

CS305 - Social, Ethical, and Legal Implications of Computing

Law and Ethics of Open Source
Bart Massey (bart@cs.pdx.edu)

The US Legal Framework

- Two sources of law: Congress, Courts
- Two kinds of law: Criminal, Civil
- Trials
- Right to appeal; grounds for appeal

Legal Framework for IP

- Four basic kinds of protection
 - Copyright
 - Patent
 - Trademark
 - Trade Secret
- Many goals for this framework

IP: Ethical and Social Issues

- What goals are served by current IP law?
Consider categories of IP that are currently not protected...
 - When does IP protection inhibit creation?
When does it encourage it?
 - From what ethical framework does a “creator's right” to control “his/her” IP flow? Is it universal?
 - What price is society willing to pay to “protect” IP?
Is it technical? Social?

“Open” IP

- Movement for collective creation
- Typically focused around copyright, source code
- Idea: License away individual rights
- Two flavors:
 - Vanilla ala Creative Commons, Open Source
 - “Viral” ala GPL

Stallman's “Four Freedoms”

- 0. Freedom to run the program as you wish.
- 1. Freedom to study the source code of the program and then change it so the program does what you wish.
- 2. Freedom to help your neighbour. That’s the freedom to redistribute the exact copies of the software when you wish.
- 3. Freedom to contribute to your community. That’s the freedom to distribute copies or modified versions when you wish.

Discussion: *The Right To Read*

- Horribly written story (read like it was written by Holt on *Brooklyn 99*), but...
- How much of the framework from this 1997 story is already here?
- How much of it is coming soon?
- Is this...OK?
- If not, what to do about it?

Ethics of the Four Freedoms

- From what ethical framework do these freedoms flow?
- Are they stated in a way that biases the ethical case?
 - Robin Hood
 - Bitcoin
- Do they reflect a different understanding of “property”?

The GPL as a Legal Hack

- Ethics of hacking (at) laws?
 - Sets bad precedent (c.f. kernel headers); encourages litigation (c.f. Busybox)
 - Can be risky (courts/lawmakers can wreak havoc with the framework)
- Following vs setting community norms
 - c.f. Bill Gates's Letter

Open Source and litigation: *Jacobsen v. Katzer*

- Katzer / KAM Train Tools 1997
- 1998 Katzer files patents for client-server train SW
- 2000 Jacobsen starts JMRI under Artistic License
- 2002 JMRI adds client-server capabilities
- Jan. 2004 Jacobsen / JMRI files DecoderPro TM
- Feb. 2004 Katzer gets *decoderpro.com* domain
- 2005 Katzer files patent case against JMRI
- 2006 Jacobsen files to invalidate Katzer patents
- 2007 WIPO gives JMRI *decoderpro.com*

Jacobsen v. Katzer cont.

- 2006 Jacobsen C&D's Katzer, claims damages
- 2007 Jacobsen amends with DMCA claims
- 2007 Court denies suit: license violation v. cpyr infringement
- 2008 Appeals Court sends case back to trial
- Feb. 2009 Katzer abandons patent claims
- Feb. 2009 Katzer, responds, counterclaims copyright
- Dec. 2009 Judge rules
- Feb. 2010 Parties settle (see Wikipedia)

Jacobsen v. Katzer: Discussion

- Classic example of real legal interaction:
 - Two parties who hate each other a bit too much
 - Lots of legal interactions
 - Over a long period of time
- Who was “in the right”? Is it obvious?
- What could be done to avoid it next time?
Done by who?

Last Questions

- Does the legal framework we have set up for SW IP serve society well? What about open source in particular?
- Is there a commonly accepted standard of IP ethics? If so, is it appropriate? If not, is this a problem?
- Is it your responsibility as a computer scientist / software developer to address this stuff?

Bonus Slides

Copyright

- Covers an expression of a creative work
- Everything since about 1930
- Currently obtained by...creating
- Gives right to
 - Reproduce
 - Prepare derivative works
 - Distribute copies
 - Perform, Display
- Enforced by civil suit (mostly)

(Utility) Patents

- Covers a novel, useful idea
- Last 20 years
- Application process through USPTO
- Right to “practice” idea
- Enforced by civil suit

Trademarks

- Covers a distinguishing mark
- Last as long as in trade use
- Application through USPTO
- Right to use mark (c.f. Lanham Act)
- Enforced by civil suit

Too-brief history of UNIX

- A new kind of OS from AT&T
- UC Berkeley and BSD
- BSD entirely frees UNIX (c.f. SysV)
- MINIX, etc
- Early Linux
- Commercial Linux adoption
- Mega-GPL

Linux kernel

- OS kernel vs utilities
 - “GNU/Linux”
- Kernel interfaces, headers
- Kernel community
 - Consensus feedback both to and from
 - Conflicting goals
 - Open...but
 - The Benevolent Dictator

Trade Secrets

- Covers a “secret” (probably even if otherwise not protectable)
- Created by not disclosing
- Last as long as the secret stays secret
- Right to prevent employees etc from disclosing the secret
- Enforced by civil suit (mostly)

Commercial vs Free

- The Free Rider problem (?)
- Commercial tech economy is incredibly valuable (IP is biggest US export)
- Where should the bar be set?