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**Purpose: What was the purpose and intent of the DMCA?**

The DMCA is the Digital Millennium Copyright Act. The aim behind it was to enact a law that would exist for the sole purpose of protecting existing copyright protection technologies and prevent the development of tools and software that would exist for the purpose of circumventing copyright technologies.

**Legality: What is banned and restricted under the DMCA?**

Any individual or organization can not use or develop any programs that are designed to defeat or circumvent Copyright technology and/or Digital Rights Management technology. This may include things like keygen programs which circumvent the requirements of licensed serial keys in computer programs.

**Anti–reverse engineering: Why is the DMCA considered to be an anti–reverse engineering law?**

DMCA is considered an anti-reverse engineering law as it outlays what the definitions of a technology protection is and what circumventing it means and then thusly enforces rules to prevent such circumventions and development of technologies that would do so. As such, the ability to not bypass these protections means that being able to reverse engineer a piece of software becomes incredibly tricky to impossible depending on the software and platform. This means that if a piece of software is protected by the DMCA and that company is bought out, the new owning company is not allowed to reverse engineer the original software to perform upgrades or create a copy of the original to integrate into a new software.

**Exceptions: What are exceptions to the DMCA in which reverse engineering is legal and ethical?**

The exceptions the DMCA allows are interoperability when reverse engineering is the only way to decrypt it to allow the developer to be able to interoperate, Encryption Research when the reverse engineering is being performed by an encryption technology research team and only if the protection interferes with he encryption technology evaluations, Security Testing where the product is being used to develop new methods to improve security and examine the flaws in the current system, Educational Institutions and Public Libraries that allows for circumvention in the vein of evaluation of a product prior to purchase, Government Investigation where the government is investigating a product in regards to a case, Regulation where the product can be reversed engineered to regulate the access to and availability of digital materials, and Protection of Privacy where products that transfer personal information can be reversed seemingly to research the security and improve it.

**Impact: What are your thoughts on the DMCA and its long-term impact on reverse engineering and the computer science field?**

The DMCA is a topic I feel torn about. As someone who has created digital content and has had it distributed, the concept behind the DMCA is a positive thing to me. It allows for security to be built into what I have created and sold to help prevent my work from being stolen, copied, and distributed without proper compensation. At the same time, I see the arguments against it and how it can be used to prevent forward progression in security and encryption when the likes of corporate entities or the federal government have involvement in it that has short sighted purviews and demands of what researchers are allowed to do. I do believe without a change to present policies, software engineers, reverse engineering, and computer science will be held back by archaic and outdated laws. With the way technology has advanced and is advancing the DMCA needs to be constantly reviewed and updated to adhere to how the climate of the technology world is advancing and changing.