

Python Programming

Exercise 6: Object Oriented Programming

Prof. Dr. Thomas Kopinski

November 10, 2021

Abstract

This exercise will focus on implementing classes in python and working with simple inheritance.

Task 1: A simple class

- implement a base class for a vehicle
- the typical attributes of a vehicle are: owner, brand name, model name, weight, mileage and maximum speed
- implement a method that drives the car for a given distance x (in km) and displays the new mileage
- implement a method that changes the owner of the vehicle and displays the new owner
- implement a second class that defines a school bus
- in addition to all the attributes of a vehicle this Bus has a line number, a current driver and a seating capacity
- write methods for changing and displaying the said attributes
- Test your implementation
- use the python isinstance function to determine whether the bus is a vehicle