

**PBL: Grade Book Part 8: class AssignmentLoader**

This assignment continues the project to create software for a school grade book that will hold the scores that students received for their assignments.

This part of the assignment will implement class `AssignmentLoader` that will load a file that contains both the information about an assignment to create an `Assignment` object, and the score each student has received on the assignment.

The format of the file is as follows:

- The first line of text contains the assignment name.
- The second line of text contains the maximum score for the assignment as an integer, then optionally white space followed by the word “strict” if the student will not be able to receive a score higher than the maximum score.
- Each subsequent line is to contain the student’s student number and score, separated by a comma. The remainder of the line can contain any data, such as the student’s name or a comment about the assignment.

Scores\_a1.txt

```
A1 - Primitive Types 1
10 strict
1234,10
2345,5,Huang,James J. - James was feeling ill this day.
3456,10 Long,Chen
4567,10,Zhuge,Liang
```

Implement class `AssignmentLoader` according to the following specification.

- The class is to contain at least these three fields:
  - A field of type `String` to store the filename where the assignment information has been saved.
  - A field of type `StudentList` to store the list of students – this is needed so that each score can be added to the appropriate student’s existing assignment scores.
  - A field of type `Assignment` that will store the `Assignment` object that will be created using the details about the assignment as loaded from the file.
- A constructor that takes two parameters:
  - the filename to save in the filename field.
  - the list of students to store in the `StudentList` field.
- A load method that will load all the data from the file specified by the filename field. It must:
  - Create an assignment object and save that in the `Assignment` field.
  - Load all student scores, and for every score successfully loaded, save that score into the `Student` object it belongs to. *Hint:* the student number will be used to determine which `Student` object the score should be added to. You may wish to refer to the structural diagram in the previous part of the assignment to aid in understanding how `AssignmentScore` objects store the scores for each student. You are advised to decompose this method into simpler parts and implement one or more `private` helper methods to keep the code more understandable.
- A getter method for the `Assignment` field.