

Classes and Objects

Write a program that will create two classes; *Services* and *Supplies*. Class *Services* should have two private attributes *numberOfHours* and *ratePerHour* of type float. Class *Supplies* should also have two private attributes *numberOfItems* and *pricePerItem* of type float. For each class, provide its getter and setter functions, and a constructor that will take the two of its private attributes. Create method *calculateSales()* for each class that will calculate the cost accrued. For example, the cost accrued for the *Services* class is computed as *numberOfHours* times *ratePerHour*, and for the *Supplies* class the cost will be *numberOfItems* times *pricePerItem*. Each class should have a function *__str__()* that will return all the required information.

Write a *main()* program that applies a Python list to store at least two objects of each class mentioned above. Implement all available functions to demonstrate your understanding of applying those methods in your program. Make up your own data when creating each object and print out each object's information accordingly. Please submit your UML diagram. Your code is expected to be commented-on and user-friendly.

Write a Learning Report Summary

Using Microsoft Word or any text editor, answer the following eight questions.

1. Did you complete your assignment and did it run without errors?
2. Did your program produce the correct result?
3. Did you test your program thoroughly?
4. How much time did you spend completing your assignment?
5. Did you write the program yourself? Did you get any help from anyone?
6. How did you resolve the issues when you encountered obstacles to completing your program? Did you use Google to get help? Describe how Google was able or not able to assist you?
7. What did you learn from doing this assignment?
8. Any other information you would like to share with your instructor?

What to Submit

- All source code files (.py extension).
- Program output, showing multiple runs with valid and invalid cases/inputs
- Your learning report summary
- Submit your UML diagram