

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

Fall 2003

Utah School of Computing

Student Name Server

slide 5

Administrative Basic Needs

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

Fall 2003

Utah School of Computing

Student Name Server

slide 6

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

Fall 2003

Utah School of Computing

Student Name Server

slide 7

Aversive Characteristics For: - 1

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

Fall 2003

Utah School of Computing

Student Name Server

slide 8

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

Fall 2003

Utah School of Computing

Student Name Server

slide 9

Aversive Characteristics For: - 3

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

Fall 2003

Utah School of Computing

Student Name Server

slide 10

Aversive Characteristics For: - 4

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

Fall 2003

Utah School of Computing

Student Name Server

slide 11

Summary of Issues - 1

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

Fall 2003

Utah School of Computing

Student Name Server

slide 12

Summary of Issues - 2

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

Fall 2003

Utah School of Computing

Student Name Server

slide 13

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

Fall 2003

Utah School of Computing

Student Name Server

slide 14

Failures in Modeling the User - 1

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

Fall 2003

Utah School of Computing

Student Name Server

slide 15

Failures in Modeling the User - 1

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

Fall 2003

Utah School of Computing

Student Name Server

slide 16

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?

Fall 2003

Utah School of Computing

Student Name Server

slide 17

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"

Fall 2003

Utah School of Computing

Student Name Server

slide 18

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

Fall 2003

Utah School of Computing

Student Name Server

slide 19

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

Fall 2003

Utah School of Computing

Student Name Server

slide 20

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

Fall 2003

Utah School of Computing

Student Name Server

slide 21

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

Fall 2003

Utah School of Computing

Student Name Server

slide 22

Answer

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

Fall 2003

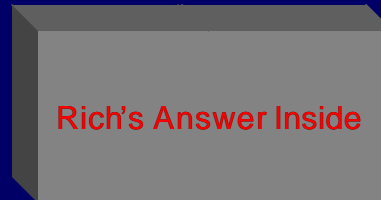
Utah School of Computing

Student Name Server

slide 23

My Solution

To be presented in class.



Fall 2003

Utah School of Computing

Student Name Server

slide 24

Utah School of
Computing

End of Lecture Set
Class Emailing Utility
Design
