

1. ITEM 13: Security Testing Used

ISSUE: File paths are hardcoded.

Pull Commit: [c3ff670](#)

A huge security issue that I had only noticed after working on the “Fixing Bad Code” assignment is that there are a lot of instances where the file paths are hardcoded as strings. To fix this issue I decided to do a bit of research and concluded that having the file path be relative rather than an absolute path would make it more secure as it would make it harder to locate these files and exploit them. However, this remains a work in progress, and I have not finished it yet and have implemented it to the font file path.

2. ITEM 14: Making sure that sensitive information is not accessed accidentally by user.

ISSUE: Potential buffer overflow by using pointers. (WIP)

Pull Request: [cddefc4](#)

In the renderBattle function from my program pointers are used to change data which may case can become a risk. If there is a scenario where the size exceeds the buffer size it may lead to the program crashing or worse any bad actor may execute code. While not committed to the code, a fix I am working on is by using vectors rather than the raw pointers used for “party1” for the Pokémon.

These changes were done to the pokemonProjFinal.cpp

ITEM	PRIORITY	DIFFICULTY	TODO
6	MID	MODERATE	Implement an up-to-date version of SFML and make changes to code if need be.
7	LOW	EASY	Install the newly bought ring cameras around the outside of the house as soon as they arrive.
12	MID	MODERATE	Add more error handling to diminish possibility of crashes and vulnerabilities.
14	HIGH	MODERATE	Find a way to have the program validate any inputs made in the mouse event. Currently it blindly accepts the user’s inputs.