

## HCI Knowledge Bites presented in different courses through scenarios

### Some scenarios to raise discussions on HCI issues

#### [Introduction to Databases]

Maria, a Brazilian student of HCI, wanted to buy Norman's "Design of Everyday Things" book, which a colleague of hers had bought in [acmestore.com.br](http://acmestore.com.br). When searching for the book in the website, she first chose the 'books' category (so she wouldn't get too many irrelevant results), but from the book title the search did not return any results. Her colleague showed her that the book would appear if she would search by everything. It was as if the book was not classified as 'book'. After some investigation, they realized that there was an 'imported' category, at the same level as the 'books' category, and each item in the store could only be assigned to a single category.

*Discussion on alternative solutions and their consequences for end users: single/multi-level/orthogonal categories; (im)possibility to categorize an item in more than one category; when searching within a category and not finding anything, possibility of showing the results for any category.*

#### [Introduction to (Web) Programming]

Gene was asked to implement a student registration form. Pierre, a department employee, was charged with registering over one hundred new students at the beginning of the year, and had to follow the path [ask to register new student, fill out form, confirm, wait for list of students to load] several times. When Gene observed Pierre using the system, he added a checkbox 'keep registering new students'. Upon checking it, Pierre could register several students in a row, without having to go through the process of going back to the list of students, which took a long time to load.

*Discussion on how diverse design decisions fit different contexts of use; in this case, single/multiple registrations*

#### [Introduction to Programming/Databases]

Susan had a hard time choosing a task management system. Besides entering the most important tasks, she adds a few more in case she has some spare time. At the end of most days, however, she realizes that she had not completed some of the tasks due that day, so she needs to postpone them to the next day. All the systems she had tried to use allow her to edit each task and change their due date, one by one, as most CRUD (create, retrieve, update, delete) systems would, but that is a lot of work, so she usually leaves them as is and needs to cope with having a list of tasks that the system marks as overdue. Fortunately, Susan was not alone. After talking with a friend, she discovered the ACME-To-Do-List, which offers as one of its main features the capability to allow users to select a set of tasks and hit a "postpone" shortcut, which is exactly what she needed.

*Discussion on different degrees of possibility for action, according to context: the user must (not) do X; the user often does X; I recommend that the user do X; the user can do X; the user could even do X (week). When should programming effort be invested to bring the user interface closer to the user intentions (and away from simple CRUD operations).*

#### [Introduction to Web Programming]

At the end of the semester, Kate, a professor in Psychology, needed to enter all her students' grades. The system presented a form with all students, each one next to a small textbox where she could enter

the corresponding grade. She filled out the form very carefully, and then decided to double check the values before submitting the form. When she was done checking everything, she submitted the form, only to receive a 'session expired' message. When she logged in again, she had to start all over, so she entered the grades but did not double check them, so eventual errors were left unnoticed.

*Discussion on what to do when a session expires: what data should be preserved; where the user should be taken after logging in again. When should systems remember/forget what the user has "said"?*

[Most courses]

*What is the total cost of the system (developers' cost during development + users' cost throughout usage)?*