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Ethics in the Field of Engineering

As engineers, it is important that we stick to a strict set of ethical behaviors. With this, we are able to avoid shady business practices and blatant disregard for general society's wellbeing. Due to the nature of being an engineer, we are often held under a microscope of ethical laws because what we can create can have serious consequences. Such as a software engineer creating malicious code targeting or attacking for monetary gain or an electrical engineer stating assurance of proper steps followed when designing a product, then a consumer being injured because the engineer took shortcuts in development.

In the face of harsh or difficult situations related to ethics, it is imperative to look at the IEEE Code of Ethics as a baseline to determine your next plan of action. When looking at a situation in a morally grey area, it is always best to side with the morally correct course of action. Typically, in situations like this, it is important to understand why this situation occurred. For example, if it happened due to time constraints or laziness, it is easy to see the correct moral side. In other situations, it might take more work to determine the correct course of action. In these situations, you should look for what is best for people's well-being in the short run and the long run.

In this class, we have looked at some less-than-morally correct actions by large companies, such as the Pinto incident. In a brief synopsis, the Ford Motor Company created a vehicle prone to

catching on fire and exploding when hit from the vehicle's rear. This was seen in testing, and instead of creating an $11 fix, they decided not to address the issue because it was cheaper to pay for the deaths than to fix the part. This violates many key points of the code of ethics that these engineers should have argued against.

At some point there is a moral grey area where it is almost impossible to prove if a decision is ethical or not. The strongest option is always to air on the side of ethics and try to adhere to guidelines as closely as possible. Overall, with a large group of people, it is generally easier to determine whether something is ethical. This is because the more inputs, the more people decide whether something is right or wrong. Obviously, herd mentality can lead to negative outcomes. Still, if every person alive could know every piece of information made in a decision, then the majority would be the most ethical.

For my Virtue of Ethics, I chose integrity honesty, and responsibility. I chose these because it relates best to the idea of the Pinto incident. First, the engineers who knew that there was a fatal problem did not show integrity because they let the car pass the inspection knowing that it had a flaw. Second, honesty, though there was knowledge of the flaw enough to warrant the creation of a fix to the problem, it was never shared publicly until it was discovered due to all the fatalities. Finally, as engineers we should be held to a standard of ethics higher than the average person. The engineers showed blatant disregard for the power of their actions and should be held morally and ethically accountable.