Grace Liu

Professor Cappos

Computer Security

2 November 2023

Assignment 2.3 Writeup

Originally when I did assignment 2.1, I misinterpreted the assignment details and only fixed the undo operation in my reference monitor. This resulted in me having a very insecure reference monitor, as many of my classmates' attack cases were able to log a vulnerability.

This time for assignment 2.3, I made sure to update the other necessary functions in the reference monitor, such as the __init__ constructor, the writeat() function, and the close() functions. I used classmates' attack cases and reference monitors as references.

In the __init__ constructor, I added variables for the file size and pending file size, and I added a bool to keep track of if the file was opened or not.

In the writeat() function, I made sure to check for exceptions such as if the file was open or not, if the offset was above 0, and if the offset was in limits of the file size.

In the close() function, I updated the file boolean to True after closing the file and performed a final writeat() before closing the file.

If I had the chance to redo the assignment, I would definitely be more attentive to the bugs/vulnerabilities in the original reference monitor that we were given, and as a result I would be able to come up with a larger variety of attack cases that would produce more successful logs than not.