Utah School of Computing

Class Emailing Utility Design

CS5540 HCI
by
Rich Riesenfeld
Fall 2004

Issues

- Functional Needs
  - Current, reliable class mailing list
- Users
  - Students
  - Staff
  - Faculty

Student Basic Needs

1. Occasionally broadcast short messages to all classmates
2. Receive timely information re course

Staff Basic Needs

1. Occasionally broadcast short messages to entire class
2. Receive and monitor all mail sent to class
3. Personally identify sender

Faculty Basic Needs

1. Occasionally broadcast to entire class
2. Receive all mail sent to class

Administrative Basic Needs

1. Receive all mail sent to class
2. Create a repository of all class mail
3. Provide access

Desired Features of the Utility

- Students
  1. Ability to filter email
  2. Convenient access
     i. Venues: home, school, work
     ii. Permissions: authorized access
- Staff
  1. Reliable mail list
  2. Stable, always available

Aversive Characteristics For: - 1

- Students
  1. Want freedom of choice
  2. Don't like being told where to get mail

Aversive Characteristics For: - 2

- Staff
  1. Need 24 / 7 access
  2. Want light-weight, simple mail system solution, not a separate behemoth (PeopleSoft) w major overhead
  3. Don't want a system requiring remailing, or untidy aspects

Aversive Characteristics For: - 3

- Faculty
  1. (same as Staff 1-3)
  2. Dealing w bounced mail from bad addr's
     i. annoying, time consuming, and distracting
     ii. requires admin monitoring function to clear bounce

Aversive Characteristics For: - 4

- Admin
  1. Complicated system
  2. Bothersome, inconvenient, inaccessible

Summary of Issues - 1

	Studs	Staff	Faculty	Admin
Send	√	√	√	
Receive	√	√	√	
Monitor		√	√	
Archive				√
Spam Filter	√			
Login Choice	√			
Mobile Access	√	√	√	

Summary of Issues - 2

	Studs	Staff	Faculty	Admin
Authorization	√	√		
Single List		√	√	√
Satisfactory to Others			√	
No bounced email to clear			√	

Failures in Modeling the User - 1

- Student Model Flawed?
  - This is a bigger issue than Instructor perceived??
  - Did not consider the issue of filtering mail
    - Do not account for this aspect when assuming that CS students can fwd mail

Failures in Modeling the User - 1

- Instructor Model Flawed?
  - There was some rationale, although possibly inaccurate
  - It was *not* an *abritrary and capricious* exercise of authority, however misguided
- Instructor *IS* concerned with student disposition

Failures in Modeling the User - 1

- Staff Model Flawed?
  - Students likely had not considered this
- Administrative Model Flawed
  - Students likely had not considered this

How to Resolve? - 1

- Assess the costs of intransigence or accommodation to each group
- How much does it matter to users, resp?
- How much is each party willing to spend in goodwill to prevail?
  - What happens next time?
  - Does a lingering effect erode effectiveness?
  - Why happens to Coke machine when it abuses user?

How to Resolve? - 2

- Is there a technology fix?
  - Better system
  - Wiser choices or designs
- Could a good design satisfy all or more needs, preferences?
  - Easier to impose w authority than develop creative solutions
  - "Absolute authority absolutely corrupts"

What is at Stake?

- Goodwill v Inconvenience
- Possible lingering resentment
- Pedagogically, could result is less conducive learning atmosphere
- Less pleasant relationship: lose/lose
  - HCI should be enjoyable experience

Particular Complications

- Multiple user groups
- User groups are disjoint
  - Faculty may not understand all student concerns
  - Students may not appreciate faculty, staff, admin issues
- More challenging to develop accurate user model because of diversity

Lessons - 1

- Stay Flexible
  - Throw out problematic designs *early*
  - *Accept* human nature and go forward
    - HCI is about taking it into account
  - Don't always assume nefarious purposes
    - Try to analyze to expose the design rationale
    - Don't condemn too quickly
- Model User Accurately
  - Do the homework, the user study

Lessons - 2

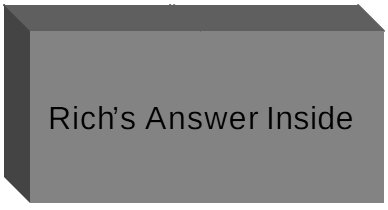
- Provide available feedback channel
- Act on feedback
  - Dan's Q: "Did you find everything today?"
    - Answer has no effect; it's just an empty Q!
- Look for creative, win-win solutions

Answer

- What is the "right" answer?
- Propose a better solution than the current approach.

My Solution

To be presented in class.



Utah School of Computing

End of Lecture Set

Class Emailing Utility Design