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Ethics of Copyright and Code

Copyright laws are nothing new and have existed for over one hundred years. Despite this, many people do not have a full understanding of how they work, especially when it comes to computer science. Having an understanding of copyright law and how to use it ethically is crucial in today's information age.

Before diving into copyright issues, it is important to have a solid foundation of ethics. There are two prevailing computer science codes of ethics. One is the ACM Code of Ethics, the other is the IEEE Code of Ethics. The ACM Code of Ethics is far more detailed and organized. It contains many of the ideas of the IEEE Code of Ethics but also puts a much greater emphasis on professionalism and integrity. It states very clearly that the goal of a computer scientist is not just to complete the work provided, but to do a professional job in both code and behavior ("ACM Code of Ethics and Professional Conduct"). The IEEE Code of Ethics focuses on security. It prioritizes writing secure code as well as not creating or exploiting breaches without permission. It holds the end goal of having a secure and safe program as the top priority ("IEEE Code of Ethics"). Neither code of ethics mentions copyright specifically, however the ACM Code of Ethics principle 2.3 is to "Know and respect existing rules pertaining to professional work" ("ACM Code of Ethics and Professional Conduct"). This includes national laws of which copyright belongs.

U.S. copyright law at its core is designed to balance the control that a creator has over their work and the ability of a consumer to use the work. Copyright law sets the rules for how

one can or cannot use another's intellectual property (RobbGrieco). Copyright law applies to computer software in the same way it applies to art or any other creative mediums. This is great for programmers because it gives them more freedom to share code as well as more control on how others are allowed to use it. A programmer can determine how and to what extent their works can be used by others. If someone were to use code without the creator's permission, they would be penalized and the creator would be protected. Additionally, it gives other programmers the ability to use code that falls under fair use or has been released freely.

A growing movement in computer science is that of open source programming. An open source program is released freely, often with the intent to be modified and redistributed. However, in order to release an open source program, it should have a license. A license is a legal document that gives the details about how a piece of software can be used. Without a license, copyright law defaults to exclusive ownership by the creator which prevents others from using the work ("No License"). A license is how a programmer sets the rules for how a program is allowed to be modified and distributed. This is where a programmer can include instructions on the limitations that their code can be used for, or what actions must be taken before using their code such as potential compensation. There are many different licenses that have already been written which can be used. The MIT License is very short and allows the user complete freedom. Other licenses, such as the GPLv3, are much longer and provide greater levels of control to the creator. If the program uses code from another source, it must abide by the license of that source ("The Legal Side of Open Source"). Simply giving credit to the original creator may not be enough depending on the code's license.

A programmer has a few obligations when reusing code from the Internet. The first obligation is to make sure to read the license of the code. If the code has no license, it is still

protected under copyright law. In this case, permission must be granted by the copyright owner. If the code's license does not exist and permission is not given by the owner, then the code should not be used ("No License"). This is very important as misusing someone else's code is plagiarism. In a school setting, it could mean failing an assignment or class. Outside of school, using stolen code and in turn violating a copyright law can end a career and even bring lawsuits or criminal charges. Beyond that, it can cause harm to the original writers of the code by stealing their hard work without proper compensation.

Inversely, it is important to make ethical choices of when to pursue action against somebody who has violated copyright. Sometimes taking action against somebody who has infringed on a copyright may be within the accepted rights of the copyright holder but is not necessary. For example, pursuing action against someone who has violated copyright accidentally may not always be the best option. The Bible states that Christians are not to take revenge on others and as long as the person is not hurting anyone or trying to take credit for and/or profit off of the work, then it can be best to let it go. It does not make their actions correct, but it is not worth trying to ruin somebody's life over simply using a copyrighted image by mistake. That being said, if the person is being malicious or if the infringement is harmful to the copyright owner or others, action should be taken.

In conclusion, although it may seem to be a daunting task, understanding and abiding by copyright law is ever-growing in importance. It is extremely valuable in protecting both the rights of the programmer and the user. Rather than limiting creativity, when abided by ethically, copyright law promotes and facilitates it. Computer science professionals should always remember to be ethical in their use of copyright law as its abuse can hurt others and damage the industry as a whole.

Works Cited

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