

Task 1:

- 1) context Register inv: self.year > 2019
- 2) context Register inv: self.className.startsWithDigitFrom1To9()
- 3) context Person inv: Pupil.age > 6 and Teacher.age > 20
- 4) context Person inv: self.name.length() > 0
context Person inv: self.surname.length() > 0
- 5) context Grade inv: Set{2,3,3.5,4,4.5,5} -> includes(self.value)
- 6 and 7) -
- 8) context Register::averageOfSubject(subject:String): Real
Body: sum(subject. grades)/count(subject. grades)

context Register::averageOfPupil(pupil:Pupil): Real
Body: sum(pupil. grades)/count(pupil. grades)

Task 2

Given answer:

IsSelected:Boolean

Test:

Result: Real

Test Definition:

Title: String

Subject: String

Date: Date

TimeFrom: DateTime

TimeTo:DateTime

Question:

Description: String

Score: Real

Answer:

Content: String

IsCorrect: Boolean

Teacher Account:

Degree: String

Account:

Name:String

Surname:String

Login: String

Password: String

Student Account:

Album: Number

Faculty: String

Major: String

Active: Integer

*Structure and operations are implemented is inside of the Java project