Proposed Title: ALP (Automated Learning Pro)

Description: The goal of this project is to give an easier way (mainly for teachers) to those without access to pricey learning systems like canvas a free alternative. ALP needs to be able to do a lot of things necessary to keep tabs on students and in a specific course. The users will include the teacher and the students. I will need one file to keep all user data and class data (a .dat file for an array of course classes). The only interaction between user and system will be through three different main menus using the command line similar to the bank assignment. The first menu will be the login, then depending on the user it will either bring up the student menu or a teacher menu (which will be similar to an admin like in the bank project). I will try and make this able to handle multiple different courses having each course stored in an array of the Course class as a .dat file.

**Login Menu:**

Welcome to ALP!

Please input your User ID:

Input

Please input your Password:

Input

**Student Menu:**

Welcome <first and last name of student>!

Please Input Course Number:

input

Please choose from the following options:

1. Check all courses info
2. Change password
3. Back

**Teacher Menu:**

Choose course:

1. Course
2. Course
3. Course
4. Add course
5. Exit

Input

Please choose from the following options:

1. Add something
2. Check something
3. Change something
4. Back

**Teacher Add something sub menu:**

Please choose from the following options:

1. Add exam
2. Add homework
3. Add quiz
4. Add student
5. Back

**Teacher Check something sub menu: (each have their own sub menu’s except overall class grade and assignment type grade weight to select which one they are trying to select)**

Please choose from the following options:

1. Check exam
2. Check homework
3. Check quiz
4. Check overall grades of class
5. Check student
6. Check assignment type grade weight
7. Back

**Teacher Change something sub menu:**

Please choose from the following options:

1. Change student’s grade for an assignment
2. Change assignment type grade weight
3. Change something from an assignment
4. Change something else from this course
5. Back

**Teacher Change something from an assignment sub menu:**

Choose Assignment Type:

1. Exam
2. Homework
3. Quiz
4. Back

input

Please choose the assignment you wish to change

1. Assignment 1
2. Assignment 2
3. Back

input

Please choose from the following options:

1. Delete assignment
2. Change assignment name
3. Change total points
4. Change individual grade weight
5. Back

**Teacher Change something from this course sub menu:**

Please choose from the following options:

1. Delete course
2. Change course name
3. Change course subject
4. Remove student
5. Back

The best way I can think of to represent the data is through a database using a single file for each course with a .dat file that is an array of course classes that I load up into a separate class that I have all the menu’s in (ALP.java). There are a few things that you can do like add extra credit by adding an assignment but putting the total points as 0 or having an assignment not count towards the student’s grade but still show up on the record so they can see what score they got by putting grade weight at 0 for that assignment. If any problems arise from the .dat file not loading correctly you can take out the /\* on line 19 and \*/ on line 68 and run it then. Just make sure to put both back after running it once, as it will reset any data back to what it puts there. Also grade weight is pretty much points \* grade weight to be able to have somethings worth more in the overall grade. To login into teacher menu input ‘Teacher’ for both userID and password.

Classes needed (uml is also in base folder)

Graphical user interface, text

Description automatically generated