Seminar 07 Classes

Classes



Objectives

Using Python to solve complex problems

- Implement complex programs using Python
- Solve problems using abstract data types
- Implement classes and methods
- Develop unit tests
- Use design patterns



Requirements

Continue the development of the application from Seminar 6.

- i. Make the following changes at the level of class *Student*:
 - The grade becomes a list of grades
 - Add attribute 'group'
- ii. Make the following changes at the level of class *StudentRepository*:
 - 1. Get the student with the maximum grade.
 - 2. Get the student with the maximum average grade.
 - 3. Get the average of the maximum grades of students from the same group.
 - 4. Get the minimum grade of any student from a group.
 - 5. Update the grades of student given the id.
 - 6. Given a student name, return the id(s).
 - 7. Update the group of a student given the id.
 - 8. Delete all grades of a given student.
 - 9. Delete all students from a given group.
 - 10. Delete all students that have no grades.