**MyAssistant**

MyAssistant program is a tool for a student to keep track of upcoming exams, projects, and homework as well as semester progress and weekly schedule all in one place.

The program consists of 8 java classes and 1 interface and is designed to communicate with MySQL database server that contains 7 tables, 5 views, 9 triggers and a stored procedure to keep the data valid and organized. The program runs in command line and consists of menus and tables. Users interact with it by entering the number of desired choice in the menus. (View screenshots in folder for reference)

To use the program, a user needs to create a semester, then add courses to the semester, then add assignments and classes to these courses.

**Users will then benefit from the following features:**

**1- View Schedule**: The program will book class time entered in schedule and allow a user to enter tasks to the program (Ex: yogaClass). When adding a new task, the user can give the task a time on schedule or add it with a deadline to place on schedule sometime later.

The program will also create tasks from assignments due within 2 weeks (or 3 weeks for big assignments worth more than (15%)) and will give the task a length in hours depending on the weight (%) of the assignment. It will also create multiple tasks if the number of hours of a task created from an assignment happened to be more than 3 hours. (Basically, for assignments worth more than 5%, view stored procedure on DB to edit logic if desired.)

**2- GPA Calculator**: The program will take in grade as input for all courses in current semester (accepts letter grade, or numerical (%) grade), and it will calculate the GPA and prints it to console (View GPA calculator screenshot for reference)

**3- View Semester Progress**: A table is printed to console with the columns **possible**: referring to possible (%) to achieve so far (sum grade of submitted assignments), **achieved**: referring to the achieved grade in submitted assignments in a course, and **projected grade** (LetterGrade) depending on current performance.

**4- View this week's assignments**: Prints a table to console that contains the assignments with a deadline within a week from today. The table contains the name of the assignment, name of course, weight(%), and deadline for each assignment.

**In addition to the main features:**

- The program allows the user to view/add/delete/modify semesters, courses, assignments, classes and tasks and keeps completed tasks in a separate table on DB for the user to check at any time. (Will have to select from completedtasks in DB)

- The program will crash if invalid data type is entered, use numbers as input when navigating the menus.

- When entering hours, use 24h format. (Only full hours are supported in schedule feature).

**To run the program:**

- Run the scripts included in the file (SQL Scripts) in MySQL to create the DB for the program.

- Open Queries.java file and add your username and password for the DB on top.

- Edit Assistant.bat and add the absolute path of Test.java (or keep it the same and place the studentAssistant folder directly in C:)

- Use the shortcut Assistant to run the program (can be added to taskBar or startMenu)

- Trigger start-up.java to be run at windows startup (if desired).

- Enjoy using the program!

Feel free to modify the program to create your personal experience using it. Shoot me a message if you're having a hard time navigating through the code, I'll be happy to help!

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