public boolean decide(){

if(ethical()) {

do();

return true;

} else {

return false;

}

}

Oh, if only it were that simple. Understanding the ethical implications of a program is complicated. With many aspects of a problem to consider, it is not always clear whether a solution is helpful or harmful. Ethics is not black and white. However, it is possible for software engineers to take steps to make ethical decisions.

This process begins with design. Before software is even created, a software engineer should think about possible effects of their work. For example, if one forgets one’s password, one might write a program to get into one’s phone, but someone else could use this same software to break into other people’s phones. One might then decide that it would be unethical to publish this software. Software engineers should weigh the real life benefits for their users with the capacity to harm and then make the best judgment call that they can. It is especially important to use empathy, logic and critical thinking in their analysis.

In fact, even those involved after the initial design can and should still consider how their part will be used in the larger framework of the software. Using the same process of analysis, they can evaluate how their code may possibly affect individuals, the community, the environment, etc.

It is important for software engineers to think about the bigger picture when they’re coding. They might just think about what they intend for the code, but other people could use it for different purposes. This is especially pertinent if the software engineer created this code as open source.

Ethical impact is often hard to judge. Hindsight is 20-20 after all, but it can be hard to predict exactly what can come of any given action or creation. While software engineers should take precautions to avoid dangers, we shouldn’t be so cautious as to refrain from innovation just because someone might abuse our work. If we take the time to think critically and carefully about how we can affect other people, if we use our empathy for our fellow humans to try to help rather than harm, we can create great innovations that can bring us closer together.