1 Administrivia

Announcements

Monday 11/21: Day to work on Web sites.

Assignment


From Last Time

JavaScript lab.

Outline

1. Introduction and discussion.

Coming Up

E-commerce II — lab.
2 Introduction and Discussion

2.1 Advantages and Discussion

The advantages of e-commerce:

1. To start, ask students.
2. Use search engines to find best prices. froogle.com, bizrate.com, shopper.com, price-line.com
3. Can find almost anything.
4. Great prices on used items through online auctions.
5. No sales tax. (Sometimes; for now!)

The disadvantages of e-commerce:

1. To start, ask students.
2. Can’t see items (important for clothes).
3. Concern over eavesdropping on connection, e-commerce site being hacked, marketing of customer data.
4. Shipping costs.
5. Have to wait for package to arrive.
   But: package tracking; typical delivery times.

Personal experience:

1. Credit card information hacked (McGlen).
2. Item advertised was not item delivered (video card).
3. SPAM.

4. Phishing expeditions.

### 2.2 Safeguards

1. Shop with merchants whom you know and trust.

2. Look for and read each merchant’s delivery, return, and privacy policies.

3. Never transmit sensitive data over a page which does not have an address beginning with `https://` and a locked padlock icon.

4. Make online purchases with a credit card, not a debit card.

5. Don’t hit the “BUY” button more than once — be patient.

6. Never send credit card info via e-mail.

7. Print and save all online receipts at least until you receive all ordered items in good condition.

8. Search for the best prices before buying.

**Background:**

1. Digital Certificates: sent by Web site; used to encrypt session data.
   
   But still, how do you know the site is legitimate?

2. Certificate authorities: organizations which vouch for e-commerce sites.
   
   Web browsers have a list of them. Sometimes, the list must be updated.

### 2.3 Potential Problems

2. Unauthorized disclosure: Sending sensitive data in the clear.

Why would they do that?


4. Data alteration: Intercept and modification of data being transmitted to a Web site.

Encryption via SSL guards against all of these. 128-bit encryption is best (no one can break). Don’t accept anything below 64-bit (only NSA can break) — 56 or 40.