

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

Example : same time / same place



Different time / same place

- Message Boards
- Dedicated Team rooms
- Large displays

Example: Ideas for Different Time / Same Place

Airport Display:
Arrival/Departure Information

DEPARTURE	CARRIER - FLIGHT- PARTNER	FLIGHT	GATE	TIME	STATUS
Dallas /Ft	AA 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



Same time / different place: Technologies

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

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

Great needs of telephone
communications are identified;
people phone for enjoyment
from family-type booths
in restaurants, homes,

New York Head Office Address:
One Penn Plaza, Suite 1000
New York, NY 10119
Telephone 212-904-2100

Bell System PICTUREPHONE service
lets both callers see as well as talk
on the telephone. And "face-to-face", if
they wish.

For the first time, people can meet in
short distances, talk to another city,
the latest example of the forward-thinking
research and development that are
continuing to improve the telecommunications
we provide.

This new service is being offered in the

area listed at the left. Bell Picture
phones are used in such facilities as
airlines, movie theaters, fast-food
units, travel agencies, business
offices, restaurants, and more.

Further development of PICTURE-
PHONE service is still in the works.
But this service is another step toward
our goal of providing you with better,
easier, more easily accessible communications

Get more info on the
german system
described below



Picturephone® installation showing Touch-Tone® control console.

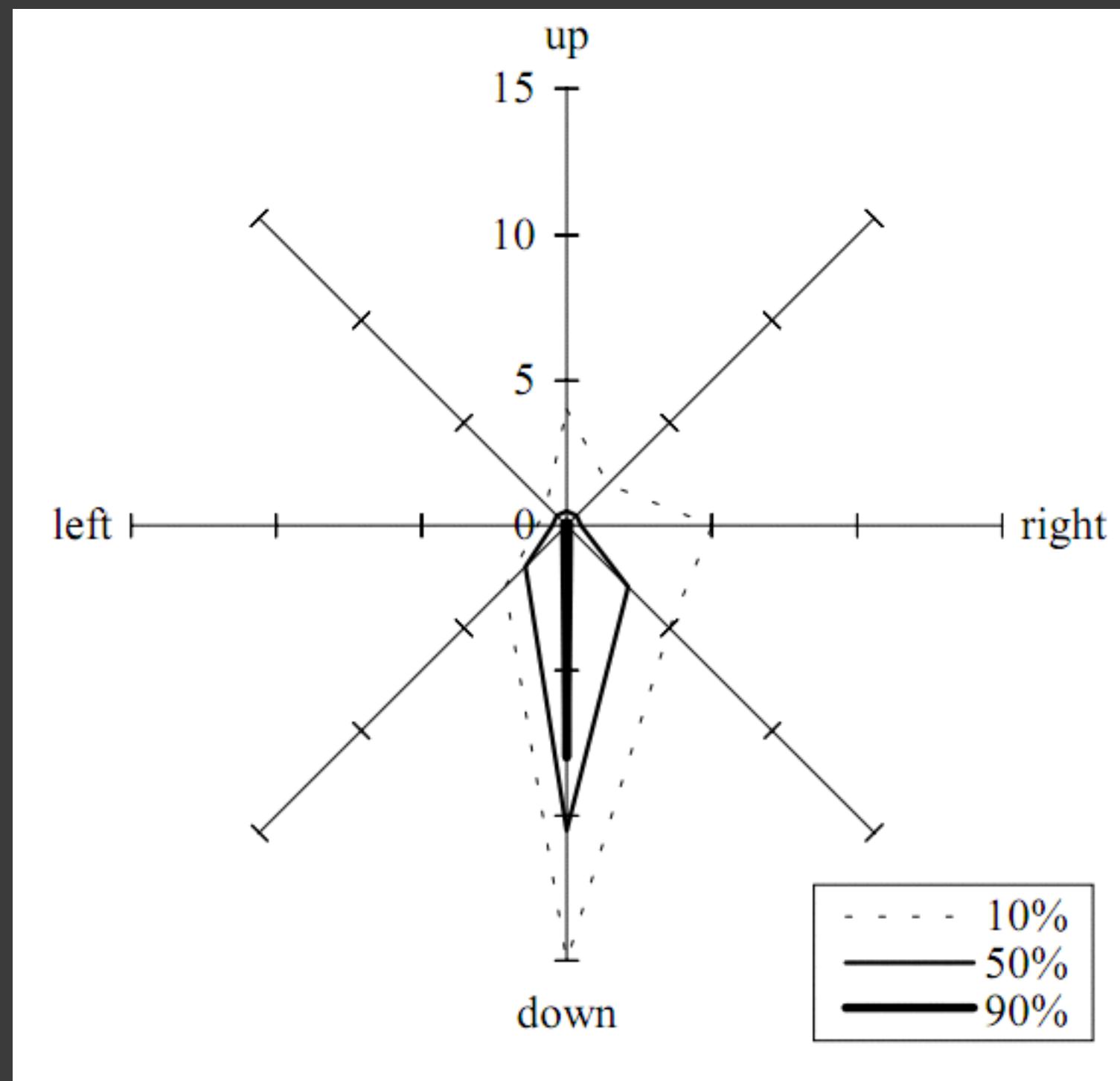
 **Bell System** Operating companies
American Telephone & Telegraph Co. and Associated Companies

Example: Skype



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





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

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 :D”).

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

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

Doodle ★ Features Pricing Create account Sign in

★ NEW FEATURE: Schedule multi-day events like conferences, workshops or holiday trips. [Learn more →](#) X

Doodle simplifies scheduling

The scheduling tool you'll actually use. Find a date for a meeting 2x faster

Free → [Schedule an event](#) or [View example](#)

The screenshot shows a Doodle scheduling interface for March 6, 2015. On the left, there are arrows pointing right next to the names Tom, Paula, Chris, and an empty box. To the right is a 5x5 grid representing time slots from 9:00 to 8:00. The grid uses color coding: pink for unavailable, green with a checkmark for available, and blue for neutral. The availability for each person is as follows:

	9:00	11:00	2:00	4:00	8:00
Tom	Pink	Green (checkmark)	Pink	Green (checkmark)	Pink
Paula	Green (checkmark)	Green (checkmark)	Green (checkmark)	Pink	Green (checkmark)
Chris	Pink	Green (checkmark)	Pink	Green (checkmark)	Green (checkmark)
Empty Box	Blue	Blue	Blue	Blue	Blue

Example: Google Calendar

Calendar Today < > Feb 22 – 28, 2015 Day Week Month 4 Days Agenda More ▾

CREATE ▾

GMT-08

Sun 2/22	Mon 2/23	Tue 2/24	Wed 2/25	Thu 2/26	Fri 2/27	Sat 2/28
			Michael in town			
9am	9 – 10 busy	9 – 10 busy		9 – 10 busy	9 – 10 busy	9 – 10 busy
10am	10 – 11 busy	10 – 1 Dirac ' Mee	10 – 1 busy	10 – 11 busy	10 – 11 busy	Breakfast w/Janaki & Scott at Etc...
11am	11 – 12:30p busy		11 – 12:3 busy	11 – 12p busy	11 – 12p busy	11 – 12:30p busy
12pm	12p – 1p busy		12p – 1p busy	12p – 1p busy		12p – 1p busy
1pm	1p – busy		1p – 2p busy			
2pm	2p – 3p busy		2p – 3p busy	2p – 3p busy	2p – 3p busy	
3pm	3p – 4p busy	3p – busy	3p – 4p busy	3p – bus	3:15p – busy	3:30p – 6p busy
4pm	4p – 5p busy		4p – 5p busy	3:30p – bus	3:45p – 4:45p busy	4:15p – 5:15p busy
5pm	5p – busy	5p – busy				5p – 6p busy
6pm						
7pm						

▶ Mini calendar

▼ My calendars

- Vanessa
- Birthdays
- CISA3
- DLab Public Events
- DLab Staff
- Assistant
- Sonic Arts Team Calen...
- Spat Lab Reservations
- ...

▼ Other calendars

Add a coworker's calendar

- Jeffi
- Karen
- Scott
- Alex
- Alice
- ...

Integrating Calendar and Email

Search Mail Search the Web Show search options Create a filter

« Back to Inbox Archive Report spam Delete Move to ▾ Labels ▾ More actions ▾

Discuss future of input [Inbox](#) | X

Ame Elliott to srk, David

Title: Discuss future of input When: Fri Dec 11 6am – 7am (PST) Where: Scott's office @ Stanford Who: daycan@ideo.com, srk@stanford.edu, aelliott@ideo.com*

[Add to calendar »](#)

show details 12:49 PM (4 minutes ago) [Reply](#)

Your Agenda for Fri Dec 11, 2009
No earlier events

6am	Discuss future of input
9:30am	Pair Program w/Joe
12pm	SymSys Committee Meeting

[view my calendar »](#)

2:00 PM - 3:00 PM December 11, 2009
Location: Scott's office @ Stanford

Scott,

Fabulous. Thanks very much. We would like to meet you next Friday at 2:00. Right now things look good for us to come to the students' final presentations too. My colleague David and I look forward to seeing you next week.

Thanks!
Ame

[Reply](#) [Reply to all](#) [Forward](#)

Title: **HCI Study Design 2 Meeting**
When: Fri Jan 22 3:30pm – 4:30pm (PST)
Where: 4th Floor Wallenberg, Union Pacific
Who: acholonu@gmail.com, daniel.schwartz@stanford.edu, spdow@stanford.edu, srk@cs.stanford.edu...

[Add to calendar »](#)

Your Agenda for Fri Jan 22, 2010

12pm	Lunch w/HCI Seminar Speaker
2:05pm	Carrie Armel
2:30pm	Ranjitha, Juho, Pao, Salman, Brie
3:30pm	HCI Study Design 2 Meeting
3:30pm	HCI Study Design 2 Meeting
8:45pm	ragi dindial show

[view my calendar »](#)

The following meeting has been modified:

Subject: HCI Study Design 2 Meeting
Organizer: "Ugochi Cynthia Acholonu" <acholonu@stanford.edu>

Location: 4th Floor Wallenberg, Union Pacific [MODIFIED]

Time: Friday, January 22, 2010, 3:30:00 PM - 4:30:00 PM GMT -08:00 US/Canada Pacific

Invitees: "Dan Schwartz" ; "Scott R Klemmer" ; "Steven Paul Dow" ; acholonu@gmail.com

Challenge: Exception Handling

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

ER ROYAL INFIRMARY
A. R. ANSCOMBE



Briggs Pea
35 - Moratorium

Normal Hospital Service Number

Date of birth

22-10-15

FEMALE
STRENGHT

CAB

ED

CLINICAL NOTES

26/11/83

ADMISSION
ICU, Magd St Sout.

MAN 14
Unknown Address

94-0-9500
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

14-0-9500
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

18-0-9500
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

05/12/95
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

12-1-96
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

16-1-96
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

20-1-96
Date

seen at 81.
Now asymptomatic. SS, H.

Gone to Spa until 16/12.

Left H

P2

CLINICAL NOTES

12-1-95 ✓ Seen to back swollen and
3d. Severe

05/12/95 ✓ Oxytetracycline L 2 mgm
not

05/12/95 ✓ Topical 20% 6th -
longer - sulphur

18-12-95 ✓ Spoke to him -
"what's a se blemish"

05/12/95 ✓ Recently developed, very
mainly white sputum

"he often crosses chest
→ Hinodegram CR."

25-12-95 ✓ plus you, lot flushed.

Onset about 1 week after
orchidectomy

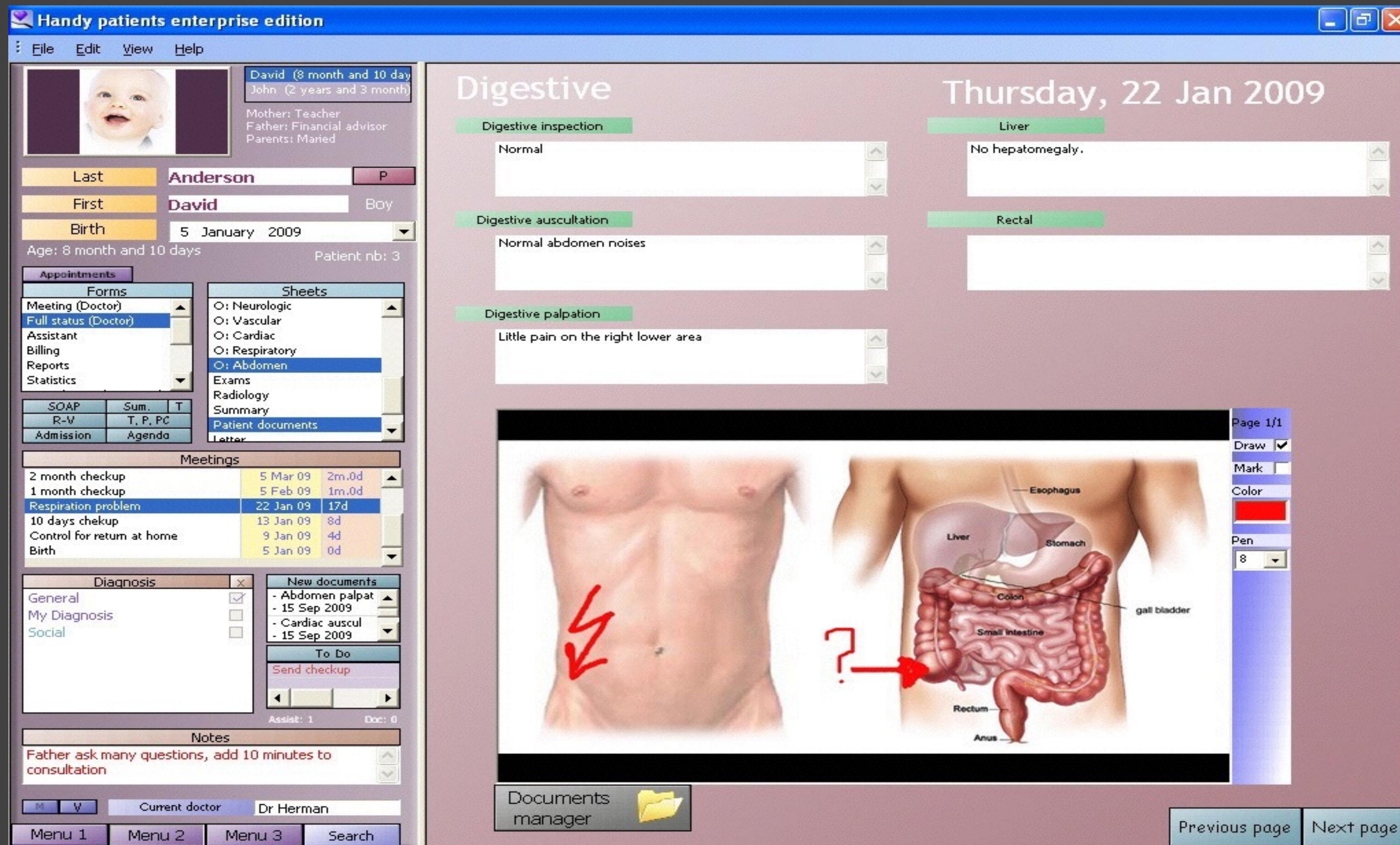
Answers were given -
will settle

Ch - 20/96
CRS normal

P increased since last visit.
GP Dr. H. per ref

H-000 8545

Electronic Health Records



Paper Flight Strips

14:45:03

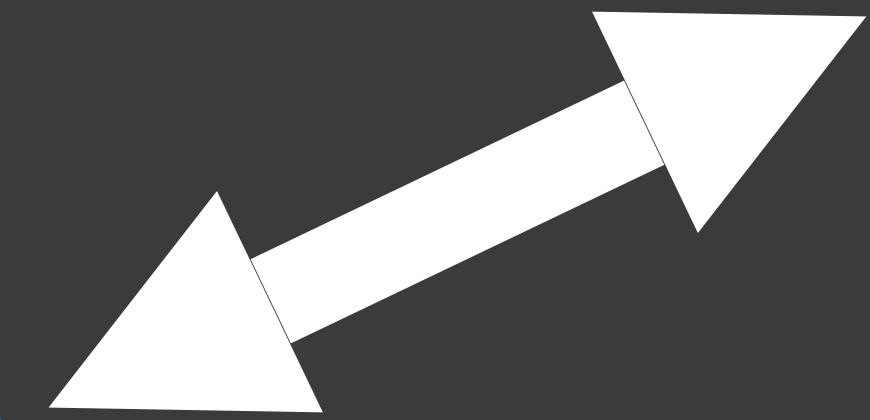
14:45:03

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

- Jonathan Grudin

CURRENT
PRACTICE

NEW
TECHNOLOGY



minimize
this distance

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