Copyright – Legal Basis

- Constitutional basis in Art. I, Sec. 8, Clause 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 Act: Title 17 of the US Code
- Code of Federal Regulations: Title 37

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Copyright Subject Matter

- Works of authorship that are fixed in a tangible medium of expression, from which they can be perceived, reproduced, or communicated, either directly or with the aid of a machine or device
  – Literary works
  – Musical works
  – Dramatic works
  – Pictorial/graphic/sculptural works
  – Motion pictures
  – Sound recordsings
  – Architectural works

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Subject Matter Limitation

- Copyright protection does not extend to any <u>idea, procedure, process, system, method of operation, concept, principle, or discovery</u>, regardless of the form in which it is described

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Subject Matter Examples

- Identify the copyrightable expressions, if any:
  – A grocery list
  – A haiku
  – A baseball box score
  – A phone book
  – A song played by street musician
  – A novel
  – A newspaper story about an election
  – A Linux distro
  – A C header file
  – A Java interface

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Enforceable Rights

- Owner of the copyright has the exclusive right to do and authorize:
  – Reproduce the work
  – Prepare derivatives
  – Distribute copies
  – Perform
  – Display the work publicly

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Compilations & Collective Works

- A <u>compilation</u> is a work formed by collecting or assembling preexisting materials or data
- Materials must be selected, coordinated, arranged such that the resulting work as a whole constitutes an original work of authorship

- A collective work is a compilation of separate independent works, e.g., encyclopedia, anthology

- *Copyright in compilation only extends to material contributed by the author (of the compilation)*

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Derivative Works

- A derivative work is a work based on a preexisting work (e.g., translation, motion picture version, adaptation)

- *Copyright in compilation only extends to material contributed by the author (of the compilation)*

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Copyright - Limitations

- Minimum standard of originality
- Independent creation
- Subject matter limitations: ideas vs. expression:
  - In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, ... 17 USC 102(b)
- Fair use
- "Limited" term...

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Fair Use

- Fair use is not an infringement
- To determine fair use, the following factors are considered:
  - Purpose and character of use (e.g., commercial? educational?)
  - Nature of the work (e.g., factual? fictional?)
  - How much is copied
  - Effect of use on potential market of copyrighted work (e.g., does the copying displace sales?)

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Fair Use Examples

- Which of the following are (or are not) fair use?
  - Copying a short passage from a novel for a book review?
  - Copying a short passage from a novel for a critical book review?
  - Showing classic movies (from a personal video collection) at a movie theater as part of a non-profit film society
  - Copying a CD onto your hard drive
  - Copying a CD for your friend

- The DMCA may significantly impact fair use

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Licenses

- A license is a permission to do something:
  - You may cross my property to reach the lake
  - You may cross my property during the week, not on weekends

- Licenses can slice, dice, and repackage the rights:
  - You may make and distribute copies to students in your class, but you may not perform or make derivatives

- Bare (or naked) license: a grant of one or more rights short of a full assignment

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Software Licenses

- Proprietary Licenses
  - A grant of permission to use software in a restrictive way, such as including limits on the type, duration, or field of use; reverse engineering; access to source code
- Open Source Licenses
  - Academic licenses (e.g., BSD)
  - Reciprocal licenses (e.g., GPL)
  - Content licenses (e.g., Creative Commons)

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The GNU GPL v2

- Long and complicated, but here is the "engine":

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also … cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

- In short, if you (1) distribute (2) a derivative work, you must also provide the source.

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The GNU GPL v3

- Slightly different wording:

You may convey a covered work [includes the Program and works based on the Program] in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License

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Risks to an Organization

- For "closed source" shops:
  - License "infection"
  - Lack of warranty or indemnification

- For "closed source" shops that have open source elements:
  - Ownership of contributions

- For open source projects:
  - Ownership of contributions

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Derivative Works Under the GPL

- Example scenarios
  - 1.0: modifying a source file
  - 1.1: modifying source file plus distribution
  - 2.0: adding a file plus distribution of resulting binary
  - 2.1: carving out the added file
  - 3.0: static v. dynamic linking
  - 4.0: plug-ins
  - 5.0: OO systems
  - 6.0: networked systems

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