Equivalence class:

1) Username

Valid class	6 <= input <= 15 characters, input is correct username
Invalid class	Input < 6 characters (lowest of lowest), input > 15 characters (highest of highest); input is wrong username

Boundary value:

1) Username

Valid boundary values	{6, 15}, correct username
Invalid boundary value	{5, 16}, incorrect username

Username	length	Expected Result	Actual Result
testin	6	User has been registered successfully!	User has been registered successfully!
test1	5	Username needs to be at least 6 characters long!	Username needs to be at least 6 characters long!
testing12345678	15	User has been registered successfully!	User has been registered successfully!
testing123456789	16	Username needs to be at most 15 characters long!	Username needs to be at most 15 characters long!

Equivalence class:

2) Password

Valid class	6 <= input <= 20 characters; input is correct password	
Invalid class	Input < 6 characters (lowest of lowest), input > 20 characters (highest of highest); input is wrong password	

Boundary value:

2) Password

Valid boundary values	{6, 20}, correct password
Invalid boundary value	{5,21}, incorrect password

Password	length	Expected Result	Actual Result
123456	6	Successful login	Successful login
12345	5	Password needs to be at least 6 characters long!	Password needs to be at least 6 characters long!
passwordpassword1234	20	Successful login	Successful login
passwordpassword12345	21	Password needs to be at most 20 characters long!	Password needs to be at most 20 characters long!

1. Registration

a) Generic cases

Test ID	Scenario	Expected Results	Actual Results
1	Register with valid inputs in all fields	The system displays the main menu for user to continue the operation	The system displays the main menu for user to continue the operation
2	Register with incomplete fields	The system prompts the user to fill up the required fields for registration	The system prompts the user to fill up the required fields for registration
3	Register with taken username	The system prompts the user to select another username	The system prompts the user to select another username
4	Register with password mismatch	The system prompts the user to re-enter the password	The system prompts the user to re-enter the password
5	Register with invalid D.O.B	The system prompts the user to re-enter their DOB in the valid range	The system prompts the user to re-enter their DOB in the valid range

b) Specific cases (Email address)

Test ID	Email Address	Expected Results	Actual Results
1	test@gmail.com	Approve	Approve
2	test	Reject	Reject
3	test@abcd	Reject	Reject

c) Specific cases (Combination)

The following inputs are discrete values and have only 2 equivalence classes:

Equivalence class for D.O.B

- 1. Valid equivalence class = {DDMMYYY, where DD = 1 to 31, MM = 1-12, YYYYY = any 4 digit number }
- 2. Invalid equivalence class = $\{123, \dots\}$

Equivalence class for Username

- 1. Valid equivalence class: {length of username >=6 and unique}
- 2. Invalid equivalence classes: {length of username < 6 or non-unique}

Equivalence class for Name

- 1. Valid equivalence class = {any string, "testuser", ...}
- 2. Invalid equivalence class = {empty string}

Equivalence class for Email

- 1. Valid equivalence class = {String of format <u>XX@XX.com</u>, where XX is any character}
- 2. Invalid equivalence class = {"abc", ... }

Equivalence class for Confirm Password

- 1. Valid equivalence class = {String that matches the password field}
- 2. Invalid equivalence class = {all other strings}

Equivalence class for Password

- 1. Valid equivalence class = $\{length of password \ge 6\}$
- 2. Invalid equivalence class = {length of password < 6}

As the number of possible cases in each of these equivalence classes are large, we'll only be choosing 1 representative value for each equivalence class

Username	Given Name	Email	Password	Confirm Password	D.O.B	Expected Result	Actual Result
testuser	test	user@gmail.com	testpass	testpass	12122000	User has been registered successfully!	User has been registered successfully!
testuser	test	user@gmail.com	testpass	testpass	12122000	Username is already taken!	Username is already taken!
test	test	user@gmail.com	testpass	testpass	12122000	Username needs to be at least 6 characters long!	Username needs to be at least 6 characters long!
testuser	Empty("")	user@gmail.com	testpass	testpass	12122000	Name is required!	Name is required!
testuser	test	Empty("")	testpass	testpass	12122000	Email is required!	Email is required!
testuser	test	user@gmail.com	Empty("")	testpass	12122000	Password is required!	Password is required!
testuser	test	user@gmail.com	testpass	Empty("")	12122000	Password and confirmation do not match!	Password and confirmation do not match!
testuser	test	user@gmail.com	testpass	testpass	Empty("")	Please enter valid date in DDMMYYY format	Please enter valid date in DDMMYYY format
testuser	test	user@gmail.com	testpass1	testpass2	12122000	Password and confirmation do not match!	Password and confirmation do not match!
testuser	test	user@gmail.com	testpass2	testpass1	12122000	Password and confirmation do not match!	Password and confirmation do not match!

2. Login

a) Generic cases

Test ID	Scenario	Expected Results	Actual Results
1	Login with valid account username and password	The system displays the main menu for user to continue the operation	The system displays the main menu for user to continue the operation
2	Login without valid credentials	The system prompts the user to enter the credentials again	The system prompts the user to enter the credentials again
3	Login with incomplete fields	The system prompts the user to fill up the required fields for logging in	The system prompts the user to fill up the required fields for logging in
4	Login without filling up minimum character requirements	The system prompts the user to fill up the required fields for logging in	The system prompts the user to fill up the required fields for logging in

b) Specific cases (Combination)

Email	Password	Expected Results	Actual Results
user@gmail.com	testpass	Successful login	Successful login
wrong@gmail.co m	testpass	Failed to login! Please check your credentials Failed to login! Please check your credentials	
Empty("")	testpass	Email is required!	Email is required!
user@gmail.com	wrongpass	Failed to login! Please check your credentials	Failed to login! Please check your credentials
user@gmail.com	Empty("")	Password is required!	Password is required!

3. Get user's current location

Test ID	Scenario	Expected Results	Actual Results
1	User allowed location permissions for the app	The system displays the main menu for user to continue the operation	The system displays the main menu for user to continue the operation
2	User denied location permissions for the app	The system prompts the user to allow permissions again every time they switch back to the explore page	The system prompts the user to allow permissions again every time they switch back to the explore page

4. Add event from explore page to a calendar

a) Generic cases

Test ID	Scenario	Expected Results	Actual Results
1	Create event with all details filled in	Event successfully created	Event successfully created
2	Create event with incomplete fields	The system prompts the user with the respective message(s) to fill up the required field(s)	The system prompts the user with the respective message(s) to fill up the required field(s)
3	Create event with invalid Time (not between 0000 and 2359)	Time is not valid, please enter number in range of 0000 to 2359	Time is not valid, please enter number in range of 0000 to 2359

b) Specific cases (Combination)

Type Event	Type Location	Event Time	Expected Results	Actual Results
Nasi Lemak	NTU Canteen	Between 0000 and 2359	Successful event creation	Successful event creation
Nasi Lemak	NTU Canteen	Empty("") / Out of range	Time is not valid, please enter a valid time.	Time is not valid, please enter a valid time.
Nasi Lemak	Empty("")	Between 0000 and 2359	Location is not valid. Please enter a valid location.	Location is not valid. Please enter a valid location.
Nasi Lemak	Empty("")	Empty("") / Out of range	Location is not valid. Please enter a valid location.	Location is not valid. Please enter a valid location.
Empty("")	NTU Canteen	Between 0000 and 2359	Name is not valid. Please enter the event name.	Name is not valid. Please enter the event name.
Empty("")	NTU Canteen	Empty("") / Out of range	Name is not valid. Please enter the event name.	Name is not valid. Please enter the event name.
Empty("")	Empty("")	Between 0000 and 2359	Name is not valid. Please enter the event name.	Name is not valid. Please enter the event name.
Empty("")	Empty("")	Empty("") / Out of range	Name is not valid. Please enter the event name.	Name is not valid. Please enter the event name.

5. Calendar Page

a) Text box with "Type Event" hint

Test ID	Text Enter	Expected Results	Actual Results
1	Lunch with Martha	Successfully Saved	Successfully Saved
2	Empty("")	Name is not valid. Please enter the event name.	Name is not valid. Please enter the event name.

b) Text box with "Location" hint

Test ID	Text Enter	Expected Results	Actual Results
1	North Spine	Successfully Saved	Successfully Saved
2	Empty("")	Location is not valid. Please enter a valid location.	Location is not valid. Please enter a valid location.

c) Numeric Textbox with "Event time" hint

Test ID	Text Enter	Expected Results	Actual Results
1	0000	Successfully Saved	Successfully Saved
2	2359	Successfully Saved	Successfully Saved
3	-0001	Time is not valid. Please enter number in range of 0000 to 2359	Time is not valid. Please enter number in range of 0000 to 2359
4	2400	Time is not valid. Please enter number in range of 0000 to 2359	Time is not valid. Please enter number in range of 0000 to 2359

d) Numeric Textbox with "DD" hint

Test ID	Text Enter	Expected Results	Actual Results
1	1	Successfully Saved	Successfully Saved
2	31	Successfully Saved	Successfully Saved
3	0	Date is not valid. Please enter number in range of 1 to 31	Date is not valid. Please enter number in range of 1 to 31
4	32	Date is not valid. Please enter number in range of 1 to 31	Date is not valid. Please enter number in range of 1 to 31

e) Numeric Textbox with "MM" hint

Test ID	Text Enter	Expected Results	Actual Results
1	1	Successfully Saved	Successfully Saved
2	12	Successfully Saved	Successfully Saved
3	0	Month is not valid. Please enter number in range of 1 to 12	Month is not valid. Please enter number in range of 1 to 12
4	13	Month is not valid. Please enter number in range of 1 to 12	Month is not valid. Please enter number in range of 1 to 12

f) Numeric Textbox with "YYYY" hint

Test ID	Text Enter	Expected Results	Actual Results
1	1900	Successfully Saved	Successfully Saved
2	2100	Successfully Saved	Successfully Saved
3	1899	Year is not valid. Please enter number in range of 1900 to 2100	Year is not valid. Please enter number in range of 1900 to 2100
4	2101	Year is not valid. Please enter number in range of 1900 to 2100	Year is not valid. Please enter number in range of 1900 to 2100