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CSCI 301 63

18 February 2021

Ethical Programming

As a programmer, it is unethical to use another's code without understanding the rights and requirements to use it. Copyright and software licensing is an important factor to understand before getting into software development and using other's code or libraries. If one wishes to create computer software in an ethical manner, he should: understand the meaning of copyright, understand and use license agreements, and know the rights and restrictions to the code that is being used.

Understanding what copyright is and how it works is important to ensure ethical programming. According to Computer Hope, an online site that makes articles about software and computers, Copyright is "a protection for any published work that helps to prevent that work from being used without prior authorization."[1] And when software is Copyrighted, it cannot be remade without permission from the owner. This protection is established in US law. According to Geoffrey P. Hull, a scholar from MTSU, "The Copyright Act of 1976 forms the basis of copyright law in the United States today. It took effect on January 1, 1978, implementing fundamental and sweeping changes in many aspects of copyright law."[2] Hull also points out that this Copyright act was the first law to incorporate the idea of "fair use" which is a way to permit the use of copyrighted material without having to directly get permission from the owner.

[1] Computer Hope. What Is a Copyright?, Computer Hope, 30 Dec. 2019, computerhope.com/jargon/c/copyrigh.htm.
[2] Hull, Geoffrey P. Copyright Act of 1976, Middle Tenessee State University, 2 Nov. 2019, mtsu.edu/first-amendment/article/1072/copyright-act-of-1976.

Determining an appropriate license agreement for one's software is important. Some of the most common licenses used for software are the MIT license, GPL license, and BSD license. For my code, I believe MIT or BSD to be the most fair of these because if people extend my code or make a fork of it, they would not be forced to open source their code like they would if I used GPL. This is explained by Ayala Goldstein from White Source, "GPL is a copyleft license. This means that any software that is written based on any GPL component must be released as open-source."[3] I would allow anyone to do almost anything with my open source code including publishing it closed source which is why I avoided GPL.

A programmer should know his obligations when it comes to using other's code. Copying code from the internet cannot be generally determined as ethical or unethical. If the owner of the code is openly sharing it and doesn't ask anything in return then it is most likely okay to use it. Section 2.3 of ACM's Code of Ethics says "Know and respect existing rules pertaining to professional work."[4] Going by this guideline, if the owner asks to be credited if used then credit him in the program somewhere. If writing a program for a school project, the goal is to learn; so copying code for school would not be ethical unless the student analyses the code and understands it himself and the professor is okay with using external sources.

It is unethical to use another's code without knowing the rights and obligations behind it. In the big picture, if one were to receive help from someone then when that someone expects something in return you should fulfill that. From a Christian worldview, failing to do so could be considered stealing. As Christians, we should make an effort to avoid such sins to stay closer to and represent Jesus.

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[3] Goldstein, Ayala. "Open Source Licenses Explained." WhiteSource, White Source Software, 5 Nov. 2020, resources.whitesourcesoftware.com/blog-whitesource/open-source-licenses-explained.
[4] ACM. "ACM Code of Ethics and Professional Conduct." Association for Computing Machinery, ACM, 2018, acm.org/code-of-ethics.

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