Common forms of IP

- Patents
- Copyrights
- Trade secrets
- Trademarks
- Contracts
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

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

Do you think posting email is a violation of copyright?
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

Can anyone provide an example?
Symantec suit targets Vista

- Symantec said that Veritas shared its trade secrets and even trained Microsoft engineers as the companies began working together. But 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)
Contracts

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

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

- Examples:
  - License agreements
  - Vendor agreements
  - Non-disclosure agreements
  - Employee contracts
Making GPL work for you

PathScale compiler product is based on SGI open source code-GPL. PS ported the code to a new architecture and enhanced its performance

- PathScale has built a strong knowledge of the Open Source code and maintains it in-house
- They distribute the Open Source components
- And engineered the PathScale proprietary code to avoid the GPL code (independent and separate works) and thus does not distribute it
“The Devil Is in the Details”

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

7 traits of a highly successful engineer

1. Caring
2. Sharing
3. Responsibility
4. The Stakes
5. Joy
6. Creativity
7. Objectivity

Papworth, Intel Fellow
Our 403 goals – how’d we do?

To have:

- Been exposed to some of the best software development practices in use today
- Learned how to more effectively collaborate with others toward a common goal
- Understood how software is produced – from conception to shipping and subsequent maintenance
- Developed skills to articulate your ideas and progress
- Understood the issues and tradeoffs involved in making decisions as software engineers and project managers
Top for project?

What was the top thing that you learned in 403 that helped you create a successful project?
Top for great engineer?

What was the top thing you learned in 403 that will help you be a great software engineer?
Calendar – What’s left?!

Lectures

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<td>Wrap Up</td>
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<td>NO CLASS</td>
<td>Demos</td>
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<td>Optional – Final Q</td>
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Assignments

- Final Release due Tues May 30th
- Final Peer/Self reviews due Fri Jun 2nd
- Final Exam Mon June 5th 8:30am
Individual Reviews

- Beta scores are in the grade database
- Used the numeric values as well as the comments and self and staff input
- Loss of 1 point if didn’t submit any reviews
- For the final release: Met, exceeded, didn’t meet responsibilities; comments are good! Opportunity for comments visible only to staff.
Final Release

- New final description/grading summary is on the class web
- More points for project and demo (audience is your customer), less for release notes
- Audience of the demo is your customer
The Final Exam

- Final will be in-class, open textbook and assigned papers (no electronic access, no notes, no slides)

- Questions will largely be short answer, ie:
  - create an example to illustrate something
  - justify a statement
  - reflect on your project experience
  - recognize a scenario

- Question study tips:
  - Assignment essay questions
  - Questions in yellow during lectures
  - Old 403 finals (Summer 2005, 7/25 and 8/16 entries)
  - Guest lectures
  - Readings