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Module Seven Journal

**Purpose: What was the purpose and intent of the DMCA?** The main purpose of the Digital Millennium Copyright Act (DMCA) of 1998 was to update copyright laws to include digital materials. This offered protection from downloading music without paying for it and copying applications and games without paying licensing fees, protecting the work of their creators from being ripped off.

**Legality: What is banned and restricted under the DMCA?** The DMCA bans bypassing digital locks put on products to protect copyrighted materials, making, selling, or distributing tools to bypass these locks, removing information that identifies the original author and licensing terms, and just generally using or helping others use material that infringes on copyright protection.

**Anti–reverse engineering: Why is the DMCA considered to be an anti–reverse engineering law?** Most software has technological protection measures (TPMs) and therefore any attempt to bypass them automatically becomes a violation of the DMCA, making almost all reverse engineering a violation of the law.

**Exceptions: What are exceptions to the DMCA in which reverse engineering is legal and ethical?** There are two main exceptions for reverse engineering in the DMCA: Interoperability and Security Research. Reverse engineering is allowed if it is necessary to achieve interoperability between computer programs. This exception enables software developers to create products that can work together with existing systems and programs. Reverse engineering is also permitted to identify and fix security vulnerabilities or weaknesses in software or hardware. This exception helps improve cybersecurity measures and protect users from potential threats.

**Impact: What are your thoughts on the DMCA and its long-term impact on reverse engineering and the computer science field?** I think that the DMCA effectively handles most conditions where reverse engineering software would be needed. Changing a program that you have licensed to be compatible with another existing system or fixing security vulnerabilities in the program that may have popped up seems like the only real reason to reverse engineer something legally. After doing some research I’ve come across multiple examples of reverse engineering a product to not have to pay for the product. The people at BnetD reversed Blizzards Battle.net under the guise of doing it for customization and availability if Blizzard's servers were down or not available, but the real reason was because it allowed users to not buy the game since it didn’t check the key code, essentially giving away Blizzards work for free. I feel like this is exactly what the DMCA is meant for, and it sided with Blizard and BnetD was taken down. I think the DMCA does a pretty good job of balancing the line of protecting copyrighted work and allowing users that have licensed the work to use it for personal use.