CMPT 109-33 Lecture Notes

**Points that were explained and/or written in last class**

1. Difference between Serial, Parallel and USB ports. (vis-à-vis Physical Appearance and Data Transfer Speed i.e. bits)
2. Factors that make the Internet affect our daily life (Distance, Social)
   - Freedoms, Liberties and other Legal Items regarding the Internet
3. Communication Types
   - Synchronous
   - Asynchronous
   - Point-to-Point
   - Broadcast
   - Multicast
4. General information on how the Internet works
   - Diagram (see note or textbook)
   - IP Addresses
   - Domain Names

------------------------Just to compliment your class notes-------------------------

How has the internet affected your life?

**Distance factors:**
Business, relationships, cultures are not limited to physical limitations such as distance anymore. Because of the internet (and previously telephones) we can do things down the street, or across the globe.

**Social Factors:**
The internet is cheap, thus allowing us to want to reach out to other people that are far away without having to dial long distance, or fly around the world.

Social relationships are now changing, before a formal letter, written in nice handwriting on high quality paper was the way to conduct transactions. Today, a simple e-mail (sometimes with misspelled and un-capitalized words) is accepted and considered the norm.

Social factors are being eliminated, why would you wait in line at a store to buy a product you can order online? No dealing with people (if you are nervous about that sort of thing), no waiting in line, no time constraints (do it at 2 AM), and it comes right to your door, so no traveling.

The English language is becoming almost universal, why? Americans and British scientists were the first to use and embrace the technology. Therefore a lot of the first web sites, and internet locations were in English. Other scientists didn’t want to be left out, so they learned English (if they didn’t know it) and started to publish
in English. It also may be that Americans would not change for anyone, but I digress.

Freedoms, Liberties, and Other Legal items:
The First (and other) amendments must be looked at in a new light now. I doubt the Constitution framers saw this coming.

What is free speech? Does free speech extend to the web? Remember that the freedom to punch someone in the nose ends at the other person’s nose.

Personal freedom vs. breaking the law is a hot topic. We have mentioned the MP3 problem, but there are other important issues.

DVD Jon:
If you bought a DVD, (i.e. you paid your money, and it is now your legal property to do whatever you want with it) but you couldn’t play your DVD on your DVD player what would you do?

What if you figured out how to play the DVD, but in the process also figured out how to (illegally) distribute the DVD movie to millions? Let’s now say you post the method of playing the DVD on a web site, for the sake of allowing others to view their DVDs. Some may want to do this, others may simply want to distribute (illegally) DVD’s everywhere.

Is it your fault for allowing this to be used in an illegal manner, or is it the fault of the person who gets the free DVD movie after the fact?

DVD Jon is a real person; he is a 16 year old (probably older now) boy from Norway. He wanted to watch a movie on his computer, couldn’t, but figured out how to watch it eventually. His method of ‘watching’ is a program called DeCSS, and also allowed the easy copying, and re-writing of DVDs. Of course this led to an MP3 style backlash by the MPAA; stating that copyright violations had happened. Guess who got the blame first. What happened? Eventually he won, the Norwegian court stated that it IS his property, and he has the right to use it any way he wants.

Communication types:
Synchronous – talking at a ‘synchronized’ (the same) time. Real life conversations, phone calls, instant messaging, lectures, etc. fall into this method.

Asynchronous – talking at a ‘non-synchronized’ (different) time. E-mail, snail-mail, etc. fall into this method.

Point to Point Communication – involves 2 points, these points can be people, or groups of people (video conference, conference call) communicating (two way communication).
Broadcast Communication – think of TV or Radio stations. One point broadcasts to a number of other points (one way communication).

Multicast Communication – Like broadcast, except everyone can send and receive. The internet falls into this category (multiple two way conversations).

The internet:

Diagrams – page 67 of your textbook

Getting from point A, to point B – The internet has to have a way to identify where you are going, if you want to travel to a friends house he gives you directions, that end with an address. The internet is the same way, if you are going somewhere you will need an address (the route will be figured out for you automatically, more on that later...)