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CSCI 332-01

November 30, 2021

Intellectual Property

Programming involves composing your own code to ultimately make your own functioning program. Who can use your software and what can they do with are questions you have to think about when publishing your own code? When making any program in the technology world today, you are authorized to the ownership of your work by the way you choose your license. Once you create your work, it is your copyright and your decision of how you want others to use it as well as distribute it. Whether it be for sale or free download. What are you actually making free, the program, the source code, the object code, the algorithm, the interface? Is it free to only use the software? Is it free to modify the software? Is it free to copy it? These are just a few questions being raised when discussing intellectual property rights.

Intellectual property rights connected with software ownership is undoubtedly one of the more controversial areas of computer ethics concerns. This raises questions such as which licenses mean what limitations on certain software. Robert Galloway writes in his article on software piracy that “Software developers, authors, and end-users sign the End-User License Agreement (EULA), which states the rules and agreements for software use. Every EULA prohibits the end-users from copying, modifying, and sharing the software with other users” (Galloway). Depending on the terms and conditions you agree to upon installing certain software, it can determine which rights you have to use it, attributing from the author.

Some people, such as Richard Stallman, the founder of the Free Software Foundation, feel as though software ownership should not be allowed at all. Although the negating the sale of software can be beneficial to allow others to access it, it should ultimately be the creators' choice of what they want to do with the work they created. Software sales are beneficial to developers and to the economy. Gallway further discusses in his article on the state of software piracy that "Software development companies earn revenue when the software is licensed and sold. Nations with high software piracy rates have recorded a low economic development rate over the past few years" (Gallway). People pirating software and obtaining it for free might be beneficial to the consumer, but software sales play a key part in economic stability. The United States Defense Counterintelligence and Security Agency state how "The IP Commission estimated that counterfeit goods, pirated software, and trade secret theft, which includes cyber-enabled trade secrets, directly cost the U.S. economy \$225 to \$600 billion annually, or 1 to 3 percent of the gross domestic product in 2016." Making software free does not solve the issue of negatively affecting the economy.

Ultimately, as we grow into an even more technology-reliant world it is important to understand the impact of software distribution and how licensing impacts the economy and further technology growth. Andrew Rapacke in his article about patenting an algorithm discusses how "Tech startups may be relied upon to create and service the algorithmic needs of existing, legacy industries, or they may create new and innovative algorithms to solve previously unknown or unfulfilled needs" (Rapacke). If the use of another's work is not carefully measured, it can lead to crimes of software piracy. Rightfully acquiring rights to software in the form of source or object code, algorithm or interface brings economic growth and stability as well as furthering the development and advancement of other software technologies.

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