### Team 14

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# **Team Contributions**

Alex Jo: Basic requirements and design, domains/relations/constraints, module

dependency diagram, Assignment, Student, Teacher, worked on

MyGradeBook

Patrick: Basic requirements and design, user cases, Console, worked on

MyGradeBook

Danny Wolf: Basic requirements and design, UML diagram, worked on MyGradeBook Basic requirements and design, domains/relations/constraints, module

dependency diagram, BlackBox testing, worked on MyGradeBook

## Domains

Student: One student enrolled in the given course

Teacher: A teacher for a given course

Assignment: An assignment (eg. a test, quiz, homework, lab, participation) includes a name, description, type, and contains point value and teacher notes for each student.

Course: A collection of the teachers, students, and assignments for a given course

#### Relations

Student: Can access his or her own grades for a given course

Teacher: Can access all grades for the course, edit grades, curve grades, add or remove assignments, add or remove students.

Assignment: Can calculate averages for all students across the assignment, as well as calculate mean, median, mode, standard deviation.

Course: Allows the teacher to add or drop students and assignments. Also manages the lists of students and assignments associated with it.

## Constraints

- A course must have at least one teacher and one student.
- Students cannot add or drop other students or assignments or courses.
- Grades for an assignment only exist for students enrolled in the course the assignment comes from
- Students can only view their own grades
- Teachers cannot add new courses

#### User cases:

- ----- Changes made to the final project
- ----- Student use case removed
- ----- Updated order of console commands to reflect new UI
- 1. System prompts for a filename to import gradebook from, or 'empty'
- 2. Teacher inputs a valid filename or 'empty'
  - 2a.If filename is invalid, the system closes
- 3. System prompts teacher for various options
  - 3a. Teacher enters 1: 'add students'
    - 3al:System prompts to enter from a file or manually
    - 3all:Teacher enters info, following prompts
  - 3b. Teacher enters 2: 'Add assignments'
    - 3bl:System prompts to enter from a file or manually
    - 3bII: Teacher enters info, following prompts
  - 3c. Teacher enters 3: 'Add grade'
    - 3cl:System prompts to enter from a file or manually
    - 3cII: Teacher enters info, following prompts
  - 3d. Teacher enters 4: 'Change student grades'
    - 3al:System prompts for student name, assignment, and new grade
    - 3all:Teacher enters desired info
  - 3e. Teacher enters 5: 'Calculate stats'
    - 3el.System prompts for assignment name
    - 3ell.Teacher enters desired info
    - 3eIII.System displays relevant information for the assignment
  - 3f. Teacher enters 6: 'Get student info'
    - 3fl.System prompts for student name
    - 3fII.Teacher enters student name
    - 3fIII.System prints out relevant student information
  - 3g. Teacher enters 7: 'Output gradebook to file'
    - 3gl.System prompts for filename
    - 3gII.Teacher enteres file name
    - 3gIII.System writes to that file
  - 3h. Teacher enters 8: 'Output assignment info to file'
    - 3hl.System prompts for filename, assignment name

3hII.Teacher enteres file name, assignment name 3hIII.System writes to that file

3i.Teacher enters 9: 'Output Student info to a file'

3il.System prompts for filename, student name

3ill.Teacher enteres file name, student name

3iIII.System writes to that file

3j. Teacher enters 10: 'Output Grade information to a file'

3jl.System prompts for filename

3jII.Teacher enteres file name

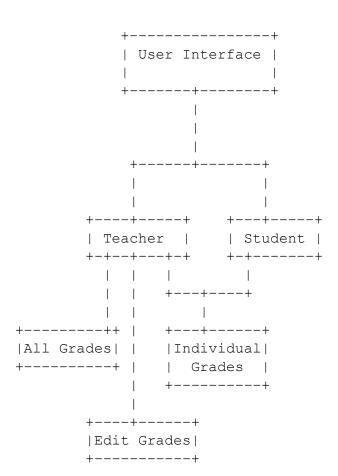
3jIII.System writes to that file

3k. Teacher enters 11: 'Print gradebook to console'

3kl.System prints out entire gradebook to the console

4. Teacher types 'quit' at any time to exit the program

# Module Dependency Diagram:



# **UML** Diagram

