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CSCI 325 Ethics Paper

I believe that one of the biggest ethical dilemmas that I and other programmers will face in the computer science field is the temptation of plagiarism and reusing code from the internet. Although plagiarism is well defined in many fields, “plagiarism in Computer Science can be a difficult concept to understand. Almost all computer programs contain ideas or short sections of code borrowed from elsewhere. But does that make it ethical to copy code without giving credit in your assignment?” (*Computer Ethics & Plagiarism: What is Plagiarism?*). It is important to recognize at what point referencing other's code becomes plagiarism and to avoid heading in a direction that could lead to negative consequences. Not only does “offloading the task mean missing out on learning [, but] copying the material is plagiarism, which is inexcusable.” (*Ethical Dilemmas in the Workplace*). While it is acceptable to reference language guides to gain understanding about a specific function or concept, it is not acceptable to completely reuse code that someone else has already written.

Section 1.3 of the ACM Code of Ethics calls for programmers to “be honest and trustworthy”, which means to work within their means and produce their own work (*Association of Computing Machinery*). Section 1.5 states to “respect the work required to produce new ideas, inventions, creative works, and computing artifacts”, which includes respecting other’s work as well as one’s own work (*Association of Computing Machinery*). This includes avoiding plagiarism as it is a disrespect to both of the parties involved.

One should prepare to face this challenge of resisting the temptation of reusing code by implementing good habits while in school by working to ensure that they fully understand their programming assignments and complete them without cheating. While I feel that there is always and will always be the temptation to take the easy way out, I feel that I am relatively prepared for handling this challenge. When completing assignments, I try to consult the internet as a last resort, consulting my textbook first to make sure that I have a firm grasp on what the assignment that I am completing is about and focusing on the things that I will need to know to finish it. I plan to work towards continuing to prepare for this ethical dilemma in the workplace by rounding out my experience with the different languages that I might need to know, as well as collecting resources that I can use later such as official language guides.

Programmers have a standard of ethics and conduct that they should take into account and abide by. One of the principles within the ACM Code of Ethics and Professional Conduct is:

> 2.6 Perform work only in areas of competence.
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> […]This includes evaluating the work's feasibility and advisability, and making a judgment about whether the work assignment is within the professional's areas of competence. If at any time before or during the work assignment the professional identifies a lack of a necessary expertise, they must disclose this to the employer or client. (*Association of Computing Machinery*)

This principle calls for a programmer to work within their means and to only take on assignments that they are capable of accomplishing. If a programmer is taking on a project that they are not capable of completing, then they are wasting time, effort, and resources. This can also be extended to many other careers and areas of life. This principle is backed up by Biblical values, namely from two specific Scriptural references. “All hard work brings a profit, but mere

talk leads only to poverty"; while claiming that oneself is capable of accomplishing an assignment might gain them more work or respect for taking on a certain project, it will ultimately lead to a waste of time and resources that would be better used elsewhere (*NIV*, Prov. 14:23). In addition, the following verse helps to highlight this concept, "'everything is permissible' – but not everything is beneficial. 'Everything is permissible' – but not everything is constructive"; not everything is beneficial or constructive and working on a project that is not within a programmer's means is a waste (1 Cor. 10: 23-24). Instead of focusing on a project that someone cannot complete, they should focus on putting their time and effort into projects that they can finish and that will be helpful to the greater community.

Another important code of ethics for programmers to take into practice comes from the Institute of Electrical and Electronics Engineers, with one of the principles being:

> II. To treat all persons fairly and with respect, to not engage in harassment or discrimination, and to avoid injuring others.
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> 7. to treat all persons fairly and with respect, and to not engage in discrimination based on characteristics such as race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression. (*IEEE*)

This calls programmers to treat everyone that they interact with equally and with respect and to not discriminate on qualities such as race, gender, age, and many other defining characteristics. This principle is backed up by Biblical values and through specific Scriptural examples. Ephesians states, "do not let any unwholesome talk come out of your mouths, but only what is helpful for building others up according to their needs, that it may benefit those who listen"; it is not beneficial to put anyone down or to discriminate, but rather people should lift each other up (Eph. 4:29). Galatians speaks more on non-discrimination: "there is neither Jew nor Gentile,

neither slave nor free, nor is there male and female, for you are all one in Christ Jesus" (Gal. 3:28). Regardless of many defining characteristics or values that people have, in the end, everyone is human and should be treated with the same level of respect.

I believe that in any career, people will be faced with many ethical dilemmas, but that those choosing to pursue computer science will perhaps struggle the most with the dilemma of plagiarism and reusing code from the internet. I am personally taking efforts to avoid this temptation of taking the easy way out and simply relying on solutions from other people, but instead working towards understanding what I am working on and what I need to do to complete my assignments. In addition to navigating these ethical dilemmas, programmers also have ethical codes to abide by such as the ACM Code of Ethics and Professional Conduct and the Institute of Electrical and Electronics Engineers Code of Ethics.

Works Cited

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