

Optional Project Part3

You don't have to submit this

1. Add the capability to read from a file containing information about the teachers, students and admin staff. This file will be named SchoolMembers.txt
2. On reading each line from the file, you should create an appropriate object (Student or Teacher or Admin), which should be returned as a SchoolMember reference or pointer.
3. This object should get inserted into a collection of SchoolMembers. What collection would you want to use for this?
4. Format of file to be read is:
Type|ID|FirstName LastName|Address;

You can assume one entry per line in the file.
; is the entry separator.

Example line in the file would be:

- a. For a student:
S|1|John Doe|1234, 24th St., Bellevue, WA 98007;
 - b. For a teacher:
T|2|Jack Bauer|1234, 25th St., Bellevue, WA 98007;
 - c. For an admin:
A|3|Jack Frost|4321, 24th St., Bellevue, WA 98007;
5. Add the capability to read courses information from a file called "Courses.txt".
 6. Format of the file to be read is:
CourseID|CourseNumber|CourseNamePrefix|Course name;

You can assume one entry per line in the file.
; is the entry separator.

Example lines in the file would be:

```
10000|101|Math|Introductory Math;  
10001|102|Math|Intermediate Math;  
10002|101|CS|Computer Science Introduction;
```

7. Add the capability to read the course schedule from a file called "CourseSchedule.txt"
8. You will need to create a class that contains this information. What class would you create and what relation would it have to the Course class?
9. Format of the file to be read is:
CourseID|(Day, Start time)+|Teacher ID;

Example lines in the file would be:

```
10000|(M,1000),(Th,1100),(Fri,800)|2;
```

10. If any of the files being read have an incorrect format, your code should throw an exception. You should define this exception class as you deem fit.
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