

Homework #1: Ethics

Honor Pledge: I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination.

1. Who do you alert of the problem, and in what order?

First, I would alert my boss and then regulators such as the FAA and US-CERT. If I were to alert the consumer watchdogs, general public, or social media, then this could cause a panic, resulting in significant financial losses for companies. This may also lead to malicious actors hitting the books and finding the vulnerability and exploiting it for money or ideological purposes.

2. If your boss pushes to keep it quiet, what would you do?

If my boss were to request that the exploit and vulnerability are to be kept quiet, I would bring the issue to the attention of those higher up in the chain of management. I would also request for such management to alert federal authorities and all companies that use the software to minimize the risk. If they do not request an update for the software and tell the appropriate authorities, then it would be my responsibility to alert the proper authorities and to provide evidence of such issues in the code.

3. If nothing is done and it results in the vulnerability being exploited in the wild, who would be responsible?

If nothing is done to fix the vulnerability and it was to cause financial or human damage in the real world, the responsibility would most likely fall on the person who discovered it (me). For example, if I found the above vulnerability and made it known to my teammates and management and nothing was done, I could still go to the authorities like the FAA and US-CERT. Also, if the vulnerability was never discovered and was exploited in the real world (i.e. a zero-day) then the responsibility should fall on the person(s) who developed the code. However, if I was threatened and pressured to not publicize and fix the vulnerability (ie I am the only one who knows and I get disappeared if anyone finds out), then the burden could lay on the person(s) who threatened me.