

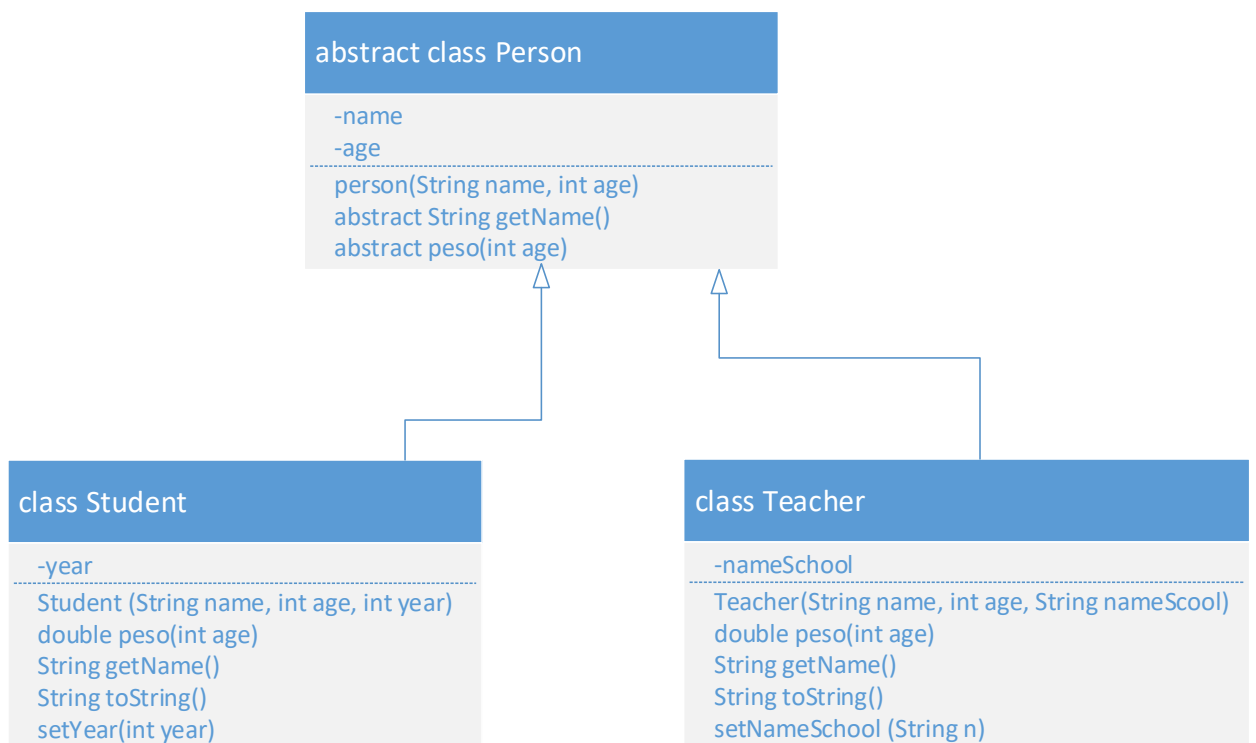
Lab-6: Abstract Class

Objectives

1. The notions of Abstract classes.
2. To use keyword implements to use a interface.
3. How constructors are used in inheritance hierarchies

Exercise

1. Given the following class hierarchy:



- a. Write an abstract class **Person** that implements the above methods. A person should have a given name and age.
- b. Write the **Student** class that inherit from **Person**. In addition to a name, age, Students should have a current year in school (year). The method `toString()` print Student information as well. The method `getName()` return the name variable, `setYear()` modify the variable year and the method `peso()` find the weigh of the student ($\text{peso} = \text{year} * \text{age}$)
- c. Write the **Teacher** class that inherit from **Person**. In addition to a name, age, Teacher should have the name of the school (nameSchool). Method `peso()` find the weigh of the teacher ($\text{peso} = \text{age} * \pi$). Others method have the same structure like Student.
- d. Write a **PersonTest** that is capable of printing a list of four students and two teachers. Test all methods and change the variables (set methods).