## What the Digerati Know

INFO/CSE100, Spring 2006 Fluency in Information Technology

http://www.cs.washington.edu/education/courses/100/06sp/



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## Readings and References

- Reading
  - Fluency with Information Technology
    - » Chapter 2, What the Digerati Know
- References
  - W3Schools
    - » http://www.w3schools.com
  - Webmonkey
    - » <a href="http://www.webmonkey.com/">http://www.webmonkey.com/</a>
  - WebReference
    - » http://www.webreference.com/



# **Learning New Tools**

- How do we learn to use new tools?
  - Be taught their use by someone else -- car, bicycle, etc...
  - Reading the owner's manual -- chain saw
  - Watching others -- vending machine
  - Figure them out ourselves -- CD player
- Software designers wanting you to learn the new tool ASAP, so they try for "intuitive" usage
  - Consistent Interfaces -- build in experience
  - Suggestive icons -- bypass terminology
  - Metaphors -- exploit analogous reasoning



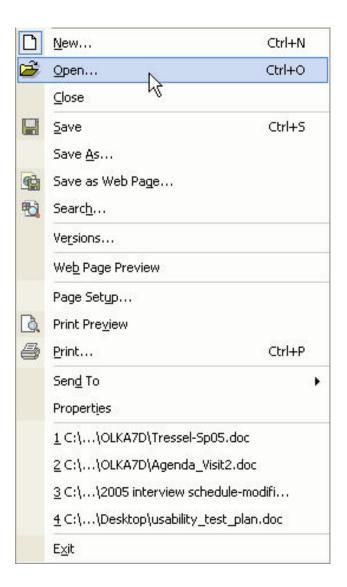
# Intuitive Design



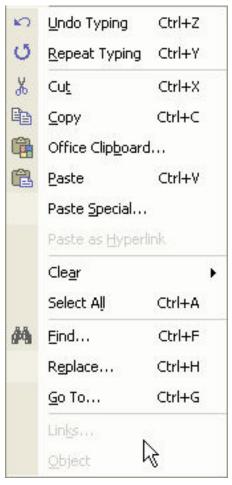


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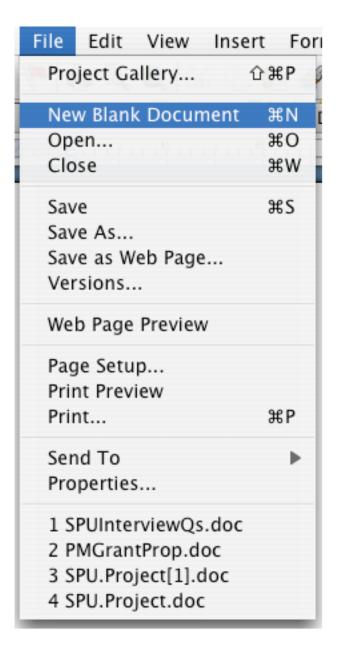
## **Consistent Interfaces**

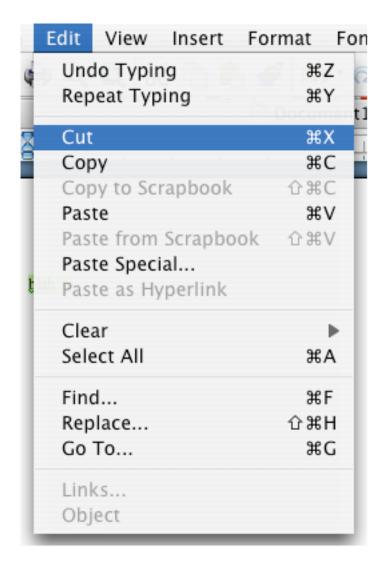


Most modern applications File and Edit menus with standard commands



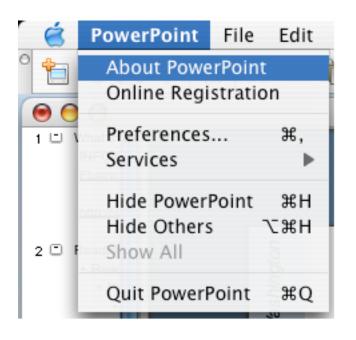


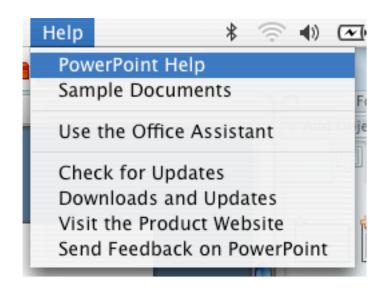






### **Consistent Interfaces**







## **Metaphors**

- Some familiar computer metaphors
  - Desktop (folders, inboxes, etc...)
  - Place (rooms, hallways, doors)
  - Tree (root, branches, leaves)
  - Stoplight (green = go, red = stop)



## **Dance Dance Revolution**







#### What does "New" Mean?

- Most applications have the concept of a document with:
  - Attributes: date created, date modified, creator, ...
  - Content: image, text, sound
- "New" means create a 'blank instance' of a document for this application
  - A document has attributes as well as content
    - » All stored in one file with a place for anything
    - » A 'blank instance' is simply the structure with some of the attributes filled in but without any of the content

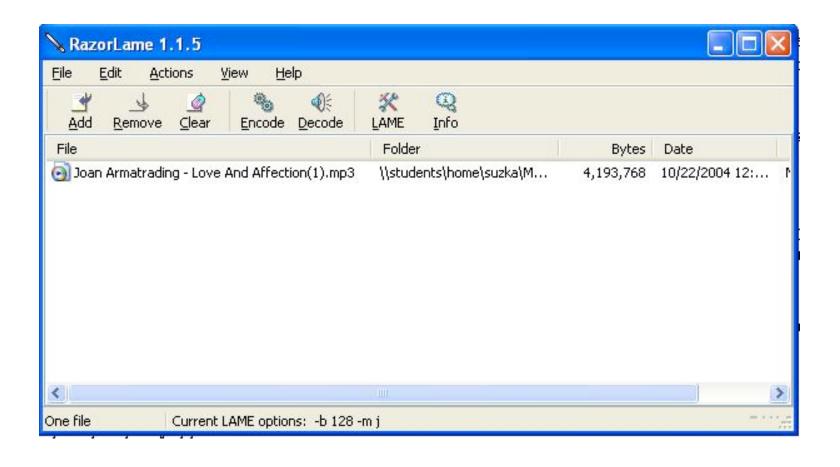


#### "Click Around"

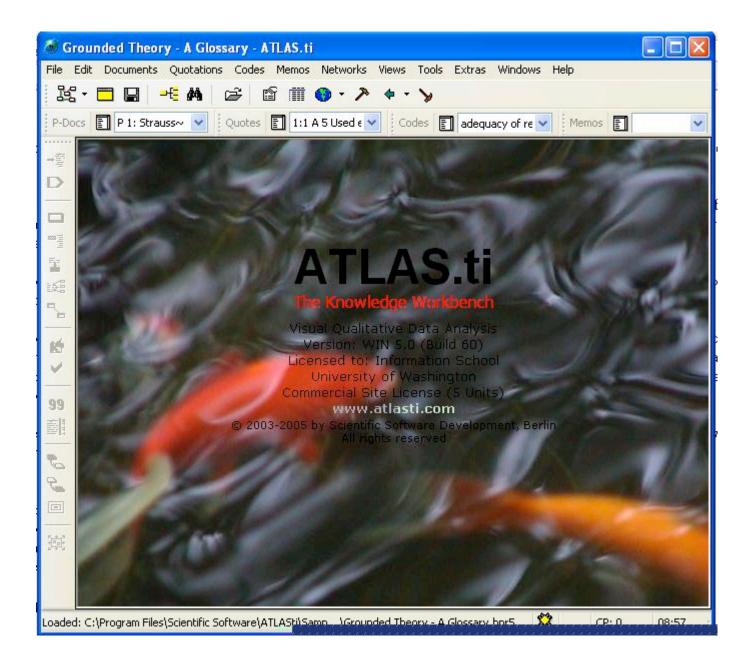
- Software designers use standard ideas to make applications intuitive
- To learn a new application, check it out by clicking around
  - Take a minute to ...
    - » Look under all menus to see operations
    - » Follow the "..." for menu operations
    - » Try to recognize what the icons mean
- Clicking around is Exploration! :)



## **A New Application**









# "Blazing Away"

- Learn an application fast by trying it!
- Beginning with a new instance, assertively try menu items
  - Expect to fail and make a mess
  - Exit the application and if you are asked to "Save?" reply "No"
  - Try repeatedly until becoming familiar



### To Learn A New Tool

- Software systems build on a consistent interface, standard metaphors, etc...
  - Expect to teach yourself applications
  - Do so by familiarizing yourself with the features by "Clicking Around"
  - Assertively try out the features, ,"Blaze Away" observing what they do
    - » Be efficient -- stay focused, don't type a lot when you expect to exit
- You also might want to skim the user manual/help file/reference book
  - <a href="http://www.oreilly.com/">http://www.oreilly.com/</a>



### **Online Tutorials**

- Often provided by expert organizations
- May provide interactive tools, examples
- Good place to find references
- Might support a user community
- Things to consider:
  - Are they up-to-date?
  - Are they selling something?



## **Example Online Tutorials**

- W3Schools
  - http://www.w3schools.com/html/default.asp
- Webmonkey
  - http://www.webmonkey.com/webmonkey/a uthoring/html\_basics/
- WebReference
  - <a href="http://www.webreference.com/authoring/languages/html/">http://www.webreference.com/authoring/languages/html/</a>



### **Differences & Similarities**

- Different vendors will produce similar software for the same task
  - Superficially, the GUIs use similar features
  - Fundamentally, the task largely determines how the software must work... they *must* be similar
- Implications
  - If you know one word processor, you can learn others fast
  - Software differences: mostly glitz and convenience
  - Don't accept lousy tools, consider switching to other applications



## **Another Implication**

 If applications are similar at their core, techniques can be learned without learning a specific vendor's software

» Example: programming languages



### Mac or PC???

- Arguments about which is better, Mac or PC create only create heat, no light
  - They are more alike than different
  - Any fluent person can use both
- I first bought a PowerMac, then a PC, then a Windows laptop, and now this Mac PowerBook
  - And I've owned a Sun Sparc 1+ Unix workstation



## Summarizing

- Humans must learn to use tools
  - Software designers want you to learn easily
    - » Good software uses consistent interfaces and menus
- Teach yourself applications by "Clicking Around" and "Blazing Away"
  - I don't know all the features, you don't know all the features, and that's okay!
- Software for a task must share core features
- Learn applications independent of vendors



### Homework 2

- Print out homework 2
- You will have to complete some tasks on 2 different computer systems (Mac, Windows, or Linux)
- Due in class on Friday, April 7th

