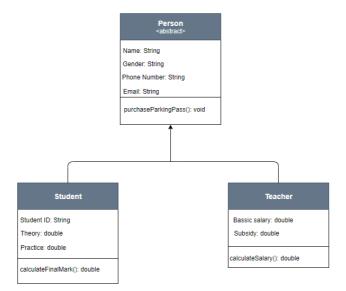
## **Assignment Specifications:**

For the class hierarchy is as follows, the trainee let's create the java classes install this class diagram to be able to relationship between it.



- » The **Person** is an abstract superclass and has four fields: fullName, gender, phone, email.
- » The Student is a concrete subclass of Person and adds 3 new fields: studentId, theory, practice. Provide calculateFinalMark() method to calculate the final mark of a student by an average of theory and practice.
- » The **Teacher** also is a concrete subclass of **Person** and adds two new fields: basicSalary, subsidy. Provide method **calculateSalary**() to calculate the teacher's salary by recipe:

Salary = Basic salary + Subsidy.

## **Business Rules:**

- » birthDate: correct date format (dd/MM/yyyy).
- » email: correct email format.
- » theory, pactice: in the range from 0 to 10.

## **Problem Descriptions:**

Create a class named PersonManage that contains the main method will be using the Person class and its subclasses allow selecting the functions as follows:

- » Input data from the keyboard: create an array of 10 Person of all types as mentioned above.
- » Update student: update student info by entering studentId.
- » Display teacher: displays information about teachers, who has a salary higher than 1000\$.
- » Report: display all students and their final mark, who qualify to pass the course (final mark >= 6).

## **Guidelines:**

Create a project named TrainingManagement:

- » Package training.entities that contains Person, Student and Teacher class.
- » Package training.utils that contains Validator class for validation.
- » Create a new package named *training.main* contains **Program** class.