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IT FDN 110 A

Assignment #8

Lessons Learned

One of the biggest takeaways from this course was learning how to structure code in a way that actually makes things easier to work with long term. Early on, it felt like everything just got lumped together, which made things harder to read and debug. Over time, breaking the program into smaller, more focused parts really helped it all come together. Separating out different responsibilities like managing data, handling logic, and interacting with the user made the project feel more organized and easier to update. It also made troubleshooting a lot less overwhelming since I could pinpoint exactly where an issue was coming from. On top of that, getting experience with saving and loading data, validating inputs, and managing errors made the program feel more realistic and practical. There were definitely a few moments of frustration, but solving those problems step by step helped everything start to click. Looking back, it wasn't just about finishing an assignment—it was about learning how to build something clean, flexible, and dependable.

Beyond the technical side, this course really changed the way I think about programming in general. I used to focus mainly on whether something worked, but now I think more about how understandable and reusable the code is. Writing things clearly, keeping everything consistent, and leaving helpful comments turned out to be just as important as getting the logic right. That shift in mindset has a lot of value, especially for a career in marine science where teamwork and long-term data projects are common. Whether it's organizing research data, automating repetitive tasks, or sharing tools with others in the field, those foundational programming habits will definitely come in handy. It's also helped me feel more confident in learning new technical tools and adapting them to real-world problems. Understanding how to build solid, well-structured code means I'll be better prepared to take on future projects, even ones that don't involve coding directly. Overall, the course was a great mix of technical learning and big-picture thinking, and it's something I'll carry with me moving forward.