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CMU 15-112

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Project Description: The name of this project is called Planner Application. The project is a

calendar/planning application that allows you schedule events in multiple ways. You can

schedule events the traditional way by selecting a certain date and time. I also plan on

implementing a way where the user can input multiple dates and times, and the algorithm will

select the best date and time, if the user chooses this option.

Similar Projects: I have come across a multitude of calendar and planner application projects,

with many similarities and differences. Some I have seen have been more typical calendar

applications that allow you to schedule events, and that event will show up at the appropriate

date and time on the calendar. Some applications I've seen have also allowed you to view

different screens, such as a day screen, week screen, and month screen which organizes your

events in the following ways.

I have also come across more smart applications that allow the user to input data such as the

hours they would need for an event and a date if they would like, and the algorithm would select

an appropriate time based on the user's preferences. I would like to implement this in my app.

Some applications have allowed the user to input a certain priority level, and the events for that

day would show up in order based on those priority levels. I would like to implement this feature

as well.

Structural Plan:

The structural plan of my project will consist of a calendar class, and multiple functions within the class.
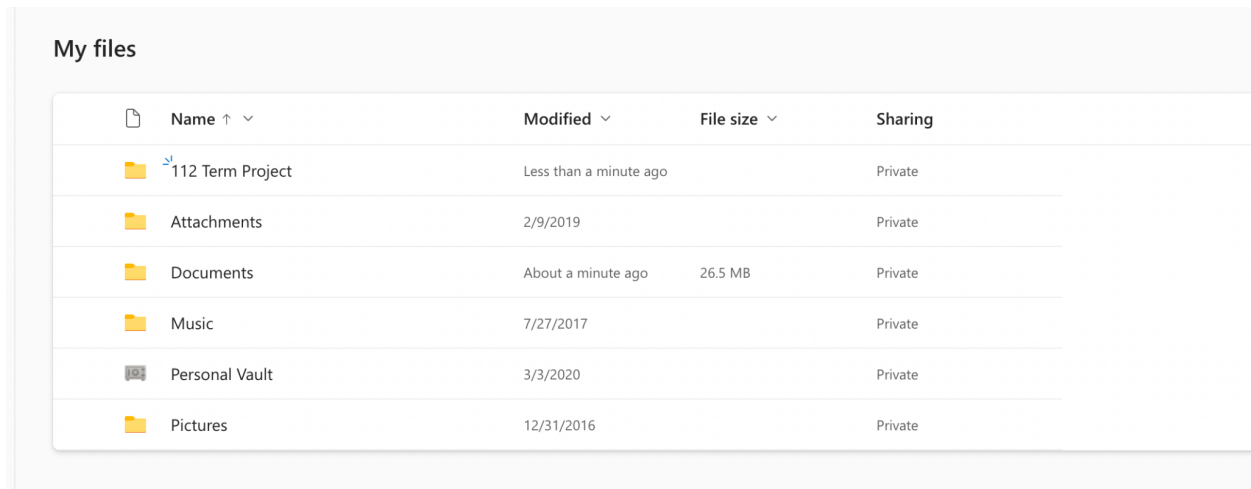
Algorithmic Plan:

I believe that the most challenging part of my project will be implementing the "auto-schedule" program where the user puts in an event and its duration, and the algorithm schedules it based on the user's preferences. This will likely need to be implemented using a backtracking algorithm. I will try to get to this feature as quickly as possible so that I can have as much time to work on it as possible, and if for any reason I need to pivot, I have time to do so.

Timeline Plan:

I intend to complete the major features of my project by the TP2 MVP deadline. I obviously intend to keep up with the pace of the TP0, TP1, TP2, and TP3 deadlines. I will start off with trying to create a passable project as quickly as possible, so I can then build on and add algorithmic complexity.

Version Control:

I will be backing up my project files using One Drive. I have created a 112 Term Project folder just for this term project.

Module List:

I do not intend to use any external modules.

TP1 Update:

I have made no design changes.

TP2 Update:

I have made no design changes.

TP3 Update:

I have added the datetime module to my module list after reaching MVP.