Disclaimer of Liability: With respect to the 403 Spring 2007 class, neither the staff or the University of Washington, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.
Intellectual Property

Any intangible asset that consists of human knowledge and ideas.

Most such assets cannot be recognized on a balance sheet when internally generated, since it is very difficult to objectively value intellectual property assets. They can, however, be included in a balance sheet if acquired, which allows a more accurate valuation for the asset (that is, the acquisition cost).
Common forms of IP

- Patents
- *Contracts/Licenses*
- Copyrights
- Trade secrets
- Trademarks
XT3 Software IP includes …

- **Internal Cray IP**
  - Hardware management (RSMS) patents
  - Proprietary cluster management software
  - Apprentice2™ performance tool

- **External IP, with fees**
  - Catamount OS, Sandia National Lab
  - C, Fortran compiler, PGI
  - Totalview parallel debugger, Etnus
  - PBS Pro batch management tool, Veritas

- **External IP, without fees**
  - Linux
  - PAPI
  - gcc, gdb
403 Project IP includes …
Who owns IP of university projects?

- In the US, inventors traditionally own their inventions, although universities most often share the monetary returns from commercialization.

**THE CHRONICLE OF HIGHER EDUCATION**

- CSE commercialization committee (Borning)
  UW office of technology transfer

- Key question is, **“who is funding the work?”**
Patents

- **Protect**: innovations (processes, machines, products, phrases, algorithms…)
- **Protect against**: others making, using, selling innovation, *even if they independently came up with it*
- **Requirements**: novel, useful, non-obvious
- **Term**: 20 years from filing – typically must file within a year of being publicly disclosed
- **Cost**: relatively high, in time and cost
- **How could you limit the risk of infringement?**
Patent ruling a win for eBay

- Patent on “Buy it Now” sales feature held by MercExchange and used by eBay
- MercExchange sued for patent infringement
- Supreme Court pushing back to lower court, but until decision, allows eBay to continue using the phrase
- Concern by court of large corporations held hostage to minor innovations (patent trolls)
Microsoft MP3 patent row looms over Apple

- Court ruled that Microsoft infringed on 15 patents owned by Alcatel-Lucent relating the MP3 music format (MP3 playback) in Windows Media Player.

- Alcatel-Lucent had argued it co-developed the technology with Germany’s Fraunhofer Institute (FI). MS licensed through FI (for $16M) but not also Alcatel-Lucent.

- Damages were $1.52 BILLION. Microsoft will appeal.

- Bad news for Apple? iTunes to iPod - dependency on MP3 technology
Lucent accused of violating patents

- Lucent sued Dell/Gateway for patent infringement on innovations including controlling a computer with a stylist
- MS pledged to cover Dell/Gateway customer costs, filed to invalidate the patents or resolve that not infringed
- Lucent sued MS for infringement on video decoding technology
- MS countered with claim that Lucent infringed 10 of its patents
War chests

Companies like to build a war chest of patents for just this reason
CSR settles Bluetooth dispute with WRF

- **UW** has 4 patents on technology (by an ugrad!) that appears to be used by cellphone manufacturers under the “Bluetooth” technology name.

- Bluetooth technology is used in wireless activities – exchange info without wires – there are a number of patents surrounding the technology.
Washington Research Foundation (WRF) working on behalf of UW reached a licensing agreement with Broadcom, who uses the Bluetooth technology.

CSR (another cellphone manufacturer) did not want to license the technology. WRF filed a suite against CSR for patent infringement.

April 2007, CSR settled with WRF for $15M but remains to believe the suite was without merit.
Google Sued for Hyperlink Patent Infringement

- **Google** is being sued by a software company for allegedly infringing on a patent for enhanced hyperlinks.

- **iLor, LLC**, filed suit against Google, arguing the search company was infringing on a patent titled, *method for adding a user selectable function to a hyperlink (when you roll over a link, you get options)*.

- iLor is seeking unspecified damages. The patent in question, #7,206,839, was issued on April 17, 2007 the same date the lawsuit was filed.

April 19, 2007
http://googlewatch.eweek.com/content/google_lawsuits/google_sued_for_hyperlink_patent_infringement.html
Contracts

- You can make anything work if you have agreement by all parties involved.

- Protections, exclusions, requirements, terms, and costs must all be *explicitly* defined as part of the contract.

- Examples:
  - License agreements
  - Vendor agreements
  - Non-disclosure agreements
  - Employee contracts
Popular license: GPL – www.gnu.org

The Free Software Foundation (FSF), established in 1985, is dedicated to promoting computer users' rights to use, study, copy, modify, and redistribute computer programs.

FSF promotes the freedom to
1. run the program, for any purpose
2. study how the program works, and adapt it to your needs
3. redistribute copies so you can help your neighbor
4. improve the program, and release your improvements to the public, so that the whole community benefits

Access to source is a precondition to 2 and 4

gcc, g++, gdb, glibc, gcj, violet, linux, …
Software licensed under the GPL is open source that must be made available with the product release.

GPL requires that all code that is “affected” by GPL code must also be distributed under the GPL. “Affected” is loosely equated to, part of the same functional unit.

poisoness license, copyleft license
There are lots of other licenses

- Mozilla Public License (bugzilla) – type of copyleft
- MIT License (ruby on rails) - permissive FOSS
- LGPL – glibc – lesser GPL
- MySQL – GPL or MySQL commercial license ($)

What’s the difference between Free, Open Source, and Proprietary software?
Microsoft takes on the free world

Microsoft alleges that FOSS infringes on 235 of its patents
It wants royalties from distributors and users

- the Linux kernel violates 42 Microsoft patents
- the Linux user interface, design elements infringe on 65 patents
- OpenOffice.org infringes on 45
- another 83 are infringed on in other FOSS programs

"What's fair is fair," Ballmer told Fortune. "We live in a world where we honor, and support the honoring of, intellectual property."

And the FOSS response is?

- FOSS legal strategist, is “uncowed”
  - The action is in tight qualitative analysis of individual situations
  - Patents can be invalidated on numerous grounds
  - Others can be invented around
  - Supreme Court stated in April that patents have been issued too readily for the past two decades and lots are probably invalid (!)
    - Peer review of patents (community patent review process) being explored
  - Corporate patrons and allies
Microsoft scores a deal with Novell

- The GPL covered patent lawsuits: any patent must be licensed for everyone’s free use or not licensed at all - “liberty or death” clause

- Microsoft can’t sue [Linux] distributors for patent infringement

- Microsoft and Novell reach a controversial agreement “not to sue each others customers” for infringement
  - Opens the door for more royalty claims by Microsoft
  - Novell’s most eminent Linux developer quit in protest
  - GNU drafting a new version of the GPL to plug loophole
What’s your opinion?

“Patents and the open-source movement get along awkwardly at best. Patent law gives proprietary, exclusive rights to patent holders, but open-source programming is built on the idea of free sharing.”

Is **FOSS** (Free and Open Source Software) the best way to foster the advancement of science?

Isn’t it reasonable for a company to patent technology to attain/keep competitive advantage?
Copyrights

- **Protect**: expression of ideas on a tangible medium, *not* the ideas
- **Protected against**: reproduction, copy distribution, derivative work creation (NOT independent creation of the same or similar work)
- **Requirements**: original work, fixed in tangible form
- **Term**: author’s life + 70 years
- **Cost**: simple, no registration
- **How could you limit the risk of infringement?**

The fact that internally developed SW looks or performs like SW that is owned by others but accessed by internal developers may raise a question of copyright infringement.
More facts on copyright

- Almost all things are copyrighted the moment they are written; No notice is required.
- Copyright software – contracts/licenses can provide permission to use copyright material

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Trade Secrets

- **Protect**: concept, idea, info, or innovation
- **Protected against**: misappropriation (*NOT* independent creation of same work)
- **Requirements**:
  - info not generally known or available
  - company derives some value from secrecy
  - must spend reasonable effort to maintain secrecy
- **Term**: no predefined limit
- **Cost**: no registration or examination
- **How could you limit the risk of misappropriation?**
Symantec suit targets Vista

- Symantec said that Veritas shared Veritas trade secrets and even trained Microsoft engineers as the companies began working together. And Microsoft used those trade secrets to start developing products [aspects of Vista] that directly competed with Veritas' offerings, the lawsuit said.
- Microsoft said that in 2004 it bought from Veritas the rights to the technologies in question.
Trademarks

- **Protect**: “any word, name, symbol, or device, or any combination thereof” used to distinguish certain goods from others
- **Protected against**: others using the mark, likelihood of confusion and dilution
- **Excluded**: use in other industries / geographic areas
- **Requirements**: use the mark in commerce or register with intent to use in future, must maintain quality control over goods
- **Term**: 10 year renewable (no upper limit)
- **How could you limit the risk of infringement?**
Are any of your project names TM?

http://tess2.uspto.gov/

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utalk</td>
<td>Patented 2003: Providing a subscription to an online mailing list and distributing messages, newsletters, and other postings from the list's members who work on the academic side of hydrology and hydraulics which includes university faculty members, research associates and students.</td>
</tr>
<tr>
<td>Waste</td>
<td>Too many variants to list</td>
</tr>
<tr>
<td>Payback</td>
<td>Too many exact matches to list</td>
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<tr>
<td>EZReg</td>
<td>Patented 2004: Providing temporary use of non-downloadable software for use in database management for student's course registration</td>
</tr>
<tr>
<td>CourseForge</td>
<td>Cursory search didn’t find a <em>live</em> patent</td>
</tr>
<tr>
<td>SuiteRates</td>
<td></td>
</tr>
</tbody>
</table>
Apple infringes on Cisco’s iPhone TM

- **Cisco** owns the iPhone trademark
- **Apple** started negotiations with Cisco to share the TM. Cisco wanted open approach to allow Apple iPhone to be compatible with other companies’ products
- Apple announced its iPhone **before** an agreement was made
- Cisco sued Apple for trademark infringement

“This lawsuit is about Cisco’s obligation to protect its trademark in the face of a willful violation. Our goal was collaboration. The action we have taken today is about not using people’s property without permission.”

How did the saga end?

- Cisco and Apple reached a settlement (2/21/07). The two companies pledged to "explore opportunities for interoperability in the areas of security, and consumer and (business) communications."

- Other terms were confidential

“The Devil is in the Details”

Understand and know the basics but consult with a lawyer for the details.