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The Horrors of Unreliable Code

In the industry of technology, there is always issues that can arise from poorly tested tech. There are many reasons why this is the case, whether the programmer decided not to take enough time to test, the time to test was low, or the lack of care the programmer put into the program, as examples. There are many ethical dilemmas a programmer will face during their time, as programs are not only made for themselves, but for many others to use. In the situation of THERAC-25, I believe that both the programmer and company was at fault in this situation, as both the programmer and company broke codes of ethics and created a dangerous form of decision making for an important choice.

For any program, especially if connected to hardware, there must be numerous amounts of testing to make sure there are no issues. To determine the amount of testing that is necessary depends on what the program is going to be used for, as if the program is something personal, only testing what needs to be tested may be fine, but if the program is to be sent and used by many people, the programmer has the responsibility to test the program thoroughly. To not test a program thoroughly before giving it to the people that want it is breaking rule 2.1 of the ACM Code of Ethics, as every programmer in the professional field should strive to create the highest quality products. If the person making the program does not have access to the hardware, I believe that they should not program for it, as blindly coding is not an efficient process. I do not believe there is a justifiable reason to sell a less reliable system, even if it may potentially help

more people, as the possibility of helping one person, but possibly harming others is not worth the ethical dilemma that would affect a person's life. As stated in Deuteronomy 22:8, to bring guilt into your house may affect the others around you, so to pick the option that would cause less guilt in the future would be the one that would help everyone around yourself. We could solve this issue by making sure the programmer has enough time to do proper tests with the hardware before officially using the item. I personally would not use the machine on myself, as if I am at a point of no return, to possibly cause more damage would not be ideal.

For engineers, the US requires a certification that would ensure that the engineers are capable of building a reliable product. I believe that software engineers should be required to have a license of sorts, as if a product that needs to be reliable is being programmed by a person who isn't specifically qualified for a professional project, the program may not come out as efficient or reliable. For example, if someone who taught themselves how to do a surgery does not have a license, I would not want to hire that person, as a surgery cannot have many mistakes. When I need a reliable person for the job, I would want some who is qualified with a license.

Overall, I believe that technology that is not tested fully is on fault of the programmer for pushing a product they knew was not fully tested, and on the company for wanting the program without the program being fully tested. The moral obligations of a computer professional are really high, as programs should be reliable and tested if given to an important situation. On the contrary, a programmer could lose their job that feeds their family if they do not give a program a company wants, even if the program is not fully tested. I can understand the situation put onto the programmer, but I believe the ethical and moral obligations are too high in order for a programmer to release code that isn't reliable.

Works Cited

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