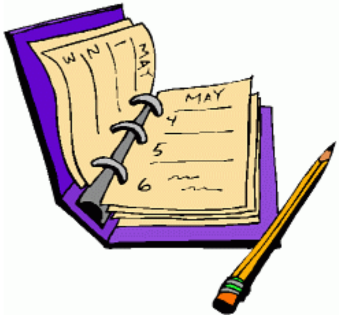
Programming Assignment 6 - Honors



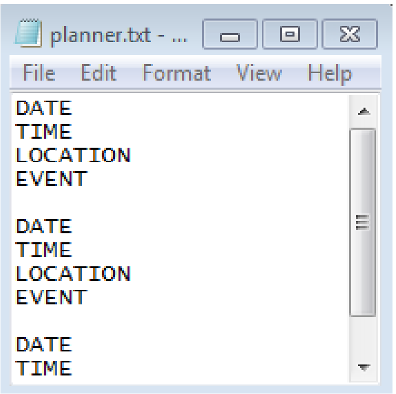
http://www.clipartkid.com/images/443/student-planner-clipart-planners-fezE3V-clipart.gif

Objectives:

- Practice reading from files
- Practice writing to files
- **NO ARRAYS!**

Assignment:

In this assignment, you are going to write a program that simulates a planner. The program allows the user to add a new event to the planner, display all the events currently stored in the planner, display the events that correspond to a specific date, or to quit the program. Since this is a planner, the data needs to be saved to a file called **planner.txt** so that the events in the planner aren't lost each time the program ends. In the file, each event will be written in the same format. Your file **MUST** be in this format.



```
DATE
TIME
LOCATION
EVENT

DATE
TIME
LOCATION
EVENT

DATE
TIME
```

If the user chooses to add an event, ask them to enter the date, time, location, and name of the event. Then, write them to the information to the file in the correct order.

If the user chooses to display the events in the planner, print out all the events in the file, in the order they appear in the file. If there are no events in the planner, print a message saying no events have been added.

If the user choses to display the all the events on a specific date, first ask the user to enter the date they want to search for. Then, search through all the events in the file, and display the event information of each event that matches the date the user entered. If there are no events with the date the user entered, print a message saying no events have been added.

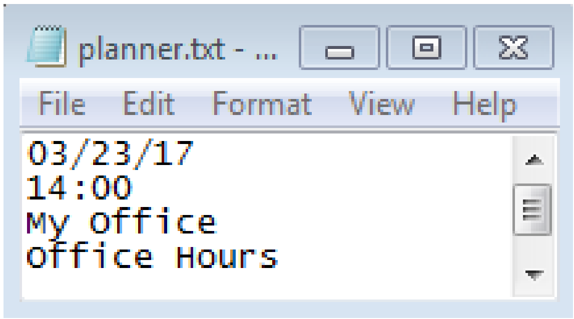
If the user chooses to quit, the program ends.

Using a temporary file to store the events will be useful when adding an event.

Sample Execution 1:

```
Personal Planner
================

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 2

No events added!

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 1

Enter date (MM/DD/YY): 03/23/17
Enter time (HH:MM): 14:00
Enter location: My Office
Enter event: Office Hours

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 2

03/23/17
14:00
My Office
Office Hours

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 4
```

planner.txt after sample execution 1:

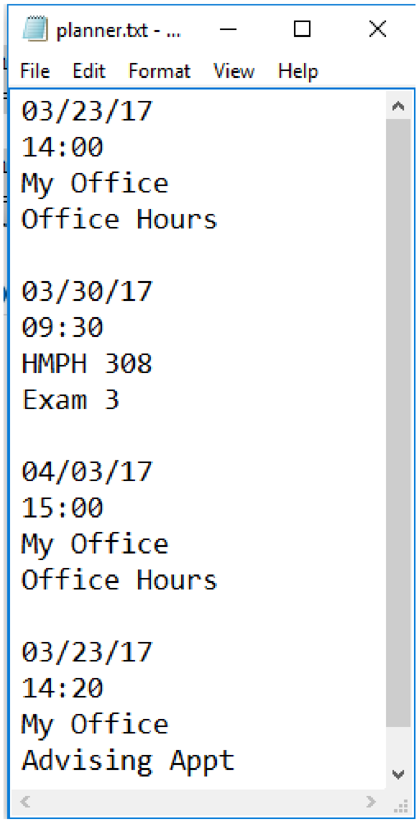


```
03/23/17
14:00
My Office
Office Hours
```

Sample Execution 2:

```
Personal Planner
================

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 2

03/23/17
14:00
My Office
Office Hours

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 1

Enter date (MM/DD/YY): 03/30/17
Enter time (HH:MM): 09:30
Enter location: HMPH 308
Enter event: Exam 3

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 2

03/23/17
14:00
My Office
Office Hours

03/30/17
09:30
HMPH 308
Exam 3

Options:
========
1. Add Event
2. Display Events
```

planner.txt after sample execution 2:



```
03/23/17
14:00
My Office
Office Hours

03/30/17
09:30
HMPH 308
Exam 3

04/03/17
15:00
My Office
Office Hours

03/23/17
14:20
My Office
Advising Appt
```

```
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 1

Enter date (MM/DD/YY): 04/03/17
Enter time (HH:MM): 15:00
Enter location: My Office
Enter event: Office Hours

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 2

03/23/17
14:00
My Office
Office Hours

03/30/17
09:30
HMPH 308
Exam 3

04/03/17
15:00
My Office
Office Hours

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 1

Enter date (MM/DD/YY): 03/23/17
Enter time (HH:MM): 14:20
Enter location: My Office
Enter event: Advising Appt

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit
```

```
Enter options (1, 2, 3, or 4): 2

03/23/17
14:00
My Office
Office Hours

03/30/17
09:30
HMPH 308
Exam 3

04/03/17
15:00
My Office
Office Hours

03/23/17
14:20
My Office
Advising Appt

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 3

Enter date (MM/DD/YY): 03/23/17

03/23/17
14:00
My Office
Office Hours

03/23/17
14:20
My Office
Advising Appt

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 2

03/23/17
14:00
My Office
```

```
Office Hours

03/30/17
09:30
HMPH 308
Exam 3

04/03/17
15:00
My Office
Office Hours

03/23/17
14:20
My Office
Advising Appt

Options:
========
1. Add Event
2. Display Events
3. Find Dates
4. Quit

Enter options (1, 2, 3, or 4): 4
```

Requirements:

- Use an updated comment block
- Your program should use the following comment block at the very beginning of your program.

```
// Name:  Your Name                        Date Assigned: Fill in
//
// Course:  CSCI 2003 60357                Date Due:  Fill in
//
// Instructor: Ms. Greer
//
// File name:  Fill in
//
// Program Description:  Brief description of what the program does.
```

- Use appropriate comments throughout the program
- Make good use of whitespace
- Your output should look exactly like the sample output if using the same data.

Deliverables:

- Planner.java file
- Upload 1 file to Moodle

Grading:

Total Points	**15 points**
Planner class	**15 points**
Displays menu correctly	0.5 point
Gets option from user correctly	0.5 point
Adds Event Correctly	
Happens when user enters 1	0.5 point
Stores previous data from planner.txt correctly (to avoid losing previous events)	1 point
Gets date, time, location, and event correctly	1 point
Opens planner.txt for writing correctly.	1 point
Writes info to file in correct format.	1 point
Close files correctly.	0.5 point
Displays all events in planner.txt correctly.	
Happens when user enters 2	0.5 point
Opens file for reading	1 point
Uses loop to read from file	1 point
Displays data in planner.txt correctly	1 point
Closes file	0.5 point
Finds dates correctly	
Happens when user enters 3	0.5 point
Opens planner.txt file for reading	
Gets date to search for from user	1 point
Displays all info about the events with the same date as the user entered.	1 point
Does NOT modify the file.	0.5 point
Closes file	0.5 point
Quits program correctly	
Program ends when user enters 4	1 point
Doesn’t display menu again	0.5 point
Not enough comments/whitespace	**-1 point**
Output does not match the sample executions given in the assignment	**-1 point**
Bad variable names, method names, and/or class names	**-1 point**