

Ethics as it Relates to Copyright in Computer Science

In an ever-changing world of computer programming, access to code through a widespread community creates the need for regulation. Safety measures that are put in place provide a safer way for programmers and pen testers alike to use one another's code safely with attribution. It is important to understand copyright and licensing agreements so that programmers can be aware of their rights as creators at a time when there are so many sources available at our fingertips.

Copyright itself has been around for many years. It wasn't until the 70's and 80's that discussions were had on whether or not copyright should include protection of computer software. According to copyright.gov copyright is known as, "a type of intellectual property that protects original works of authorship as soon as an author fixes the work in a tangible form of expression" (Copyright protection of computer software). This definition stems from the U.S. Constitution Article I, section 8 which states that "Congress shall have power. To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries" (*U.S. Constitution - Article I*). Essentially, what copyright means for us programmers is that no outside party is able to use or alter our code without running the risk of takedowns or other repercussions. Copyright use is critical in ensuring that we own the rights to our projects and can protect those projects from being used for any harmful or malicious purposes.

The question then arises, what is the best way to allow people to use already copyrighted code? This issue is solved through the use of licensing agreements. Licensing agreements are essentially contracts between the company or individual that has produced the program and the

end customer who will be using that specified program. When it comes to open source projects the legal default is still exclusive copyright which means that a developer needs to use a licensing agreement that will explicitly state the permissions they are allowing. An article written surrounding different types of licensing agreements states, “The license is a text document developed to protect the personal data of the software developer and then to restrict any lawsuits that could result after using it” (*9 types of software licensing: Necessary insights for developers*). A popular type of license that I would use for my code is known as a project-based license. These licenses are created to work for various people who work for multiple organizations. This would be a type of open-source license that would give the user certain privileges like alteration and re-use. I believe this license would be effective for my code because it would give others the ability to use what I write, on a project-by-project basis. Another type of license I might use would be a Network License to provide software connectivity to all my apps and computers on a single network.

As a programmer, using someone else's code from the internet needs to be ethical and transparent to everyone. In addition, full disclosure should be provided to parties involved, especially if personal information is being used. A section in the ACM Code of Ethics states, “Computing professionals should only use personal information for legitimate ends and without violating the rights of individuals or groups” (ACM Code of Ethics and Professional Conduct). This code of ethics explains how technology allows us to collect, monitor, and exchange information at a very fast rate, sometimes even without the knowledge of the people affected. With this in mind, programmers must remember to take proper legal precautions when dealing with their own, or other people's information.

The use of copyrights and licensing agreements allows for a safe way for us to protect and monitor who uses our code and for what reasons. Being a programmer during a time when open source is such a big aspect of the coding community means that we must use caution when releasing code to the public to combat any foul-play or malicious intentions.

Works Cited

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