The dangers of phishing include

A. Sharp hooks and nightcrawlers.
B. Credit-card fraud at a look-alike Web site that mimics your bank.
C. High mercury content in fish from polluted oceans.
Identity theft is:

A. Your sister borrowing your makeup, your shoes, and your boyfriend.
B. Someone using your name, address, social security number, driver's license number, and credit card number at your expense.
C. Retiring from your job or your kids leaving home.
Announcements

- Lab 10 is due by 10pm tonight
- Read ch 13 (first half) by today
Announcements

- Project 2B 1-1-1 deadline tonight
  - WebQ is re-opened for 1-1-1 rule
- Lab 10 due tonight
Announcements

- New survey opens (5 extra-credit points)
- Vote for the Best GoPosters
  - Who posted the best questions
  - Who posted the best answers
  - Winners in each category
    - First (40 points)
    - Second (25 points)
    - Third (15 points)
    - Fourth (10 points)
    - Fifth (5 points)
- Due 12/11/2009
Video

- Relational databases and tables
Shhh, It's a Secret

Digital Privacy

D.A. Clements
What’s different about digital privacy?

- So many databases
- So easy to link them up
Video

- Pizza Palace
Privacy: Whose Information Is It?

- What is privacy? Examine a transaction of buying *Dating for Total Dummies*
  - Information linking the purchase with the customer

- How can the information be used?
  - Book merchant collecting information is ordinary business practice
  - Book merchant sending advertisements to customer is ordinary business practice
  - What about merchant selling information to other businesses?
Modern Devices and Privacy

- Modern devices make it possible to violate people's privacy without their knowledge.
- In 1890, Brandeis wrote that individuals deserve "sufficient safeguards against improper circulation" of their images.
Controlling the Use of Information

Spectrum of control spans four main possibilities:

1. **No uses.** Information should be deleted when the store is finished with it
2. **Approval or Opt-in.** Store can use it for other purposes with customer's approval
3. **Objection or Opt-out.** Store can use it for other purposes if customer does not object
4. **No limits.** Information can be used any way the store chooses
5. Fifth possibility is **internal use**—store can use information to continue conducting business with you
A Privacy Definition

- **Privacy**: The right of people to choose freely under what circumstances and to what extent they will reveal themselves, their attitude, and their behavior to others.

- **Threats to Privacy**: Government and business.

- **Voluntary Disclosure**: We choose to reveal information in return for real benefits (doctor, credit card company).
OECD (Organization of Economic Cooperation and Development) in 1980 developed the standard eight-point list of privacy principles.

1. Limited Collection Principle
2. Quality Principle
3. Purpose Principle
4. Use Limitation Principle
5. Security Principle
6. Openness Principle
7. Participation Principle
8. Accountability Principle
Comparing Privacy Across the Atlantic

- U.S. has *not* adopted OECD principles
- China does *not* protect privacy
- European Union has European Data Protection Directive (OECD principles)
- EU Directive requires data on EU citizens to be protected at same standard even after it leaves their country
US Laws Protecting Privacy

- Privacy Act of 1974 covers interaction with government
- Interactions with business:
  - Electronic Communication Privacy Act of 1986
  - Video Privacy Protection Act of 1988
  - Telephone Consumer Protection Act of 1991
  - Driver's Privacy Protection Act of 1994
  - Health Insurance Privacy and Accountability Act of 1996
- These all deal with specific business sectors—not an omnibus solution
Two points of disagreement between FTC (US) and OECD (Europe):

- **Opt-in/Opt-out**
  - When can an organization use information it collects for one purpose, for a different purpose?
  - Opt-out is US standard except for highly sensitive data; Opt-in is European standard

- **Compliance/Enforcement**
  - US has "voluntary compliance," EU has offices to control data
A Privacy Success Story

- Do-Not-Call List
  - Telemarketing industry's "self-policing" mechanism required individuals to write a letter or pay an on-line fee to stop telemarketing calls
  - US government set up Do-Not-Call List. Over 107,000,000 households are on the list and telemarketing industry has largely collapsed
**Cookie Monster**

- **Cookie**: Record containing seven fields of information that uniquely identify a customer's session on a website. Cookie is stored on customer's hard drive.

- **Abuse**: Third-party cookie
  - Third party advertisers on web site enter client/server relationship with customer as page loads
  - Advertiser can set cookies, and can access cookies when user views other websites that advertiser uses
The Cookie Monster (Cont'd)

• Browser options:
  • Turn off cookies
  • Ask each time a server wants to set a cookie
  • Accept all cookies
Figure 13.1  Server’s view of the client/server relationship.
Americans do not enjoy the *Security Principle*

- Those who hold private information are obliged to maintain its privacy against unauthorized access and other hazards

*Identity theft* is the crime of posing as someone else for fraudulent purposes

- Using information about person like credit card numbers, social security numbers
Video

- Avoid IDentity Theft
Managing Your Privacy

- Purchase up-to-date anti-virus/anti-spyware software
- Adjust your cookie preferences to match your comfort level
- Read the privacy statement of any website you give information to
- Review protections against phishing scams
Managing Your Privacy (cont'd)

- Patronize reputable companies for music, software, etc.
- Be skeptical
- Stay familiar with current assaults on privacy
- Lobby for US adoption of Fair Information Practices