/halo/images/G7743001102007.jpg

Always-On: Portholes and Media Spaces

Source: http://people.cs.vt.edu/~srh/Media%20Space%20Home_files/Media-Space-office-meeting.jpg

Calling While Driving

Different time / different place

- Social Networks, like Facebook
- Communication + Coordination
- Wiki
- Blogs
- Workflow
- Version Control

- Shared participation over time
- Geographically world wide

Source: Wikipedia.

Document Collaboration: Track Changes

Participants with low-bandwidth connections generally assumed the spectator role and often used the text chat feature in the Google Hangout to "speak" in the discussion. Speakers (usually the moderator) would notice the text, and speak it aloud to the other participants. Both speakers and spectators used text-chat to demonstrate active listening without interrupting the speaker via audio (for example, a student wrote, "Working in [company] must be really cool. Thanks for sharing :)").

A shared video channel forces a single conversation. Still, students sometimes used text-chat as a way for non-discussion related talk, such as exchanging contact information or LinkedIn profiles.

STUDY 1: DO DISCUSSIONS HELP PERFORMANCE?

It is not obvious that the benefits of peer discussions [6, 46] would transfer to an online environment. In these environments, peers have vastly different backgrounds and no prior interaction with each other. Therefore, our first study measures the benefits of participation in online discussions. Later experiments measure how these benefits vary with geographic diversity in discussion groups.

Michael B…, 10/30/2014 11:39 AM
Deleted: Peer-discussions can lead to better critical thinking, retention, interest and motivation [6, 46]

Michael B…, 10/30/2014 11:38 AM
Deleted: , but i

Michael B…, 10/30/2014 11:38 AM
Deleted: se

Michael B…, 10/30/2014 11:39 AM
Deleted: benefits

Michael B…, 10/30/2014 11:39 AM
Deleted: where

Michael B…, 10/30/2014 11:39 AM
Deleted: differently

Click to accept change
Deleted: ally

Hey, are you free on Thursday at 3?

Context makes social computing hard

Challenge: Disparity of Work and Benefit

Challenge: Disparity of Work and Benefit

Who does work and who benefits?

Groupware applications often require additional work from individuals who do not perceive a direct benefit from the use of the application

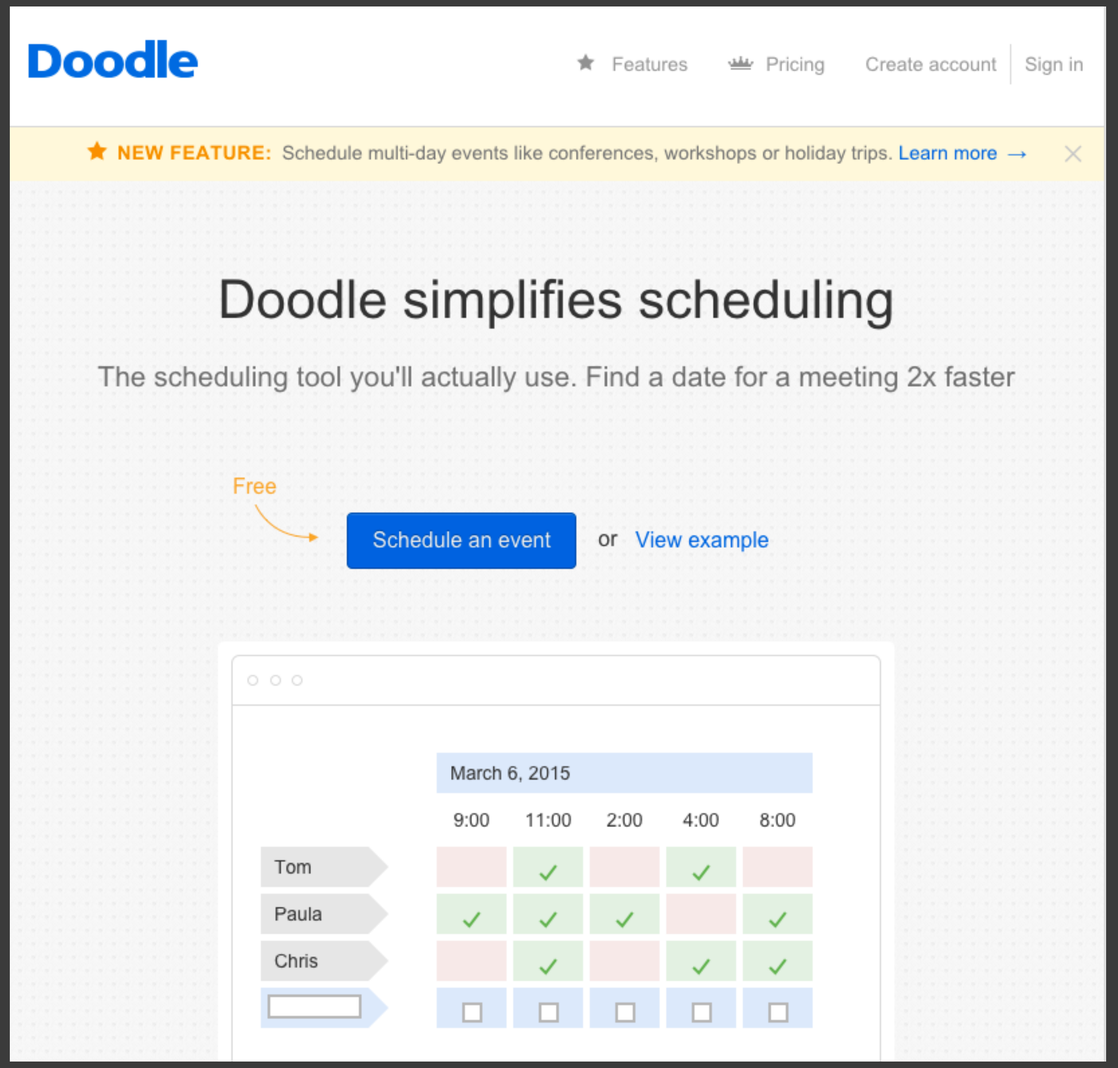
Inspired by J. Grudin, *Groupware and Social Dynamics: Eight Challenges for Developers*, CACM 1994

Example: How Workers Use Calendars

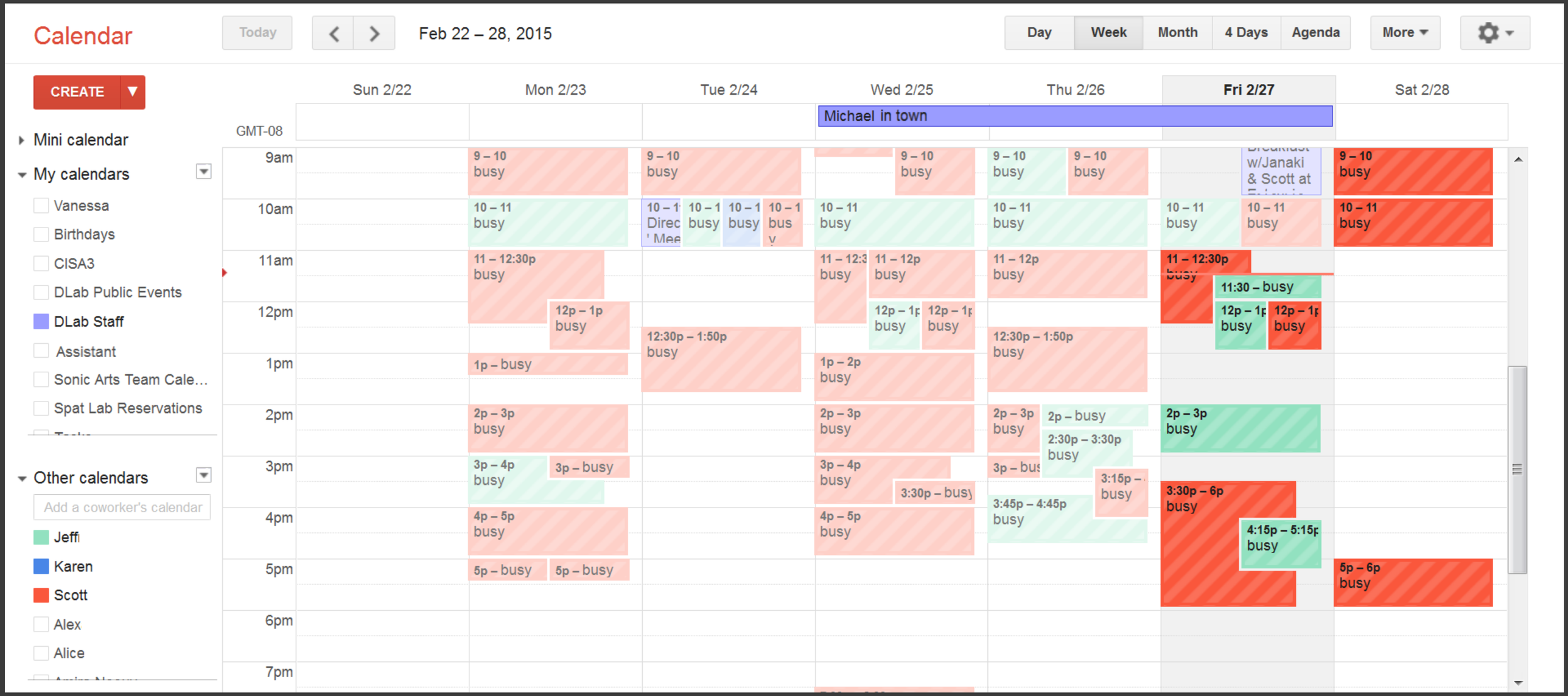
- Information is in your head not in the system
- Unscheduled time is when work gets done
- Different infrastructure
- Available depends on who’s asking

Addressing the Challenges

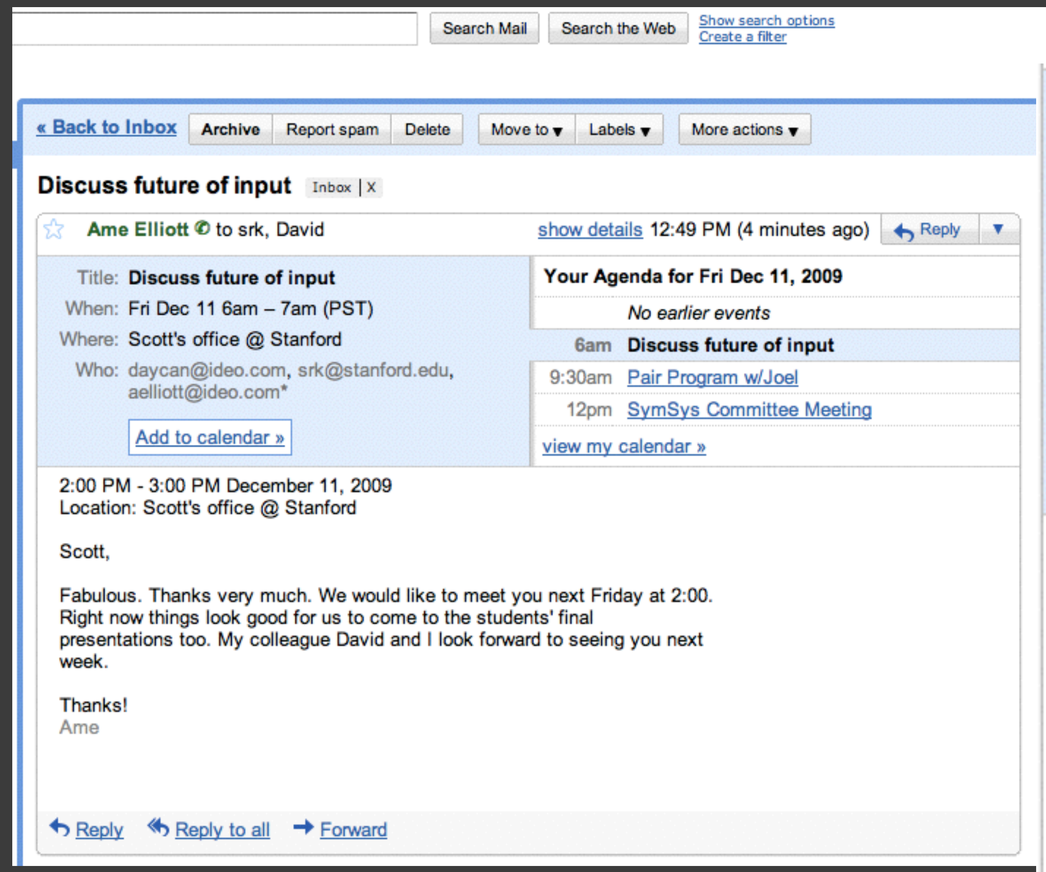
- Information is in your head not in the system
- Unscheduled time is when work gets done
- Different infrastructure
- Available depends on who's asking

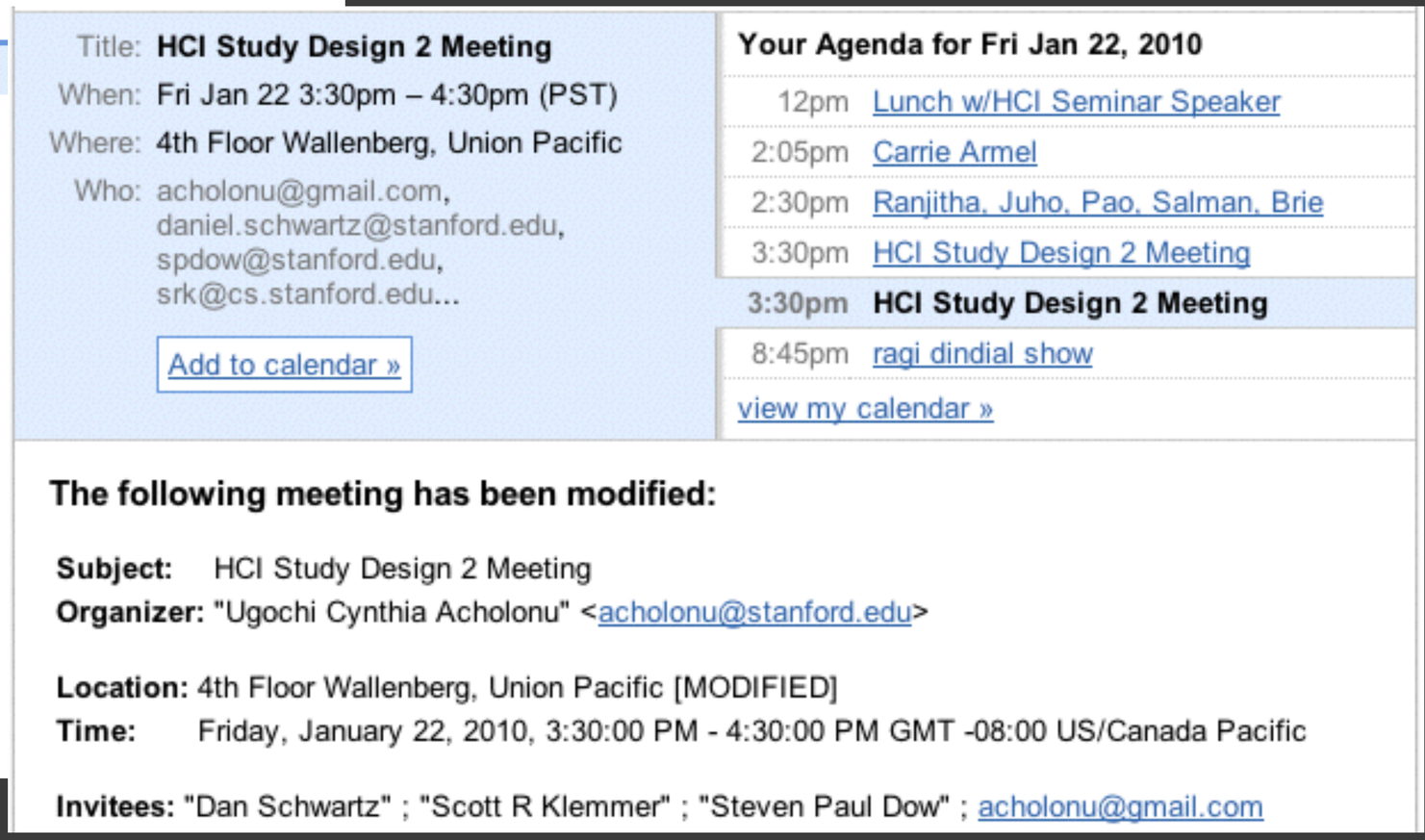


Example: Google Calendar



Integrating Calendar and Email





Challenge: Exception Handling

Groupware may not accommodate the wide range of exception handling and improvisation that characterizes much group activity

Grudin, Challenges of Groupware, CACM 1994

ER ROYAL INFIRMAR
A. R. ANSCOMBE

CANCELLED

FEMALE
SURNAME
GREY

Date of Birth
26 11 89

Address
10% Hoyt Dr South
Man 14

Hospital Number
NELS 188

Surname
Jessie

Date of Birth
22.10.15

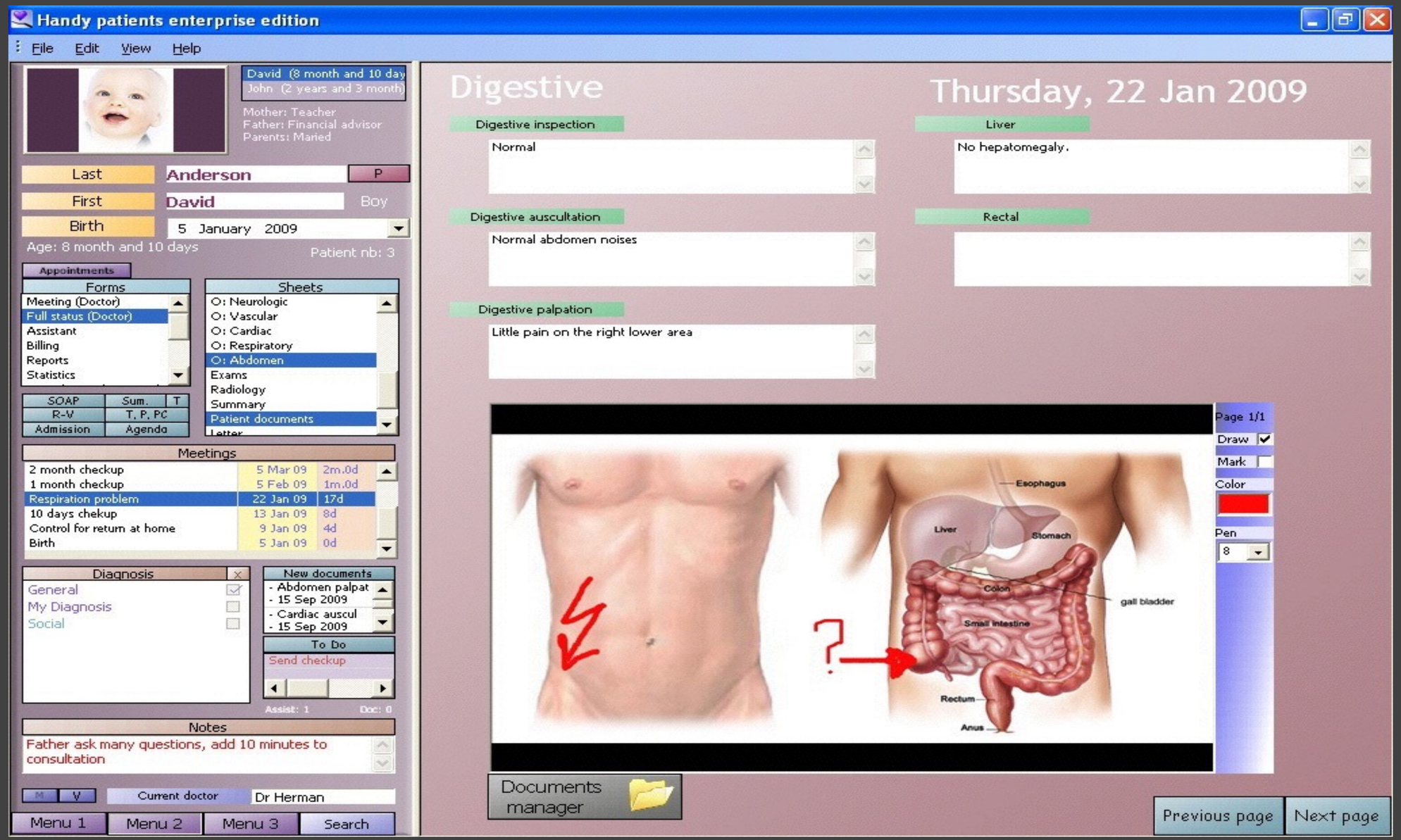
Date	*	CLINICAL NOTES
24.10.93	✓	Seen at OP. Prevent cyproterone. 50 mg bd. Going to Spain until 16/2. Cont Rx
11/2/94	✓	[illegible]
24.3.94	✓	[illegible] — drops [illegible] very inactive. [illegible] at surgery for [illegible] [illegible] [illegible] orchidectomy. [illegible] — Seen at RLH (eye) today.

Date	*	CLINICAL NOTES
12-10-93	✓	Pain low back [illegible] 3d. Severe. Oly tender L2 region [illegible] OP appt 20/10. Letter —
14-10-93	✓	[illegible]
18-10-93	✓	Spoke c [illegible] — [illegible]
05/11/93	✓	recently discharged, [illegible] mainly white sputum [illegible] crackle chest → [illegible] CR.
25-11-93	✓	[illegible] flushes. Onset about 1 week after orchidectomy. Reassured due to [illegible] will settle. Ch — 2/10/90
6.11.93		[illegible]

THIS RECORD IS THE PROPERTY OF THE SECRETARY OF STATE FOR HEALTH

4-0008545

Electronic Health Records



source: http://en.wikipedia.org/wiki/Electronic_health_record

Paper Flight Strips

Image courtesy Wendy Mackay

“If technology is to provide an advantage, the correspondence to the real world must break down at some point.”

- Jonathan Grudin

NEW
TECHNOLOGY

minimize
this distance

CURRENT
PRACTICE

How to build social computing that a world of extemporizers actually adopts

- Less structure beats more
- Twitter didn’t start with hashtags
- Flexible lightweight tools are often more used than highly proscribed ones
- Paper is one of the most flexible tools we have

Final Week!

- A10 due Thursday, March 10 11:59pm
  - You will be demoing your app on a phone in studio this week
- Final Presentations are Friday, March 11 3:30-7pm
  - Presentations start 4pm SHARP so arrive early to set up
- Poster should be vertical
- If you have a conflict, inform your TA and fill out the form posted on Piazza
- Time to show what you've done in 10 weeks!

Announcements

- Classes to take next
  - COGS 121
  - COGS 160: Social Computing/IxD Startup
- What types of jobs?
  - 5 Dos and Don’ts of your Design Portfolio: designerfund.com/bridge/5-dos-and-donts-for-your-design-portfolio/
  - UX designer, product management, user research
- Where to meet people?
  - Design.UCSD
  - Design @ Large talks

Questions

Thank you