

Assignment 1

Mycalendar. jar

Done by:

Elaf Abdullah Saleh Alhaddad 31063977

Sutulova Tatiana 30806151

Testing the UI functionality:	3
1.1 Navigation	3
1.1.1 Test suite #1: Years navigation	3
1.1.2 Test suite #2: Days Navigation	6
1.1.3 Test suite #3: Months navigation	11
1.2 Events	14
1.2.1 Test suite #4: Creating events	14
1.2.2 Test suite #5: Editing events	18
1.2.3 Test suite #6: Deleting events	24
1.2.4 Test suite #7: Event Dates	26
1.2.5 Test suite #8: Event time	28
1.2.6 Test suite #9: Event year	32
1.2.7 Test suite #10: Event location	33
1.2.8 Test suite #11: Event Guests	36
1.2.9 Test suite #12: Importing and exporting calendar	38
Testing the Usability and portability:	39
2.1 Test suite #13: App usability	39
2.2 Test suite #14: App usability & portability	42
Test Summary	43
Traceability matrix	48
Bug Reports	51
5.1 Bug #1: Year navigation with arrow keys	51
5.2 Bug #2: Starting date	52
5.3 Bug #3: Time in 24hr format	53
5.4 Bug #4: Adding guests	54
Work Breakdown Agreement	56

1. Testing the UI functionality:

1.1 Navigation

1.1.1 Test suite #1: Years navigation

Test Name:	Years navigation	Number of test cases:	5
Description:	This test suite includes test cases that are examining how the year navigation functionality performs.	Tester's information:	Tatiana Sutulova
Rationale	The strategy used in this test suite is the equivalence (class) partitioning, since the inputs used to test year navigation features may be divided in groups (classes), that will be treated equally and give the same output. The main groups chosen to be tested are: <ul style="list-style-type: none">• Negative number• Zero• Valid input		

Test case #01	Description: Navigation by '>', which is supposed to send the user to the same month of the next year
----------------------	--

Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	August, 2020 is opened by default	The app goes to August 2021	The app goes to September 2020	Fail
2	Press the > button in the top left corner			

Test case #02			Description: Navigation by '<', which is supposed to send the user to the same month of the previous year.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	August, 2020 is opened by default	The app goes to August 2019	The app goes to July 2020	Fail
2	Press the < button in the top left corner			

Test case #03			Description: Manual navigation by inputting negative number	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Choose month : "August"	The application does not allow to proceed to this year	The application does not allow to proceed to this year	Pass
2	Type the year: -2020			
3	Press go			

Test case #04			Description: Manual navigation by inputting 0	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Choose month : "August"	The application does not allow to proceed to this year	The application does not allow to proceed to this year	Pass
2	Type the year: 0			
3	Press go			

Test case #05			Description: Manual navigation by inputting the valid year	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Choose month : "August"	The application proceeds to August 2025	The application proceeds to August 2025	Pass
2	Type the year: 2025			
3	Press go			

1.1.2 Test suite #2: Days Navigation

Test Name:	Days navigation	Number of test cases:	6
Description:	This test suite includes test cases that are examining how the day navigation functionality preforms	Tester's information:	Elaf Abdullah Saleh Alhaddad
Rationale	<p>Specified in the requirements that the days on the calendar can be navigated through using the arrow keys on the keyboard.</p> <p>There are four categories to test in this case:</p> <ul style="list-style-type: none"> • Moving to the right • Moving to the left <p>Moving up</p> <ul style="list-style-type: none"> • Moving down <p>Since this calendar includes years 1900-2100 with 12 months a year, this test is conducted based on the assumptions that if the arrow keys on the keyboard work for one month then it will work on all the months in each year. This method is called equivalence partitioning</p>		

Test case #06			Description: navigating across the days using the right arrow key within the same row	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Open the app	The date is already selected by default	The date is highlighted in green but is not selected by the app	Pass
2	Click on any day	Prompt to input an event	Prompt to input an event	
3	Close prompt to input an	The day selected will be outlined by	The day selected will be outlined by blue border	

	event	blue border		
4	Click on the right key arrow on the keyboard to move to the right	The blue border will move to the day to the right showing that it is selected	The blue border will move to the day to the right showing that it is selected	

Test case #07			Description: navigating across the days using the right arrow key to move to the next day in another row	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Open the app	The date is already selected by default	The date is highlighted in green but is not selected by the app	Fail
2	Click on any day	Prompt to input an event	Prompt to input an event	
3	Close prompt to input an event	The day selected will be outlined by blue border	The day selected will be outlined by blue border	
4	Click on the right key arrow on the keyboard to move to the right	If the day is already at the end of the row, it will move to the start of the next row	The blue border will not move to the start of the next row	

Test case #08			Description: navigating across the days using the left arrow key to move to the previous day in same row	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Open the app	The date is already selected by default	The date is highlighted in green but is not selected by the app	Pass
2	Click on any day	Prompt to input an event	Prompt to input an event	
3	Close prompt to input an event	The day selected will be outlined by blue border	The day selected will be outlined by blue border	
4	Click on the left key arrow on the keyboard to move to the right	The blue border will move to the day to the left showing that it is selected	The blue border will move to the day to the left showing that it is selected	

Test case #09			Description: navigating across the days using the right arrow key to move to the previous day in another row	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Open the app	The date is already selected by default	The date is highlighted in green but is not selected by the app	Fail
2	Click on any day	Prompt to input an event	Prompt to input an event	
3	Close prompt to input an event	The day selected will be outlined by blue border	The day selected will be outlined by blue border	

4	Click on the left key arrow on the keyboard to move to the right	If the day is already at the end of the row, it will move to the end of the previous	The blue border will not move to the end of the previous row	
---	--	--	--	--

Test case #10			Description: navigating across the days using the up arrow key	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Open the app	The date is already selected by default	The date is highlighted in green but is not selected by the app	Pass
2	Click on any day	Prompt to input an event	Prompt to input an event	
3	Close prompt to input an event	The day selected will be outlined by blue border	The day selected will be outlined by blue border	
4	Click on the up key arrow on the keyboard to move to upwards	The blue border will move to the day to the above showing that it is selected	The blue border will move to the day to the above showing that it is selected	

Test case #11			Description: navigating across the days using the down arrow key	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Open the app	The date is already selected by default	The date is highlighted in green but is not selected by the app	Pass
2	Click on any day	Prompt to input an event	Prompt to input an event	
3	Close prompt to input an event	The day selected will be outlined by blue border	The day selected will be outlined by blue border	
4	Click on the down key arrow on the keyboard to move to downwards	The blue border will move to the day to the below showing that it is selected	The blue border will move to the day to the below showing that it is selected	

1.1.3 Test suite #3: Months navigation

Test Name:	Months navigation	Number of test cases:	4
Description:	This test suite includes test cases that are examining how the month navigation functionality performs.	Tester's information:	Tatiana Sutulova
Rationale	The strategy used in this test suite is random testing, that was chosen based on the number of tests required to examine this feature. There are only 4 arrow keys on the keyboard, which allows to test all the possible cases and identify basic (low level) bugs.		

Test case #12			Description: Navigation by the arrow up key.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	The current month, August, is opened by default.	The selected month jumps to the month directly above it.	The selected month jumps to the month directly above it.	Pass
2	The arrow up key is pressed			

Test case #13			Description: Navigation by the arrow down key	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	The current month, August, is opened by default.	The selected month jumps to the month directly below it.	The selected month jumps to the month directly below it.	Pass
2	The arrow down key is pressed			

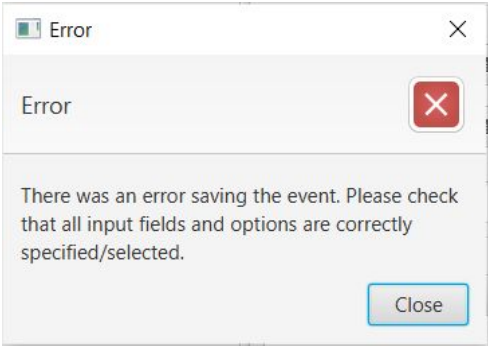
Test case #14			Description: Navigation by the arrow left key	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	The current month, August, is opened by default.	The selected month jumps to the month directly above it.	The selected month remains the same	Fail
2	The arrow left key is pressed			

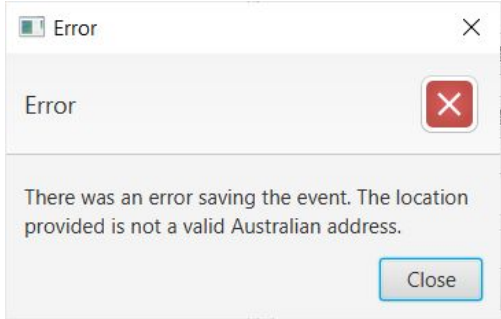
Test case #15			Description: Navigation by the arrow right key	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	The current month, August, is opened by default.	The selected month jumps to the month directly below it.	The selected month remains the same	Fail
2	The arrow right key is pressed			

1.2 Events

1.2.1 Test suite #4: Creating events

Test Name:	Creating events	Number of test cases:	3
Description:	This test suite includes test cases that are examining how to create the event	Tester's information:	Elaf Abdullah Saleh Alhaddad
Rationale	<p>As a calendar, the app should be able to create events without filling all the fields. As long as the fields that are filled are done correctly.</p> <p>Using pairwise there are 10 cases to be tested:</p> <ol style="list-style-type: none">1. Title, Start date, End date2. Title, Start date, End date, location3. Title, Start date, End date, location, Guest4. Title, Start date, End date, location, description5. Title, Start date, End date, Start time, End time6. Title, Start date, End date, Start time, End time, location7. Title, Start date, End date, Start time, End time, description8. Title, Start date, End date, Start time, End time, location, guest9. Title, Start date, End date, Start time, End time, location, description10. Title, Start date, End date, Start time, End time, location, description, guest <p>In these test cases, we will input all the fields correctly making them valid in order to focus on which fields are required to add an event.</p> <p>To increase the efficiency, we will assume that if the first test fails then test case 2~4 will fail as well due to the absence of the Start and End time, and if test 5 fails then we will assume that test 7 will also fail due to the absence of location. However, we will assume that if test 6 passes then test 8~10 will also pass due to the presence of Start and End time as well as the location of the event.</p>		

Test case #16			Description: Creation of an event by only filling Title, Start date, End date fields	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to create an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Fail
2	Click on “new event” that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add a valid title (restricted to 50 characters) and valid start and end date	No output	No output	
4	Click on the save button that is located at the bottom of the window	Event will be saved in the calendar		

Test case #17			Description: Creation of an event by only filling Title, Start date, End date, Start time, End time fields	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to create an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Fail
2	Click on “new event” that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add a valid title (restricted to 50 characters) and valid start and end date	No output	No output	
4	Add a Start time and End time	No output	No output	
5	Click on the save button that is located at the bottom of the window	Event will be saved in the calendar		

Test case #18			Description: Creation of an event by only filling Title, Start date, End date, Start time, End time, location fields	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to create an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Pass
2	Click on “new event” that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add a valid title (restricted to 50 characters) and valid start and end date	No output	No output	
4	Add a Start time and End time and valid Australian address	No output	No output	
5	Click on the save button that is located at the bottom of the window	Event will be saved in the calendar	Event will be saved in the calendar	

1.2.2 Test suite #5: Editing events

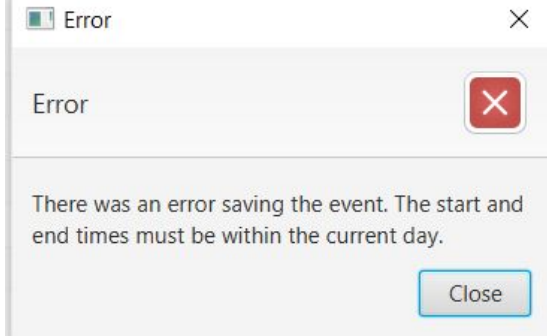
Test Name:	Editing events	Number of test cases:	6
Description:	This test suite includes test cases that are examining editing events feature	Tester's information:	Elaf Abdullah Saleh Alhaddad
Rationale	<p>As a calendar, the app should be able to edit the events that have been created, using category partitioning we are able to create these test cases:</p> <ol style="list-style-type: none">1. Edit the title2. Edit start time3. Edit end time4. Edit start date5. Edit end date6. Edit guest list7. Edit description8. Edit location <p>In these test cases, we will input all the fields correctly making them valid in order to focus on which fields can be changed after the event has been created</p> <p>To increase the efficiency we will assume that if the Start date can be changed then the End date can also be changed and if the Start time can be changed then the end time can also be changed.</p> <p>Lastly, we will assume that if all the tests pass then the user will be able to edit all the fields in the event.</p>		

Test case #19			Description: Editing the title for an event.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to edit	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass
2	Click on the event you would like to edit from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
4	Edit the title of the event	-	-	
5	Click on the save button at the bottom of the window	Event title will change	Event title will change	

Test case #20			Description: Editing the Start time for an event.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to edit	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass

2	Click on the event you would like to edit from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
4	Edit the start time of the event	-	-	
5	Click on the save button at the bottom of the window	Event start time will change	Event start time will change	

Test case #21			Description: Editing the Start date for an event.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to edit	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Fail
2	Click on the event you would like to edit from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	

4	Edit the start date of the event	-	-	
5	Click on the save button at the bottom of the window	Event start date will change		

Test case #22			Description: Editing the guest list	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to edit	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass
2	Click on the event you would like to edit from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
4	Click on Add button on top	Popup that will allow inputting the	Popup that will allow inputting the guest	

	of the guest field	guest information	information	
5	Insert the information required and click on Ok and then proceed by clicking on the save button	The guest will be added to the guest list	The guest will be added to the guest list	
6	Choose one of the guests and click on the remove button on top of the guest field	The chosen guest will be removed	The chosen guest will be removed	

Test case #23			Description: Editing the location	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to edit	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass
2	Click on the event you would like to edit from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
4	Change the current location of the event	No output	No output	

5	Click on save	The location will be updated	The location will be updated	
---	---------------	------------------------------	------------------------------	--

Test case #24			Description: Editing the description	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to edit	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass
2	Click on the event you would like to edit from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
4	Change the description of the event	No output	No output	
5	Click on save	The description will be updated	The description will be updated	

1.2.3 Test suite #6: Deleting events

Test Name:	Deleting events	Number of test cases:	2
Description:	This test suite includes test cases that are examining how to delete an event	Tester's information:	Elaf Abdullah Saleh Alhaddad
Rationale	As a calendar, the app should be able to delete an event. Using category testing, there are only two test cases required: <ul style="list-style-type: none"> • Deleting one event • Deleting multiple events on the same day 		

Test case #25			Description: Deleting one event	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to delete	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass
2	Click on the event you would like to delete from the event lists	Information of the event will be displayed at the right side of the popup window	Information of the event will be displayed at the right side of the popup window	
3	Click on the edit button at the top side of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
4	Click on the delete This	Confirmation popup will appear	Confirmation popup will appear	

	event button at the bottom right of the popup window			
5	Click on yes	The event will be deleted from the calendar	The event will be deleted from the calendar	

Test case #26			Description: Deleting all events	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date of the event you would like to delete	A window that allows creation of an event with the list of the events pops up	A window that allows creation of an event with the list of the events pops up	Pass
2	Click on Delete all events on the top right of the window	Confirmation popup will appear	Confirmation popup will appear	
3	Click on Yes	All events for that day will be deleted	All events for that day will be deleted	

1.2.4 Test suite #7: Event Dates

Test Name:	Event dates	Number of test cases:	4
Description:	This test suite includes test cases that are examining how the year navigation functionality performs.	Tester's information:	Tatiana Sutulova
Rationale	The strategy used in this test suite is the equivalence (class) partitioning, since the inputs used to test year navigation features may be divided in groups (classes), that will be treated equally and give the same output. Two groups: 1) Proper format 2) Improper format: a) Invalid characters b) Valid characters c) Year in form of YYYY instead of YY		

Test case #27			Description: The event date chosen by the user appears by default	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on any date square	The chosen date appears in the "Start time" window by default.	The chosen date does not appear in the "Start time" window by default	Fail
2	Click on new event			

Test case #28			Description: The event date format is YY-MM-DD	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Input random date, 20-05-25.	The app recognizes the date and it remains in the "Start time" window.	The app does not recognize the date, the user input is deleted from the "Start time" window.	Fail
2	Proceed to fill next window			

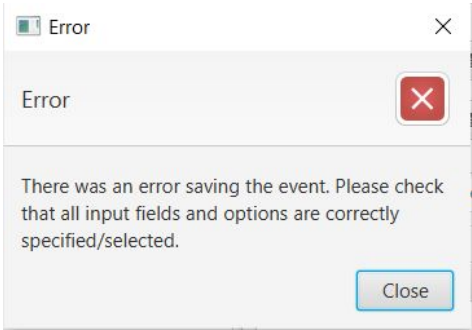
Test case #29			Description: Input the date, containing invalid symbols, negative numbers and non-integers.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Input date containing invalid symbols: twenty-\$5-2.5	The app does not recognize the date and it is deleted from the "Start time" window.	The app does not recognize the date and it is deleted from the "Start time" window.	Pass
2	Proceed to fill next window			

Test case #30			Description: Input year in YYYY format instead of YY.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Input the date: 25/08/2020	The app recognizes the date and it remains in the "Start time" window.	The app recognizes the date and it remains in the "Start time" window.	Pass
2	Proceed to fill next window			

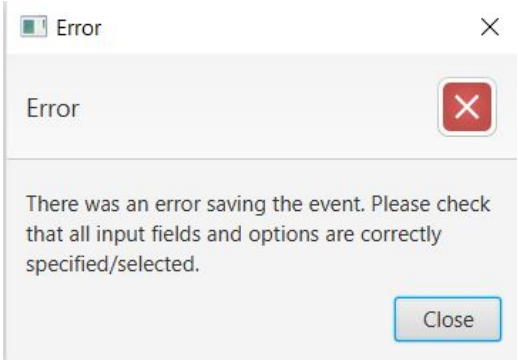
1.2.5 Test suite #8: Event time

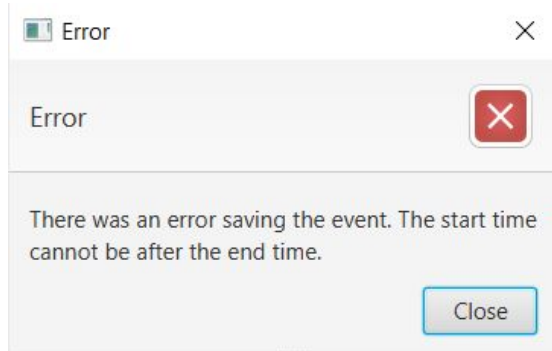
Test Name:	Event time	Number of test cases:	4
Description:	This test suite includes test cases that are examining the valid inputs of time that will be accepted by the app	Tester's information:	Elaf Abdullah Saleh Alhaddad
Rationale	For this test we will assume that all inputs other than time are the valid inputs. Using category partitioning we get four types of tests that are required: <ul style="list-style-type: none"> • Test in 24 hr format • Test in AM and PM format • Testing with an invalid input • Valid format with the Start time after the end time 		

Test case #31			Description: Time in adding an event using the 24hr format	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to add an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Fail
2	Click on "new event" that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add all valid inputs except for time	No output	No output	
4	Insert start and end time in	No output	No output	

	24 hr format			
4	Click on the save button	The event should be saved		

Test case #32			Description: Time in adding an event using the AM/PM format	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to add an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Pass
2	Click on “new event” that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add all valid inputs except for time	No output	No output	
4	Insert start and end time in AM/PM format	No output	No output	
5	Click on save button	The event should be saved	The event should be saved	

Test case #33			Description: Time in adding an event using invalid format	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to add an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Pass
2	Click on “new event” that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add all valid inputs except for time	No output	No output	
4	Insert start and end time in invalid format. For example, special characters or minutes that are greater than 60	No output	No output	
5	Click on save button	Error message should appear		

Test case #34			Description: Time in adding an event using invalid format	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the date you would like to add an event	A window that allows creation of an event pops up	A window that allows creation of an event pops up	Pass
2	Click on “new event” that is located at the top left of the popup window	Access to edit the fields located at the right side of the popup window will be granted	Access to edit the fields located at the right side of the popup window will be granted	
3	Add all valid inputs except for time	No output	No output	
4	Insert start and end time where the end time is before the start time	No output	No output	
5	Click on save button	Error message should appear		

1.2.6 Test suite #9: Event year

Test Name:	Event year	Number of test cases:	2
Description:	This test suite includes test cases that are examining if years that may be chosen by the user for the event are in the valid range from 1900 to 2100. For all the test cases in this test suite, we assume that the rest of the fields are filled with valid input.	Tester's information:	Tatiana Sutulova
Rationale	The strategy used in this test suite is the equivalence (class) partitioning, since the inputs used to test this feature may be divided into groups (classes) by numerical ranges: {1900>,<2100},{<1900, 2100>}		

Test case #35			Description: Input year, which is in the valid range {1900, 2100}	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill all the fields with valid inputs, except the year field.	The app allows the user to create an event on the date which is before the current date. The event is stored for the chosen date.	The app allows the user to create an event on the date which is before the current date. The event is stored for the chosen date.	Pass
2	Input 2019 to the year field			
3	Press the save button			

Test case #36			Description: Input year, which is out of the valid range {1900, 2100}	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill all the fields with valid inputs, except the year field.	The app does not allow the user to create an event on the date which is out of the valid range. The app gives the error message/alert notifying what the problem is.	The app does not allow the user to create an event on the date which is out of the valid range. The app gives the error message/alert notifying what the problem is.	Pass
2	Input 2101 to the year field			
3	Press the save button			

1.2.7 Test suite #10: Event location

Test Name:	Event location	Number of test cases:	3
Description:	This test suite includes test cases that are examining the format of location that the user inputs to create an event. For all the test cases in this test suite, we assume that the rest of the fields are filled with valid input.	Tester's information:	Tatiana Sutulova
Rationale	The strategy used in this test suite is Category testing? since we divide the possible inputs into four groups, American format / Australian format: <ol style="list-style-type: none"> a. With an abbreviation b. Without an abbreviation 2. Format of any country but Australia and America/ improper format		

Test case #37			Description: Adding the address in American/Australian format	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill in all the fields with valid inputs, except the guest field.	The event is saved on the chosen date at the chosen location.	The event is not saved and the app gives an alert that the format of the location is improper.	Fail
2	Input the address in a proper Australian format without the abbreviation : Lot 3 Wealwandangie Road,WEALWANDANGIE,Q UEENSLAND,4722 (QLD=Queensland)			
3	Press save			

Test case #38			Description: Adding the address in American/Australian format with the abbreviation	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill in all the fields with valid inputs, except the guest field.	The event is saved on the chosen date at the chosen location.	The event is saved on the chosen date at the chosen location.	Pass
2	Input the address in a proper American format with the abbreviation : Lot			

	3 Wealwandangie Road,WEALWANDANGIE,QLD,4722 (QLD=Queensland)			
3	Press save			

Test case #39			Description: Adding the location with the invalid format, which is a format of any country but Australia and America.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill in all the fields with valid inputs, except the guest field.	The app does not allow the user to save the event with the improper formatted location and gives the error message/alert notifying what the problem is.	The app does not allow the user to save the event with the improper formatted location and gives the error message/alert notifying what the problem is.	Pass
2	Input the Malaysian address: Jalan Lagoon Selatan, Bandar Sunway, 47500 Subang Jaya, Selangor			
3	Press save			

1.2.8 Test suite #11: Event Guests

Test Name:	Event guests	Number of test cases:	3
Description:	This test suite includes test cases that are examining if all the functionality related to adding guests is working in a proper way . For all the test cases in this test suite, we assume that the rest of the fields are filled with valid input.	Tester's information:	Tatiana Sutulova
Rationale	The strategy used in this test suite is equivalence partitioning, since the inputs are divided into two categories: valid input and invalid input, which includes invalid format. Note: This test occurs during the process of creating the event.		

Test case #40			Description: Adding the guest with all the valid inputs.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill in all the fields with valid inputs, except the guest field.	After inputting the email, the app asks for the guest name and a phone number.	After inputting the email, the app does not ask for the guest name and a phone number and saves the guest immediately by their email.	Fail
2	Input the email (tsut0005@gmail.com)			
3	Press okay/enter			

Test case #41			Description: Adding the guest with the invalid format of the email address (not following a format of jsmith@example.something).	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Fill in all the fields with valid inputs, except the guest field.	The app does not allow the user to add a new guest with this email address and gives the error message/alert notifying what the problem is.	The app does not allow the user to add a new guest with this email address and gives the error message/alert notifying what the problem is.	Pass
2	Input the invalid email address: hello@byebye			
3	Press okay/enter			

Test case #42			Description: Deleting the guest from the list of guests.	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Choose the guest by clicking on it.	App gives an alert asking if the user is sure about removing the chosen guest from the guest list and if the user confirms, the guest is removed from the guest list	The remove button is not clickable and therefore the guest cannot be removed from the guest list once added.	Fail
2	Press the remove button.			

1.2.9 Test suite #12: Importing and exporting calendar

Test Name:	Importing and exporting calendar	Number of test cases:	2
Description:	This test suite includes test cases that are examining how to import and export	Tester's information:	Elaf Abdullah Saleh Alhaddad
Rationale	As a calendar, the app should be able to import and export an event. Using category testing, there are only two test cases required: <ul style="list-style-type: none">• Importing a calendar• Exporting a calendar		

Test case #43			Description: Importing a calendar	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the file button at the left top of the calendar	Two choices of importing and exporting a calendar should appear	Two choices of importing and exporting a calendar should appear	Pass
2	Click on import a calendar	Window that allows you to choose the file from your computer appears	Window that allows you to choose the file from your computer appears	
3	Chose the calendar you would like to import, it must be in csv format	The chosen calendar will now be imported into the calendar app	The chosen calendar will not appear on the calendar app	

Test case #44			Description: Exporting a calendar	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the file button at the left top of the calendar	Two choices of importing and exporting a calendar should appear	Two choices of importing and exporting a calendar should appear	Pass
2	Click on export a calendar	Window that allows you to save the file to your computer appears	Window that allows you to save the file to your computer appears	
3	Add suitable name and save	The file will be saved in your computer	The file will be saved in your computer	

2. Testing the Usability and portability:

2.1 Test suite #13: App usability

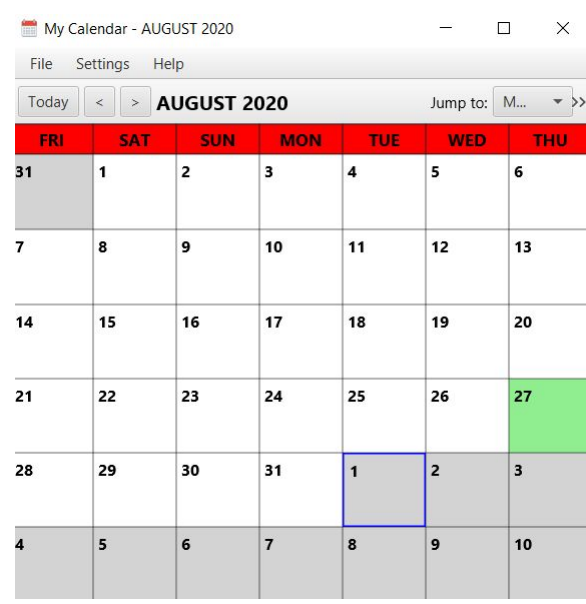
Test Name:	Usability	Number of test cases:	4
Description:	This test suite includes test cases that are examining the usability of the following program.	Tester's information:	Tatiana Sutulova & Elaf Abdullah Saleh Alhaddad
Rationale	The strategy used in this test suite is random testing, since the inputs are randomly chosen based on the functionality provided to increase the usability of the following application.		

Test case #45			Description: Help button	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Precondition: the application is opened on any month of any year.	Certain information about the functionality of the application appears for the user	There is no output, the button does not give any information	Fail
2	Click the help button in the left top corner			
3	Select "help" from the dropdown list			

Test case #46			Description: "About MyCalendar" button	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Precondition: the application is opened on any month of any year.	Certain information about the application appears for the user	Certain information about the application appears for the user	Pass
2	Click the help button in the left top corner			
3	Select "About MyCalendar" from the dropdown list			

Test case #47			Description: Today button	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Precondition: the application is opened on the January, 2019 page.	The app jumps to the page with the current date (current year, current month)	The app jumps to the page with the current date (current year, current month)	Pass
2	Click the Today button in the left top corner			

Test case #48			Description: Settings - first day of the week	
Step	Test Step/Input	Expected outputs	Actual outputs	Pass/fail
1	Click on the setting button at the left top of the calendar	Choice of changing the first day of the week appears	Choice of changing the first day of the week appears	Pass
2	Click on first day of the week	List of days will be displayed	List of days will be displayed	

3	Click on any day (e.g Friday)	The first day of the week will become friday	 <p>The screenshot shows a calendar application window titled 'My Calendar - AUGUST 2020'. The window has a menu bar with 'File', 'Settings', and 'Help'. Below the menu bar is a toolbar with 'Today', navigation arrows, the month 'AUGUST 2020', and a 'Jump to:' dropdown. The calendar grid shows days of the week as columns (FRI, SAT, SUN, MON, TUE, WED, THU) and dates as rows. The first day of the week (Sunday, August 2nd) is highlighted in green, and the second day (Monday, August 3rd) is highlighted in blue.</p>
---	-------------------------------	--	--

2.2 Test suite #14: App usability & portability

Apart from the test suites and the test cases that were created to examine the app's functionality, we also tested its portability by trying the app on a different operating system.

Originally, all the test suites were implemented within the Windows 10 operating system. With that platform, we can assume that the app's functionality and UI will deliver the same results and processing when using another Windows operating system matching the requirements outlined in the requirement document.

Another way that we tested the portability of the app was by trying its functionality on the Mac OS operating system, where we discovered that the app will look and function the same way as using Windows 10. This shows that the app passes the portability test.

Looking at the app itself without using the functionalities it provides, the app can be as a physical or any other online calendar because of the way it is designed. The only downside for the app is that the events can only be created if there is a specific destination/location to be inputted alongside the event. This reduces the usability because the user won't be able to save an event, for example a friend's birthday, without inputting where this birthday celebration would take place.

3. Test Summary

Requirement type	Requirement id	Requirement description	Test case id	Test case description	Pass/fail
UI	req01	Years can be navigated by '<' and '>'	#01	Navigation by '>'	fail
			#02	Navigation by '<'	fail
	req02	Years can be navigated manually entering the year in the text box.	#03	Manual navigation by inputting negative number	pass
			#04	Manual navigation by inputting zero	pass
			#05	Manual navigation by inputting valid year	pass
	req03	Navigating days through the arrow keys	#06	Navigating across the days using the right arrow key within the same row	pass
			#07	Navigating across the days using the right arrow key to move to the next day in another row	fail

			#08	Navigating across the days using the left arrow key to move to the previous day in same row	pass
			#09	Navigating across the days using the left arrow key to move to the previous day in another row	fail
			#10	Navigating across the days using the up arrow key	pass
			#11	Navigating across the days using the down arrow key	pass
	req04	All twelve months are shown in the drop-down menu and can be navigated through the arrow keys.	#12	Navigation by the arrow up key.	pass
			#13	Navigation by the arrow down key.	pass
			#14	Navigation by the arrow left key.	fail
			#15	Navigation by the arrow right key.	fail
Events	req05	As a calendar, the app should be able to create events	#16	Creation of an event by only filling Title, Start date, End date fields	fail
			#17	Creation of an event by only filling Title, Start date, End date, Start time, End time fields	fail
			#18	Creation of an event by only filling Title, Start date, End date, Start time, End time, location fields	pass

	req06	As a calendar, the app should be able to edit the events that have been created	#19	Editing the title for an event.	pass
			#20	Editing the Start time and end time for an event.	pass
			#21	Editing the Start date and end date for an event.	fail
			#22	Editing the guest list	pass
			#23	Editing the location	pass
			#24	Editing the description	pass
	req07	As a calendar, the app should be able to delete the events	#25	Deleting one event	pass
			#26	Deleting all events	pass
	req08	Events have a date that is selected by default, according to what day the user has chosen on the main calendar page.	#27	The event date chosen by the user appears by default	fail
	req09	Events have dates that can be entered in the YY-MM-DD format.	#28	The event date format is YY-MM-DD	fail
			#29	Input the date, containing invalid symbols, negative numbers and non-integers.	pass
			#30	Input year in YYYY format instead of	pass

				YY.	
	req10	The events' time is separately inputted to the date in both AM/PM and 24 hr formats	#31	Time in adding an event using the 24hr format	fail
			#32	Time in adding an event using the AM/PM format	pass
			#33	Time in adding an event using invalid format	pass
			#34		pass
	req11	The events can be saved for any date from years 1900 to 2100	#35	Input year, which is in the valid range {1900, 2100}	pass
			#36	Input year, which is out of the valid range {1900, 2100}	pass
	req12	The events can be created when the input of location is in two formats that are American and Australians. The application also accepts the addresses with abbreviated street types.	#37	Adding the address in American/Australian format	fail
			#38	Adding the address in American/Australian format with the abbreviation	pass
			#39	Adding the location with the invalid format, which is a format of any country but Australia and America.	pass
	req13	Guests can be added to the events, and the guests name, email address, and the phone number is	#40	Adding the guest with all the valid inputs.	fail

		required in order to do so	#41	Adding the guest with the invalid format of the email.	pass
	req14	The remove button should remove the guests from the guest list	#42	Deleting the guest from the list of guests.	fail
	req15	The ability to import a calendar	#43	Importing a calendar	pass
	req16	The ability to export a calendar	#44	Exporting a calendar	pass
Usability	req17	A working help button	#45	Help button	fail
	req18	A working "about MyCalendar" button	#46	"About MyCalendar" button	pass
	req19	A working "Today" button	#47	The app jumps to the page with the current date	pass
	req20	Changing the first day in the calendar	#48	Settings - first day of the week	pass

4. Traceability matrix

[illegible]

To test if the program allows the user to create events and edit/delete them afterwards					#19 #20 #21 #22 #23 #24 #25, #26														
To test whether the chosen date appears by default in the “date” window in the event creating menu. And to test whether the user is able to choose the date manually.								#27 #28 #29 #30											
To test whether time can be inputted manually in both 24-hours and PM/AM format										#31 #32 #33 #34									
To test whether the events can be saved for any date from years 1900 to 2100											#35 #36								

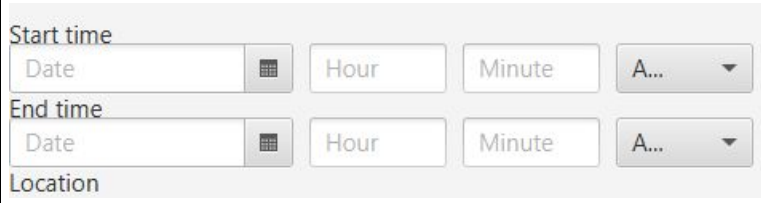
<p>To test whether the events can be created when the input of location is in two formats that are American and Australians.</p> <p>Moreover, test if the application also accepts the addresses with abbreviated street types.</p>												#37 #38 #39								
<p>To test whether guests can be added to the events, with the guests name, email address, and the phone number. Moreover, to test whether the guests may be removed from the guest list afterwards</p>													#40 #41 #42							
<p>To test whether this app supports the importing and exporting the events in the csv format.</p>															#43 #44					
<p>To test the app usability.</p>																	#45 #46 #47 #48			

5. Bug Reports

5.1 Bug #1: Year navigation with arrow keys

Requirement number	req03
Name	Year navigation by "<" and ">" buttons
Reporter	Tatiana Sutulova
Summary	Clicking "<" and ">" buttons navigates through months instead of years which is not following the requirement
Steps to reproduce	1. Click o "<" or ">" button
Expected results	The app goes to the same month of the previous/next year.
Actual result	The app goes to the next/previous month of the same year.
App	MyCalendar.jar
Operating System	Windows 10
Severity	Medium
Priority	Medium
Note/ justification	This bug is of a medium severity, since the program is still functioning well with it, however it does not follow the requirement and therefore has to be fixed.

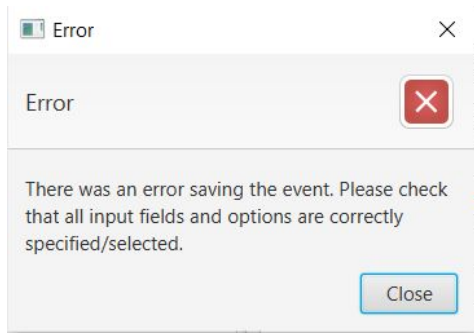
5.2 Bug #2: Starting date

Requirement number	req08
Name	The event date chosen by the user appears by default
Reporter	Elaf Abdullah Saleh Alhaddad
Summary	When clicking on a date, the popup to create an event has an empty start date and end date.
Steps to reproduce	<ol style="list-style-type: none">1. Click on any date square2. Click on new event
Expected results	The date to be automatically displayed
Actual result	 <p>The screenshot shows a light gray popup window for creating an event. It contains three sections: 'Start time' with a 'Date' input field, a calendar icon, 'Hour' and 'Minute' dropdowns, and an 'A...' time zone dropdown; 'End time' with similar fields; and a 'Location' text input field. All date and time fields are empty.</p>
App	MyCalendar.jar
Operating System	Windows 10
Severity	High
Priority	High

Note/ justification	When clicking on a date, the popup to create an event should automatically display the date that was clicked on. However, that does not occur and the app shows an empty field for the date. This gives a confusing message to the user and the user would think that they could input any date in the date field but that will cause an error in the system.
----------------------------	---

5.3 Bug #3: Time in 24hr format

Requirement number	req10
Name	Testing the event can be created when inputted the valid inputs of time
Reporter	Elaf Abdullah Saleh Alhaddad
Summary	When creating an event, if the time is inputted in 24 hour format it fails to created and an error message will be displayed
Steps to reproduce	<ol style="list-style-type: none"> 1. Click on the date you would like to add an event 2. Click on "new event" that is located at the top left of the popup window 3. Add all valid inputs except for time 4. Insert start and end time in 24 hr format 5. Click on the save button
Expected results	The event to be saved

Actual result	
App	MyCalendar.jar
Operating System	Windows 10
Severity	Medium
Priority	High
Note/ justification	The app should be able to create an event regardless of the format of the time inputted based on the requirement. The app however, fails to meet this requirement making this a bug that should be tackled

5.4 Bug #4: Adding guests

Requirement number	req13
Name	Guests can be added to the events, and the guests name, email address, and the phone number is required in order to do so
Reporter	Sutulova Tatiana

Summary	Guests can be added to the events, however the app is not asking for the guest's name and phone number. It requires only a guest's email.
Steps to reproduce	<ol style="list-style-type: none"> 1. Fill in all the fields with valid inputs, except the guest field. 2. Input the guest's email 3. Press okay/enter
Expected results	The app asks for the guest's name and phone number
Actual result	The app saves the guest by their email without saving the name and mobile number
App	MyCalendar.jar
Operating System	Windows 10
Severity	Medium
Priority	Medium
Note/ justification	The bug is of medium severity since the adding guest feature works even when it persists, however the feature does not follow the requirements and therefore this bug has to be fixed.

6. Work Breakdown Agreement

Our team consists of two team members, which makes it easier to equally separate the workload. Most of the work was done during the Zoom meetings to ensure that the time spent by both students to complete given tasks is equal and to be able to solve any issues and problems that the student may face, while completing their parts, is discussed and solved immediately. The following table shows what parts each student contributed to and approximation of the time spent by each student to complete this assignment.

Student name and student id	Test suites	Test cases	Traceability matrix	Bug reports	Work Breakdown Agreement	Formatting of the document	Approximate time spent on the assignment
Tatiana Sutulova, 30806151	#1, #3, #7, #9, #11, #13	#01- #05; #12-#15; #27-#30; #35-#42; #45, #47; (24 test cases)	X	#1, #4	X		3.5 hours
Elaf Abdullah Saleh Alhaddad, 31063977	#2,#4, #5, #6, #8, #10, #12, #13	#06- #011; #16-#26; #31-#34; #43, #44, #46, #48; (24 test cases)	X	#2, #3		X	3.5 hours