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7-1 Journal

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

Put in place in 1998, the Digital Millennium Copyright Act (DMCA) wanted to modernize copyright law for the digital era. Its primary purpose was multi-purposed, aiming to safeguard copyrighted materials against unauthorized access and distribution, to protect the growth of e-commerce and digital technologies, and establish legal structures to support content creators and distributors in the digital realm.

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

Some technological practices that control access to copyrighted works are banned and restricted. These include the production and unauthorized circulation of technology, devices, or services primarily designed or marketed for evasion purposes. The act also criminalizes the act of failure of access controls, even if the intended use of the protected material is legal.

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

The DMCA is considered as an anti-reverse engineering law because it prohibits the runaround of technological protection measures which restricts the ability to analyze and understand how certain systems or technologies operate. This restriction hinders the process of reverse engineering which is crucial for various purposes in the field of computer science.

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

DMCA permits reverse engineering for the purpose of achieving interoperability of computer programs as long as certain conditions are met. The act also allows for reverse engineering for encryption research and security testing if only done in good faith.

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

I believe the DMCA has had a varied impact on reverse engineering and computer science. It has hindered certain legitimate reverse engineering efforts I’m sure of; however, it has also driven the progress of certain methods and encouraged achieving interoperability and security analysis of systems. There is a middle ground that must be met with DMCA between copyright protection and technological progress, which can always lead to a debate of good ethical practice versus malicious intent and to address the concerns of both content creators and technological researchers.