C# Final Project Module 10

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Project Overview

This project was basically about making a simple C# program that could keep track of contractors and subcontractors. We needed two classes, so Contractor had stuff like name and number, and then Subcontractor added shift and pay rate. Users can add a bunch of subcontractors, and the program figures out their pay depending on the shift. Night shift gets a little extra. Most of the work was just setting up the classes right so it didn't get confusing, and trying to make sure if somebody typed the wrong thing it wouldn't crash everything. It took a few tries to get it all working without bugs.

Challenges and Hurdles

Starting the project, setting up the Contractor and Subcontractor classes sounded simple enough. It didn't seem like it would take that long. But after trying to actually split the fields between the two, it got confusing. It took a little longer to figure out which parts should stay in the Contractor class and what needed to be in Subcontractor. After initially setting it up, it just did not feel right, so we had to change it again. It slowed things down because even making small changes meant testing it all over again to make sure nothing broke.

Input validation ended up causing more problems than expected. In the beginning, the program let users type anything... letters, wrong numbers, symbols. It messed up the pay calculations pretty much immediately. Adding basic checks helped a little at first, but they didn't catch everything. It took a bunch of tries to get loops that would actually block bad inputs and not crash if somebody typed random stuff. Even getting the program to only accept a shift value of 1 or 2 ended up being way more annoying than it sounded.

Keeping everyone on the same page wasn't easy. Different life schedules and slow replies made it even harder. Sometimes it made more sense to keep pushing forward on the main parts instead of waiting around. Getting the project done on time meant focusing on what had to be finished first before worrying about anything extra.

Potential Improvements

If there was more time, it would have been helpful to add a way for the program to save subcontractor information so it could still be there after closing it. Right now, once you shut it down, everything is gone, and that definitely makes it less useful. It would also be good to add something so you could go back and fix a mistake if you entered the wrong information by accident, like editing or deleting entries instead of just starting over. Some kind of menu might make the program easier to navigate too, because right now you kind of have to know exactly what to type. Cleaning up the instructions and making sure every error message actually explains what went wrong would also help a lot, especially for people who haven't used programs like this before.

Github link: https://github.com/Joewhat89/Module10FinalProject