Charleston Southern University

The Software Ownership Debate

A response to Intellectual Property

Thomas Ramsey

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Professor Yu-Ju Lin

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For everything created by people there is always the issue with who owns it. Software is included in the things that people have an issue over who owns it. Someone creates the software so he or she should be the one to own it, right? Not necessarily, there are some scenarios where part or even all of a piece of software should not be privately owned. To determine how software should be owned one must look at the "source code", the "object code", the "algorithm", and the "look and feel" of the software.

Lets looks at the "source code" part of the software first. According to the professor provided article, "The "source code" which is written by the programmer(s) in a high-level computer language like Java or C++,00". The "source code" is the code that the programmer(s) actually write, so it is essentially the most important part of the software and what makes the software unique. This part of the software should be owned by the person or company who created it because they put in all of the effort to create this part of the software. In the professor provided article it says, "Software companies or programmers would not invest weeks and months of work and significant funds in the development of software if they could not get the investment back in the form of license fees or sales [Johnson, 1992],". The "source code" is what we could consider the work of the programmers, so they should be able to profit off of their work just like other people in society due. Artist make money off of paintings they paint since they put all the work into the painting, the same with chefs and the food they cook, or musicians and the music they are singing. In the terms of ownership the "source code" should be owned by the actual creator of the original program in the form of copyright so that if someone comes up with a similar idea they can create software on that idea but cannot use already owned "source code",

but the owner of the "source code" can still make money off of their work. The ownership debate on software does not stop at the "source code" there is also the "object code".

The "object code" is where the ownership can get kinda fuzzy. According to the teacher provided article, "The "object code", which is a machine-translation of the source code,". The reason the ownership is kinda fuzzy is because the "object code" is created by the machine but it is created by translating the source code. A machine cannot take ownership of the "object code" since it's not human, so where does the ownership lie, that is why it is fuzzy. Some people might believe that the programmers that created the "source code" should own the "object code" too since the "object code" is created using the "source code", on the other hand, they are not the ones that are directly creating the "object code". The "object code" is what allows the software to be executable and cannot be read by humans so the "object code" ownership is debated. Since the use of the "source code" and the "object code" go hand-in-hand in creating software they both need to be protected. If the "source code" is being owned with copyright the "object code" should also be owned through copyright in order to protect the creators of the "source code" from people reproducing the software from the "object code". There are even parts of the "source code" and "object code" that are debated on with how it should be owned, that is the "algorithms".

Algorithms are the building blocks of software. According to the professor provided article, "The "algorithm", which is the sequence of machine commands that the source code and object code represent,". This would mean that the "algorithm" also pertains to the mathematical functions that are used to create the software, but the ownership of the "algorithm" is kinda apparent. The "algorithm" should not be owned by one person or group, and should be available

to the public, because ownership of the "algorithm" would lead to people unable to use certain mathematical functions that should be public domain. There should not be a debate on this part of the software because the "algorithm" is not really the unique creation of a programmer.

Besides the "algorithm" there is another part to software where ownership comes into question, it's the "look and feel" of the software.

The term "look and feel" are kinda ambiguous in what it means. According to the professor provided article, "The "look and feel" of a program, which is the way the program appears on the screen and the interfaces with users,". The look part of the "look and feel" term could be said as the part of this term that deserves ownership, still just in the form of copyright, because it created through the "source code", which should be owned through copyright. While the look part of the "look and feel" term should be owned by the same person that owns the "source code" the 'feel' part is the confusing part of the term in ownership. Although the 'feel' is created through the "source code" and is how the program interfaces with the users it would be detrimental to other programmers if they cannot have their programs interfacing with the users because all the ways to interface with the users are being owned by other people. The look of the program should be owned by the creator but the way it interfaces with the users should not be owned.

The terms of ownership when dealing with software is slightly confusing. The "source code", "object code" and the look of the software should be owned by the creator of the software in the form of copyright. The "algorithm" and the way that the software interfaces with users should not be owned by a single person or company, and should be available to the public.