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## **Ethics Essay**

As engineers, we are constantly innovating and changing the world around us. As a result, there are certain things that we are obligated to do ethically, such as protect the lives and information of people in society. For example, this could be ensuring that all data is properly encrypted, or that there is sufficient testing in hardware and software so that people's lives are not at risk. This could be seen in autonomous vehicles, as if anything goes wrong, crashes could occur, causing harm to occupants of said vehicle. IEEE has a Code of Ethics which outlines certain things that we are professionally obligated to do. This could include things such as rejecting bribery, or being honest with claims and not stretching the truth, or even properly crediting the contributions of others. The purpose of having said Code of Ethics is to maintain a society that allows everyone to pursue the best quality of life.

When faced with an ethical situation, one must be sure to always think from the perspective of others, as well as how your situation may impact different pieces of society. You must also consider all possible outcomes and their impacts. In class, a variety of ethical decisions were discussed, including whether or not it is wrong for the Amazon Alexa to collect information, and whether or not it would be wrong for Amazon to give that information to anyone. While it may always seem wrong to give up the private information of others, there are cases where it may be harder to think if it is ethical or not, such as in solving a murder case. The two competing interests would be Amazon, who is trying to protect their reputation, and the

police, who are trying to solve a murder. An appropriate course of action would possibly be for Amazon to only give the information to the police with the user's permission. This could not only solve the case, but would not hurt Amazon, because they did not give out the information without permission. The ethical considerations introduced by my class differed in some ways, but in other ways they were quite alike. What made it difficult to come to a consensus was that many issues discussed were in part both ethical and unethical, and it is quite difficult to decide which way you should go when both decisions feel wrong in some way.

There are a variety of ethical issues that may come up during our lifetimes. One example of such an issue may be a company performing reverse engineering of a competitor's products. A relevant code of ethic would be to avoid injuring others, their property, reputation, or employment by false or malicious action. Considering how this company is reverse engineering a competitor's product in order to recreate their parts or out-do them, they're trying to beat them, which could potentially run them out of business and damage the property and employment of others. In our society, it makes sense that they are competing, but it also seems wrong ethically to reverse engineer their products. As a result, a resolution to this conflict would be to simply build their own parts from scratch, doing their own research, rather than copying their competitors. This may seem less shady, and improve the reputation of the company.