

*This work is mine unless otherwise cited. - Kai'Iani Woodard*

## Abstract and Background

The program I have decided to pursue for my course project is a digital calendar that can read, write and delete events. The purpose of this program is to create a digital calendar that can efficiently perform all of the functions of a physical calendar and planner within a user-friendly interface. This program will be an extension of my project from last semester in Computational Expression. I plan to restructure the program by adding more functionality by including more classes and implementing some concepts covered in Data Abstraction.

## Project Planning

In order to achieve this, I plan to implement a combination of concepts learned in Data Abstraction and also concepts from a couple of outside sources. I intend to create multiple classes to store an array of methods ranging from reading from and displaying the calendar. Something I would like to modify for this rendition of my calendar program is the way that the calendar is displayed. In the first edition, the program read from a comma-separated value sheet to access the year, month, day and the day of the week that a month would begin. This method only allowed the user to view months in the context of 2019. I hope to create an expression that will calculate the day of the week that a month would begin with an equation, to make the program more usable at any time. To write to the calendar, I plan to import some classes, such as `FileWriter` and `BufferedWriter`. I would also like to change the class structure in this rendition of the program. I feel that creating more specific classes could benefit the program. In the previous version, I had three classes: `CalendarRead`, `CalendarEvents` and `CalendarMain`. In this version, I feel that the program would benefit for more specific classes to enclose methods rather than these abstract ones. In the previous edition, I also did not include a way to delete events from the calendar; after taking the Data Abstraction course, I feel that I have the knowledge to implement such a method into this program. These plans are just an idea of how I plan to perform the program's intended functions.

## Citations

<https://apstudents.collegeboard.org/ap/pdf/ap19-frq-computer-science-a.pdf>

<https://docs.oracle.com/javase/tutorial/uiswing/components/dialog.html>

<https://www.youtube.com/watch?v=vcO-6ZhUdlw&feature=youtu.be>

<https://stackoverflow.com/questions/17218971/i-want-to-open-a-text-file-and-edit-a-specific-line-in-java>