

Credit Name: CSE 3130 Object-Oriented Programming 2

Assignment Name: Vehicle, Car, Truck, Minivan

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Reflection Log

Understanding the Problem

To understand the challenge, I first read the instructions carefully to see what classes I needed (a parent abstract class and three subclasses: Car, Truck, and Minivan). I also asked ChatGPT for some vehicle attributes for each one. This helped me decide which variables and methods belong in the parent class and which belong in the children.

Planning the Solution

Before coding, I made a simple plan: create the abstract Vehicle class with shared variables (make, model, year) and an abstract method displayInfo(). Then I created three subclasses (Car, Truck, Minivan) that each have their own unique attributes and override displayInfo() to show information specific to their type. I chose this structure because I needed inheritance, polymorphism, and abstract classes for the assignment.

Implementation

I wrote the code in small pieces. First, I created the Vehicle abstract class, then the Car subclass, followed by Truck and Minivan. Finally, I wrote the MainVehicle class to create objects and display information. Writing it step by step helped me make sure each class worked before moving on to the next.

Overcoming Challenges

I initially had a problem when I capitalized the T in toString(), which caused the program to not recognize the method correctly. It took me a long time to figure out the error because eclipse doesn't underline those in red, but I remembered Mr. Abdullah said something about that during one of our skillbuilders which helped me recognize the spelling issue.

Learning

I learned more about how subclasses interact with parent classes and how the information is actually transferred between classes.

Some resources I used

<https://www.youtube.com/watch?v=HvPIEJ3LHgE>

https://www.w3schools.com/java/java_polymorphism.asp

<https://www.geeksforgeeks.org/java/overriding-in-java/>