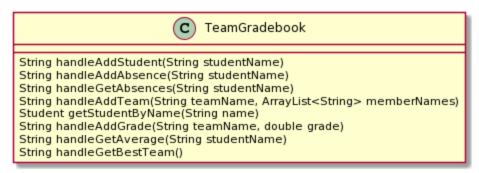
Design Problems, HW2	Name:	CM:	

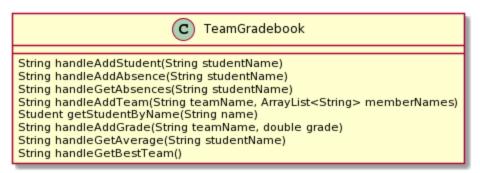
**Team Gradebook**: You are implementing a grading application for a hypothetical school's class. In this class, each student is a member of one or more teams - each team has a unique name. The teams are assigned grades for the work they submit. A student's average is the average of all the grades earned by each of the teams to which that student is a member. The app will also track each student's absences. There should be a method to get a String representation of the best Team. NOTE that "best team" is different from the team with the best students. The average is for the grades FOR THAT TEAM - not including other grades that students on that team might have.

#### Solution A



### **Source**

#### Solution B



Both of these designs have the worst kind of problem: **they don't function**. For each, please identify the problems with each one (by number, either principle 1a, 1b, or 1c) and explain how it violates that principle. Then propose a new design of your own that works correctly.

Problems With A

# Problems With B

# Solution



# C TeamGradebook

String handleAddStudent(String studentName) String handleAddAbsence(String studentName)

String handleGetAbsences(String studentName)

String handleAddTeam(String teamName, ArrayList<String> memberNames)
Student getStudentByName(String name)

String handleAddGrade(String teamName, double grade)

String handleGetAverage(String studentName)

String handleGetBestTeam()