

## Lab 5 demo steps and rubric

Team name:	lab5-amykim_lab5
Group members:	1.Amy Kim 2. 3.
Score:	<b>73</b>

### 1. Creating and adding events

- a. Create an event named “event1” on 5/1/2019 at 10 AM. If the calendar view is not updated, zoom in on the day 5/1/2019. Create a second event named “event2” on 5/1/2019 at 9 AM.

	notes:	1(yes) or 0(no)
Were the events created on the correct day?		1
When the day is displayed, are the events sorted by time? Event2 should be displayed first, followed by event1		1

- b. Recurring/multiday events. Create an event named “Halloween” that occurs on 10/31/2019 and recurs every 365 days through the year 2021(3 events total). Zoom to each year and show that 3 events were created, one each year.

	notes:	1(yes) or 0(no)
Were 3 events created on the correct days? An off by 1 day error in 2020 and 2021 is fine (this is due to a leap year)	Recurring for multiple years doesn't work	0

## 2. User Interface, options

- a. Zoom out to the top level Calendar object.

	notes:	1(yes) or 0(no)
Are the following global options available?  1. Create an event 2. Search event 3. Jump to a specific date 4. Save calendar 5. Restore calendar 6. Change the view (zoom in, zoom out)		Give a 1 or 0 for each option (6 total) 1.1 2.1 3.1 4.1 5.1 6.1
Is the option to edit/remove an event available?(it should not be - give 1 if it is not, 0 if it is)		1

- b. Zoom in on one of the events that was previously created

	notes:	1(yes) or 0(no)
Is the following local option available(it should now be available)? 1. edit/remove event		1

- c. Edit the event by moving the event to a new date. Then remove the event from the calendar

	notes:	1(yes) or 0(no)
When event date was changed, was it moved to the correct day?	Edit not implemented	0
Was the event deleted properly? Try searching for the event and zooming to the day of the event. (half credit if the event was only removed from the day or when searching for the event, but not both)		1

### 3. Searching Events

- a. Search for the event named "event1", or another event if "event1" was modified previously

	notes:	1(yes) or 0(no)
Was the event found?		1
Are details of the Event displayed? This should be done by updating the view of the Calendar to be the event.		1

- b. Search for an event named "Halloween", then choose one of the Halloween

events to display

	notes:	1(yes) or 0(no)
Were all 3 Halloween events listed?	Although events can't recur yearly, events that recur monthly are searched for successfully	1
Was the user able to choose one to display?		1

c. Search for an event named "unknown"

	notes:	1(yes) or 0(no)
Was the invalid name handled appropriately? (the calendar display remains the same or a message is output letting the user know the event does not exist)		1

#### 4. Jump to a specific date

a. Jump to the date 5/1/2019 with granularity of a day, a month, and a year.

	notes:	1(yes) or 0(no)
When given granularity of a year, was the display of the calendar updated correctly to display the year of 2019?		1
When given granularity of a month, was the calendar updated to display the month of May?		1
When given granularity of a day, was the calendar updated to display the day of 5/1/2019?		1
Try jumping to an invalid date. Is the invalid input handled appropriately?(display is	Debug assertion thrown	0

unchanged, a message may be given to the user letting them know the date does not exist in the calendar)		
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### 5. Saving/restoring the calendar

- a. Save the current calendar to a file
- b. Quit the currently running program and then rerun the program so the Calendar is now empty
- c. Restore the calendar saved in step a above.

	notes:	1(yes) or 0(no)
Are all events recreated and placed in the proper days? (use zoom in/out to verify, or jump)		1
Are all events recreated in a searchable way? (verify by searching for events by name)		1

### 6. Zoom and Display updates

- a. If restore functionality worked correctly, continue with step b. Otherwise, setup the calendar again by recreating "event1", "event2", and "Halloween" from part 1.
- b. Zoom out to the top level - The Calendar object
- c. The display should look similar to this:
  0. 2019
  1. 2020
  2. 2021

	notes:	1(yes) or 0(no)
Is the display correct?		1

- d. Zoom in on index 0(year 2019)
  - i. The year should be displayed on the first line
  - ii. Each month(January - December) should be displayed with format similar to this, where the events in a month are listed in sorted order below the

Month they are contained in and each month is given an appropriate index:

0 January  
 1 February  
 2 March  
 3 April  
 4 May  
     5/1/2019 0900 event 2  
     5/1/2019 1000 event 1  
 5 June  
 ...  
 9 October  
     10/31/2019 .... Halloween  
 ..  
 11 December

	<b>notes:</b>	<b>1(yes) or 0(no)</b>
Is the display correct?		1

e. Zoom in on index 4(May)

- i. The format of a month should look similar to below. Each day containing an event should be followed by an \* for each event in the day. Also, ensure the 1st day of the month is printed on Wednesday:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1**	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
20	21	21	22	23	24	25
26	27	28	29	30	31	

	<b>notes:</b>	<b>1(yes) or 0(no)</b>
Is the display correct?		1

f. Zoom in on index 0(May 1st)

- i. The format should be similar to this, with appropriate values from the current calendar:

Wednesday 5/1/2019  
0900 event 2  
1000 event 1

	notes:	1(yes) or 0(no)
2. Is the display correct(how the time is displayed doesn't really matter, as long as it is displayed)		1

**7. Testing Merge (only if this part was completed)**

- Exit the program and rerun. Create an event named "NewYears" on 1/1/2019 that occurs 3 times, recurring every 365 days
- Create an event named "event1" on 5/1/2019
- Merge in the Calendar saved in step 5.a
- Jump to the day of 5/1/2019

	notes:	1(yes) or 0(no)
Are there 2 events named "event1" on 5/1/2019?	Did not do	0
Is one of those events prefixed with the name of the calendar that merged in?	Did not do	0
Verify all events were merged correctly by <ol style="list-style-type: none"><li>Jumping to the day of 10/31/2019. Does "Halloween" exist on this day?</li><li>Searching for the event named "Halloween". Do 3 events show up in the search?</li></ol>	Did not do	0

**8. Testing ToDo Lists(only if this part was completed)**

- Create a ToDo list using the todo list option
- Add a task
- Add another task with an earlier deadline

d. Mark a task complete

	notes:	1(yes) or 0(no)
Was there an option to create/view the todo list available?		1
Was a todo list created successfully?		1
Was the task created and displayed successfully? Output should look something like: TODO List: Exam 4/4/2019 18:30 COMPLETE Finish lab5 4/30/2019 23:59 TODO	Could not add	0
Are the tasks ordered correctly by deadline?		0
Was the task displayed as completed after marked complete?		0

### 9. Testing Incremental builder

- Modify the main function to use the incremental builder rather than the full builder
- Retest the above functionality(adding an event, adding recurring events, jumping to a specific date, zoom in on an object that has not been created yet), ensuring the calendar behaves the same with the incremental builder as with the full builder(except for displaying the calendar, some objects may not be displayed if they have not been created yet).

	notes:	1(yes) or 0(no)
Did the calendar behave as expected with the incremental builder?	Did not do	0
List any issues below:		



## 10. Code Review:

Ask the student to show you the following pieces of their code:

- Where are events saved for efficient searching?

	Notes:	1(Yes), 0(No)
Are events stored in an efficient way(multimap, map, vector, etc..) rather than searching the entire calendar?		1

If the student implemented merging calendars, ask to see the code corresponding to the decorator pattern

	Notes:	1(Yes), 0(No)
Did the student simply store the calendar name in the event class or modify the event name to include the calendar name as well? (this would be bad, not the decorator pattern)	Did not do merge	0
Or, did the group create a new class representing a decorator and use it? (this is good!!)		0

If the student implemented the ToDo List option, ask to see the ToDo List code. Particularly where the singleton pattern is enforced

	Notes:	1(Yes), 0(No)
Are the constructors of the		1

ToDo List class private?		
Does the ToDo List contain a static member variable for holding access to the currently allocated ToDo list?		1
Is a static member function provided for accessing the ToDo List object stored in the static member variable?		1

(Leave this for me later...Nothing to do here)

Overall grade breakdown:

75 points code

Functionality:	Possible points:	Earned:
Add events	15	12
Make interactive	25	22
display	15	15
1st optional	10	4
2nd optional	10	0
3rd optional	(5 extra credit)	
Completed by original deadline	(5 extra)	0
Total	75 (+10)	53

25 points documentation

Documentation and Design	worth	Earned
Readme	10	10
Clear separation of concerns?(incremental builder)	5	
Search events efficiently	5	5
Used decorator for merging?	5	0
Used singleton for todo	5	5

list?		
Total	25	20