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Attendance Tracker

Executive Summary:

This program emulates the attendance record that would be found in a typical classroom setting. With this, the user may mark off students’ absence and tardiness by specific students or specific days. Students may also be added or dropped from the class. A chart of the students’ attendance can be displayed at any time. If the user wishes to, he or she may reset the data, inserting a new start and end date of the course and the days of the week class will commence. The data will also be saved at exit for future editing.

Design Specific:

This program will be tied to a file database. This file will hold the names of students, the course start and end dates, and the days of the week class is held. A character will represent the status of the student of that date with ‘O’ denotes present, ‘X’ denotes absent, ‘T’ denotes tardy, and ‘D’ denotes the date the student dropped.

The program will first check if there is save data (saved\_attendance\_data.txt) or a name list (student\_names.txt) present. If there is a save data present, the data will be loaded. Otherwise, a new data will be built based on the name list and then sorted alphabetically. If neither is present or the file is corrupted, then the names of the student must be added manually.

At the creation of new data, a start and end date will be prompted, followed by the days of the week class is held. These will be the days that are taken to account when recording attendances.

After everything is inputted correctly, the user will enter a menu. The first option will mark students off either by a single date or individual student. If the user chooses to mark by date, he or she will choose a date and then mark the students that were absent or tardy that day. If the user chooses the latter, he or she will choose a specific student and mark the days that the student was absent and tardy. The remaining days will be marked as present.

The second option will display give the user the option to print out the list of names, dates, or as full report of attendance. The third option will set the course data, resetting course dates. The names will be saved.

The fourth option will allow the user to add or drop students from the roster. If the user wishes to add a student, he or she will be asked to enter the student’s name. The student will be then added to the list and sorted alphabetically. If the user wishes to drop a student, the user will select a student and will choose from dropping the student at a certain date or complete removing them from the list.

The fifth option will save the data then exit the program. The data will be stored as a text file (saved\_attendance\_data.txt).