Palm Beach State College
COP2360 – C# Programming
Module 10 Final Project – Classes & Objects
Group Submission
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COP2360 – Module 10 Final Project (Classes & Objects)
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Project Overview

For this project, our group created a C# program that demonstrates object-oriented programming using two classes: **Contractor** and **Subcontractor**.

The Contractor class holds basic contractor information, and the Subcontractor class inherits from it while adding shift details and hourly pay. The program also includes a menu that allows the user to add subcontractors, list them, and calculate pay — including a 3% shift differential for night shift workers.

This project shows our understanding of constructors, accessors, mutators, inheritance, control structures, and basic program flow in C#.

Group Contributions

Every member of the group contributed equally to this project. We all participated in discussions about how the classes should be structured, reviewed each other's ideas, and made sure the logic and requirements were met. Each person played a part in helping the group stay organized and complete the assignment.

Challenges We Faced & How We Solved Them

Understanding the class relationship:
At first, it took us a moment to clearly map out how the Contractor and Subcontractor classes

should interact. We reviewed examples together and clarified the inheritance concept before coding.

Shift differential logic:
We had to make sure the night shift differential was calculated correctly. Testing a few scenarios helped us confirm that our math and conditional logic were correct.

Managing multiple objects:
Another challenge was figuring out how to organize multiple subcontractors without the program becoming confusing. After discussing it as a group, we chose a straightforward way to store and manage all of them together.

If We Had More Time…

With more time, we would have added features to take the project even further, such as:

- Validating user input
- Saving subcontractor information to a file
- Adding more menu options and reports
- Building a simple interface instead of using the console

Conclusion

Overall, this project gave us good hands-on experience with C# classes, inheritance, and basic program structure. Working as a group helped us combine our strengths, talk through challenges, and complete the assignment successfully.