Copyright, DMCA, Intellectual Property

What's happening this week

- Background on copyright and DMCA
  - Digital Millennium Copyright Act, 1998
  - Impacts of the law on people, technology, you
  - Court cases and what's in the news

- Foundation for more: Intellectual Property
  - Patents (less on trade secrets and trademarks)
  - Licensing and open source software

- What's expected in Compsci 82

Article I, Section 8

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

- Copyright and patent
- From Constitution to US Code (section??)
  - Can't copyright ideas
  - Is this class copyrighted? Notes? Lecture?
  - Who “owns” the rights, does it matter?

Copyright Basics

- What can by copyrighted?
  - US Code Title 17, Section 102
  - https://www.eff.org/cases/electric-slide-litigation

- Software and computer programs, facts and data, parodies and copies, ...
  - What about Fair Use? What about infringement?
From IP to IP via copyright

- **Intellectual Property**
  - What does this mean? Can we own it?
  - When Jefferson and his fellow creatures of the Enlightenment designed the system that became American copyright law, their primary objective was assuring the widespread distribution of thought, not profit. Profit was the fuel that would carry ideas into the libraries and minds of their new republic. Libraries would purchase books, thus rewarding the authors for their work in assembling ideas; these ideas, otherwise "incapable of confinement," would then become freely available to the public. But what is the role of libraries in the absence of books? How does society now pay for the distribution of ideas if not by charging for the ideas themselves? *Economy of Ideas*

Software, Copyright (towards Patents)

- **Software the code v. software the program**
  - Competitor’s viewpoint, user’s viewpoint
  - Tangible medium when written
    - What about when running on a machine?

- **What a program does, rather than the code**
  - Whelan v Jaslow 1985/6
    - Supreme Court goes 4/4, look and feel not copyrighted
  - More cases that change interpretation of laws

Facts not subject to copyright

- http://mlb.mlb.com/mediacenter/

*Since facts do not owe their origin to an act of authorship, they are not original, and thus are not copyrightable.*

- Feist v Rural (Wikipedia and others)

Sunglasses or recipes copyrighted?

- http://amzn.to/aTtcTy
- $189.99 at Amazon

- $9.99 at ...

Molten Chocolate Cakes Recipe by Jean-Georges Vongerichten
Copyrights and Licensing

- Most software is licensed rather than sold
  - Why isn’t it sold? First-sale doctrine
  - Are EULAs valid? According to whom?
  - Can I back up my software? DVD/CD?

- Tale of three logos
  - Linux
  - Windows
  - SQLite

Toward Open Source

- http://tinyurl.com/yqfcq (Groklaw)

- Copyright law, guarantees protections
  - Exclusive right to copy
  - Exclusive right to create derivative works
  - Exclusive right to distribute work
  - Exclusive right to perform/display work

- Fair use exceptions, First Amendment
tension, facts and ideas vs their expression

Fair use, face-to-face education

- Educational Exceptions
  - What about YouTube videos?
  - What about Social Network Torrent?
  - Clip from Ferris Bueller?

- Four prongs copy/use copyrighted work:
  - (1) For commercial or non-profit use
  - (2) Nature of copyrighted work, e.g., original?
  - (3) How much of work used
  - (4) Effect on market or value

Digital Millennium Copyright Act, DMCA

- Copyright law of United States
  - Passed in 1998, general industry support
  - What's different about digital copyright?

- DMCA I: Rules against circumvention
  - Can’t try to bypass DRM, CSS, ...
  - What about BitTorrent, Rapidshare, Elliott’s server, Youtube

- DMCA II: Safe Harbor provisions
  - Protect online service providers (blogs?)
DMCA: Chilling Effects (according to?)

- **Anti-circumvention (1201) aspects of DMCA**
  - Prevents legitimate back-up/archive
  - Fair use “under siege”
  - Inhibits free speech

- **Impedes innovation, science, invention, ...**
  - Despite research exceptions
  - What happens on violation or threat of?
  - Review and comments every three years
    - Why Library of Congress?

DMCA: Safe Harbor

- **DMCA saved the web (2.0)**
- **Safe harbor provision (512) is indispensable**
  - No knowledge of offense!
  - Take down notices
  - Counter notice
  - Eligible for safe-harbor?

- **If I post a video to YouTube that infringes...**
  - Who gets in trouble?

Happy Birthday (Oct 28, 1998) DMCA!

Blogs, search engines, e-commerce sites, video and social-networking portals are thriving today thanks in large part to the notice-and-takedown regime ushered in by the much-maligned copyright overhaul. A decade ago, when the DMCA was enacted, these innovations were unheard of, embryonic or not yet conceived. Now, Google has grown into one of the world’s largest companies, and its video-sharing site YouTube has left an enduring mark on public discourse.

DMCA: Takedown notice?

- **Notice and take down for copyright infringement**
  - Ivan Hoffman on the DMCA
  - chillingeffects.org on DMCA
  - http://www.eff.org/takedowns

- **To submit a takedown notice, provide:**
  - Complainant: name, address, e-signature
  - Location of infringement, e.g., link
  - Affirm: no legal basis for use of materials
  - Affirm: act on behalf of copyright holder
DMCA and chilling effects

- Dmitry Sklyarov, Elcomsoft, 2001
  - Arrested? Conference?
- Ed Felten, SDMI, 2001
  - RIAA urges reconsideration
  - Princeton Profs anti-circumvention song
  - Alex Halderman, Sony rootkit
- Ben Edelman and CIPA (children’s internet protection act)
  - Research, tools, distribution, “just sue”

Jon Lech Johansen (DVD Jon)

- DeCSS
  - How does DVD encryption work?
  - What is GPL issue with original code?
  - Brute force attack on 40-bit key beyond DeCSS
- Apple, iTunes, Fairplay, DRM
  - Digital Rights Management
  - iPhone
  - Hacker Jon

Copyright infringement in a nutshell

- Vicarious infringement
  - Ability to control users, financial benefit
  - Liability without knowledge, Napster?

- Contributory infringement
  - You know it, you did it (abet piracy)
  - Host forum for others to post

- What about DMCA safe harbor provisions?

DMCA in the news (Fall 2010)

- Is it ok to jail break your iPhone? Why?
  - http://bit.ly/d5gAs9 on details of Library OC
  - www.jailbreakme.com
- YouTube knowledge of infringement?
  - Not enough for $1 Billion for Viacom
  - Where is Veoh today? What about fall 2009?
- Parodies and Hitler (Ethics meets DMCA?)
  - DMCA_Constantin_Downfall
- (From 2009) Flickr and Obama/Joker