

E-Commerce ~ Week 4

John Montét

MontetJ@westernnc.edu

608.785.0000



Last week we covered...

- Database information for e-commerce
- Began group project
- Web automation
- Web security
 - Secure transactions
- Credit card processing



This week...

- URLs
- Domains
 - What they are, how to choose a good one
- Choosing a Web host
- Writing for the Web
- Understanding legalities



URL

Addressing the situation



URLs

- Uniform Resource Locator
- Looks like this...
 - `www.montet.org/wtc/`
- String of characters
- Just used for humans
- Computers need numbers



URL dissected

protocol	http://, https://, ftp://
sub-domain or host name	www, video, images
domain (second level)	Montet, Google, CNN, MSN
top-level domain	.com, .edu, .net
third-level (sometimes)	bbc.co.uk



URL dissected

- 127 possible domain levels
 - `http://this.domain.has.a.lot.of.levels.com`
 - Rarely more than four are used



Anatomy of a URL

`http://www.montet.org/wtc/index.cfm?name=Bob`



Exercise

- In groups
 - Find and dissect a URL
 - Be sure we can find it
 - Don't pick a super long one





IP Addresses & Domains

- **Domains resolve into IP addresses**
 - Emails use domains too
- **Browsers can't resolve domains**
 - They need IP addresses



IP Addresses

207.230.217.77

- **Four octets**
 - Each between 0 - 255
- **That is 2^8 numbers in each octet**
- **2^{32} possible addresses**
- **Some IP Addresses are reserved**
 - There is no place like 127.0.0.1



Resolving Domains

- Name servers
- Some control entire top-level domains
 - Network Solutions (www.netsol.com)
 - Controls .com domain
 - Maintains WhoIs database



Resolving Domains

- Name servers use a **distributed database**
 - Most often used database in the world
 - On multiple servers
- Nearly any computer can be a name server



Resolving Domains

- **ISPs set default name server**
 - `WINIPCFG.EXE` in command window
- **Name servers temporarily save (cache) IPs they know**
- **Root Name Servers**
 - Many Root Name Servers
 - Between them all, they know all other name servers



How it works (deep breath)

- Your ISP's name server checks its cache
- Asks root name server
 - If it can't find it, it asks other RNS
 - Continues until domain controller is found (e.g. Network Solutions for .com)
- Name server asks top level domain for domain's IP address
- Top level domain gives it the IP address of the server hosting full domain
- The browser uses the IP to get the site



Let's try it!

1. www.footlocker.com
2. www.cnn.com
3. www.westerntc.edu
4. www.monster.com
5. www.yahoo.com
6. www.google.com
7. www.oneacross.com
8. www.thinkgeek.com



Choose a Web hosting company

Culling through the choices



Choosing a Web hosting company

- Key factors
 - Price
 - Per month & annually
 - Cheaper by the year
 - Hard drive space
 - Email accounts
 - Sever-side scripting



Choosing a Web hosting company

- Look for recommendations
 - Users groups are the most powerful filter
- Examples
 - Comparison
http://kb.adobe.com/selfservice/viewContent.do?externalId=tn_16477
 - Discount ASP
<http://www.discountasp.net/>
 - Host My Site
<http://www.hostmysite.com/>



Quick note about cyber squatters

- Buy URLs before companies
 - Illegal violation of copyright/trademark
- Grab misspelled domains
 - E.g. www.lacrosstribune.com
 - instead of www.lacrossetribune.com

