

AfL - Exit Ticket

Prerequisite Knowledge for Trees

- Basic data structures and types (int, string, lists)
- OOP: classes, objects and methods
- Implement basic algorithms
- Recursion (note: tree implementations do not require recursion, but it does make it simpler. I'm assuming I am teaching trees after recursion. But the lesson could be altered so that recursion is not required knowledge if needed).

Exit Ticket

1. Define a class `Pet` that contains the following fields: `name`, `species`, `age`, and `weight`.
2. Define a class `PetShop` that consists of a list of `Pet`.
3. Write a method for the `PetShop` class that returns the mean age of all the pets at the pet shop **using recursion**.
4. Write a program that creates one `PetShop` and multiple `Pet` objects (your choice of pets) and prints the mean age of the pets at the pet shop.