



Computers & Society

Computers long ago entered our social world ... they can be used crudely or skillfully

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The Problem With Email

Email is part of our lives ... but it's not good for everything

- Poor for emotion, alternating interactions, most broadcast, sarcasm, ...

Email has (n)etiquette

- 1 topic messages; include context w/ reply
- Use 'vacation' auto-reply
- Answer aging email in reverse arrival order
- Get sender's permission before forwarding



Virus And Worms

A virus embeds in SW & travels with it, worms move around net on their own

- Both can do damage like erasing your files or taking information, but they may not
- Best defense is practicing "safe" computing
- All computers should have virus protection software -- many vendors

You are responsible for protecting your computer!



Example: Melissa

Melissa virus (Friday 3/26/99) embeds in MS Word docs attached to email

```
From: <name of infected user>
Subj: Important Message From <infected user>
To: <50 names from infected user's email address book>
```

Here is that document you asked for ... don't show anyone else :-)

Attachment: LIST.DOC

Its still out there!

Would this make sense coming from a friend?



What Happens w/Melissa

When users open the attachment, initializing code runs (often macros)

- That code is the virus/worm and can do harm or setup to do harm
- It also propagates itself, e.g. getting the email address book and sending copies of itself to those people

David L. Smith pleaded guilty to creating and propagating Melissa



MyDoom.b

This month's species is MyDoom.b

- Like Melissa ...
 - * MyDoom.b is a worm
 - * Spreads by attachments
 - * Virus software began checking for it within 24 hours
 - * MyDoom.b is a mutant of MyDoom
- Unlike Melissa ... it's harmful



Be Cautious

Viruses/worms are serious, be cautious

- Have virus software running on any machine connected to the Internet
- **Don't ever** get "trigger happy" at opening attachments
- Be careful where you get your SW from!
 - Commercial SW, Shareware, Freeware
- Keep your files "backed up"
- Be alert to "phony" viruses



Expect The Unexpected

Be alert for odd behavior, weird events ... think about it, "What's happenin'?"

(It's hard to teach/learn this topic)

- In physical world, many cues alert us, but for synthetic world of IT, we must use reasoning
- When something is odd, can you explain it?
- Even if you can't, does your understanding of it suggest some action?

Dying software is often **gimpy** before crashing



Copyright

Basic facts about copyright

- Since 1989 the © has not been needed
- Creating "intellectual property" automatically creates a copyright
- Most information is owned by someone, but if you get a copy legally you can use it *personally*- read it, play it, etc. - but no copy
- "Fair Use" allows copying for "socially valuable purposes," like reviews, education

www3.utsystem.edu/ogc/IntellectualProperty/copypol2.htm



Hard Facts About SW

It is virtually impossible to create bug-free software

- Software engineers know this (better than anyone) and make huge efforts to write quality programs and test them carefully
- Expect quality, but be alert for bugs
- Try other products if bugs/errors numerous
- Be wary of SW in "safety critical" situations

Life is uncertain ... eat dessert first!