

## CalendarInfo Class

### Attributes:

- **DAYS\_OF\_WEEK**  
(list) Holds the name for the days of the weeks  
e.g. 'Su', 'Mo'
- **calendar\_dict**  
(dictionary) Stores and updates the information for every month as well as the holidays for each month.

## UserCalendar Class

### Attributes:

- **Int\_year**  
(int) holds the desired year as an integer(must be four digits)  
e.g. 2022, 1990, 2500
- **str\_year**  
(str) holds the desired year as an integer from the int\_year  
e.g. 2022, 1990, 2500
- **first\_day\_of\_month**  
(int) Holds the first day of the month for every year and with this the name for day of the week is determined.
- **disp\_months\_2d**  
(2d-list) Horizontal list: holds 12 lists for each month  
Vertical side: holds everyday for each month

### Methods:

- **opens\_file()**  
opens calendar file in local folder
- **rand\_year(upper\_bound\_year, lower\_bound\_year)**  
*Parameter upper\_bound\_year, lower\_bound\_year(int)*  
Generates a random year depending on what bounds the user entered
- **user\_year()**  
returns the user's choice on the year in both int and string in that order
- **days\_in\_feb(int\_year)**  
Determines how many days there will be on February depending on the year
- **start\_day\_formula()**  
returns what day of the week the year began with a formula
- **print\_leap\_year(first\_day\_of\_month)**  
*Parameter first\_day\_of\_month(int) name of weekday*  
Prints out if the year is a leap year and if it is the variable first\_day\_of\_month is changed
- **create\_2d\_list()**  
Creates a list and appends more lists on to create a 2d list
- **append\_holiday()**  
adds more holidays for the desired month in the calendar\_dict
- **insert\_zeros(month\_count)**  
*Parameter month\_count(int)*

Determines the first day of the week for the new month and inserts zeroes as place holder

- **close\_file()**

Closes the current file to reduce the risk of being unwarrantedly modified or read

### WriteCalendar Class

#### Methods:

- **write\_year()**

Writes the year on the calendar.txt file

- **write\_months(month\_name)**

*Parameter month\_count(int)*

Writes the name of the month on the txt file.

- **write\_week()**

writes and Organizes the days of the week for every month

- **write\_days(month\_name, month\_count)**

*Parameter month\_name(str), month\_count(int)*

Writes the days for the current month by casting the days to string. The zeros will then be converted to blank strings, "".

- **write\_dash()**

writes the dashes for under the days of the week

- **write\_holidays(month\_name)**

*Parameter month\_name(str)*

reads from the calendar.py to write the holiday on the calendar.txt file.

- **write\_calendar()**

Writes and organizes the year, month, weeks, and days as an organized calendar by using the previous methods