I. Ethics Overview

Engineers are those who design, build, and invent. Almost any product, service, or public work that we interact with daily has had input from an engineer. Because of this widespread influence, it is important for engineers to have a strong code of ethics.

A code of ethics is a document explaining right and wrong, and how to make ethical decisions. This code can be referenced when an individual is unsure on how to approach a situation from an ethical standpoint. Having a static document to help make decisions is important for consistency. Many organizations, both professional and commercial, have a code of ethics for their members or employees to follow. An individual can also have their own code of ethics that incorporates their own personal values. When an engineer follows a code of ethics, employers, colleagues, and society can count on them to act in a reliable and ethical manner.

Everyone must make ethical decisions in their life and career, and I am no exception. When I come to an ethical decision, I like to try to look at the problem from many different points of view. Using these points of view, I then think about how the issue would make me feel if it affected myself. The most common issues I see come up are those of safety, privacy, and fairness. I believe that looking at an ethical issue from multiple sides allow me to come up with more just solutions.

II. In-class Applications

An example of an ethical issue we discussed in class was police using Amazon Alexa to get evidence for a murder investigation. In this situation, investigators believe that the Alexa may have recorded audio during a murder where there were no witnesses present, but Amazon (the company where the possible recording would be on file) argues that there will be no useful information, and that accessing that information will be a violation of their customer's privacy. This is an interesting example because there are strong ethical arguments to make for both the police and Amazon.

There were multiple opinions in the group that discussed the Amazon Alexa issue. One side believed that the investigators were in the right to request the audio records from Amazon, no matter the unlikelihood that they would reveal any information. This side argued that it is in the interest of public safety to have the evidence necessary to put a murderer behind bars. The other side of the argument was that the owner and parties recorded on the Amazon Alexa device did not consent to having themselves recorded and used by the police. In many states all parties must consent to being recorded by the police. Both sides had valid ethical arguments for public safety and personal rights.

This is a good example of a situation where even though all parties are trying to act ethically, they can still conflict in their opinion on course of action. In the end the two groups were able to come to a compromise. The groups decided that Amazon should put in the terms of service that your audio may be used in criminal investigations, and that instead of giving the audio directly to the police to be used in evidence, and independent organization should review the files to see if the information would be valuable to the investigation. We found this to be an ethical decision that protected both public safety and personal rights.

With respect to the six virtues of ethics, there are three that really stand out in this situation. The three virtues that I can see in this situation are responsibility, integrity, and honesty. The parties involved need to show responsibility toward the public in making sure a violent criminal isn't walking free, while also protecting individual rights to privacy. Honesty needs to be practiced by both the criminal investigators and Amazon to ensure that both parties can be trusted by each other and the public. Both parties must act with integrity, maintaining openness and acting in the best interest of individuals and public safety.

III. Conclusion

The field of ethics in engineering is both complex and indispensable. Any good engineer needs to understand the values of themselves and others, and how their actions and decisions affect the general public. With this in mind, engineers must maintain a strict code of ethics and follow it in both their careers and personal lives.