**The Cultures of Computing**

**Course Housekeeping**
- No extra credit
- Missed quizzes
  - No valid excuse? No credit
  - Valid excuse? Stay tuned
- Only one lab next week (lab 3)
- Slides not loaded until after lecture

**Getting socialized, acculturated**
- Where am I?
- What can I expect?
- What can I or should I do?
  - (What rules of conduct apply?)

**Getting socialized, acculturated**
- How can I tell if my behavior is appropriate?
  - (What features of the environment give me feedback?)
- How can I recover if I’ve made a mistake or been inappropriate?
- Who am I talking to?

**Who am I talking to?**
To: dmlevy@u.washington.edu
Subject: hey
My name is . . . I just wanted to open up the lines of communication so if you want to contact me my address is . . . MyUW wasn't working to well tonight so i had to e-mail you from my aol account, but i will only use this address for friends and family stuff. Hope to talk to y a soon.

**The cultures of computing**
Let's go online . . .
How do we become acculturated?

- By watching others
- By analogy with other environments
- By trying things
  (and learning from what happens -- including mistakes!)
- . . .

Learning by analogy

Real Jukebox has added more features, but notice the basic design (from a previous slide) remains.

Which cultures are better?

- Consider GUIs vs. Command Line interfaces (e.g., SSH vs. command line)
- On the surface, the GUI looks more intuitive than command line interface
  - Visual
  - Spatial
  - Less to remember
- But, it depends on what you mean by better...

GUI vs. Command Line Interface?

With a GUI, how many mouse clicks?
With a command line interface, how many commands?

Which Interface is More Efficient?

- GUI: 4 clicks
  - Click FIT100
  - Click Projects
  - Click Project1
  - Click HTML
- Command line interface: 1 command
  - cd FIT100/Projects/Project1/HTML
- If you do this same action again and again and again, which interface would you rather use? Why?
Some More Insight on Technology Cultures

- Some environments you enter are better at informing you of appropriate behavior than others
  - Think of the GUI in SSH when you successfully change into another directory vs. the command line prompt in Tera Term
- Discovering how each environment will deliver feedback is important.
- Some environments will give obvious feedback. Others require more initial alertness on your part.

Computer Culture Feedback

- How can you distinguish between a case when the computer or program is busy working on your task and the case when it is patiently idling, waiting for you to give it another command?

- Watch for color or shadow change, icon change, title change, motion, etc.
  - Think of the rotating world image in Internet Explorer

Some Behaviors are Cross-Cultural

- Current GUIs are built using some standard behaviors
- MS Word illustrates many of these behaviors

- Buttons
- Sliders
- Arrows
- Icons
- Close

Computer Cultures Share Many Common Behaviors

- Menus present the functionality of an application
- There are pull-down menus and pop-up menus
- There are standard behaviors that should always be applicable in certain activities

- File
  - New Ctrl+N
  - Open … Ctrl+O
  - Close Ctrl+C
  - Save Ctrl+S
  - Save As ...
  - Page Setup ...
  - Print ...
  - Print Preview
  - Exit

- Edit
  - Undo Ctrl+Z
  - Repeat Ctrl+Y
  - Copy Ctrl+C
  - Cut Ctrl+X
  - Paste Ctrl+V
  - Clear
  - Select All Ctrl+A

Explore the Environment

- When starting to use a new piece of software, like any new culture, take a moment to explore
- With the expectation that much of the culture can be observed and tested, check out the environment

- Fundamentally Rule of IT: You can't break the computer unless you drop it out the window!!!!
- The way to learn the operation of an application is to try it out, so EXPLORE!
- Though nothing will break, things can get into a horrendous mess — beginners and experts alike can really screw up software!
- There is no value in the mess, so it doesn't have to be undone … Throw the mess away
- Be prepared to throw work out
  - Work on copies
  - Don't expect to do it all right the first time, work in stages
  - Go out, and come back in

Explore, Experiment, Interact!

Ironically, though most beginners think they should read the manual, it's most useful to an expert.
For Monday

- Read Chapter 8 of the FIT course pack
- Chapters 5 and 6 are for Wednesday

- First Quiz: Next Friday at beginning of class
  - Short - 3 to 4 questions
  - High discrimination questions - if you've been reading and doing labs, you'll be fine if you review material