Black box testing

Equivalence Class & Boundary Value Testing

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Scenario 1: Account Sign Up

Equivalence Class for Email:

Valid EC	Valid Email address
Invalid EC	Empty field or invalid Email address

Equivalence Class for Password:

Valid EC	Strong password that meets requirement
Invalid EC	Empty field or password does not meet requirement

Test Case 1	Invalid account sign up		
Test Scenario	Account sign up	**Test Case ID**	T-SU-1
Test Description	Sign up with invalid credentials	**Test Priority**	High
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Email	Password	Expected Output	Actual Output	Test Result
1	[empty]	abc	Sign up failed: Unable to validate email address: invalid format	Sign up failed: Unable to validate email address: invalid format	Pass
2	example@gmail.com	[empty]	Sign up failed: Signup requires a valid password	Sign up failed: Signup requires a valid password	Pass

No.	Email	Password	Expected Output	Actual Output	Test Result
3	a@gmail.com	abc	Sign up failed: Email address "a@gmail.com" is invalid	Sign up failed: Email address "a@gmail.com" is invalid	Pass
4	a@gmail.com	Password1234!	Sign up failed: Email address "a@gmail.com" is invalid	Sign up failed: Email address "a@gmail.com" is invalid	Pass
5	chuaqindi02@gmail.com	abc	Sign up failed: Password should be at least 6 characters.	Sign up failed: Password should be at least 6 characters.	Pass

Test Case 2	Sign up successful		
Test Scenario	Account sign up	**Test Case ID**	T-SU-2
Test Description	Sign up invalid credentials	**Test Priority**	High
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Email	Password	Expected Output	Actual Output	Test Result
1	Any valid email. Eg. chuaqindi02@gmail.com	Password123!	Check your email to confirm sign up!	Check your email to confirm sign up!	Pass

Scenario 2: Account Login

Equivalence Class for Email:

Valid EC	Existing Email address in database
Invalid EC	Empty field or Email address does not exist in database

Equivalence Class for Password:

Valid EC	Correct password associated with email
Invalid EC	Empty field or incorrect password

Test Case 1	Invalid Login		
Test Scenario	Account Login	**Test Case ID**	T-LO-1
Test Description	Login with invalid credentials	**Test Priority**	High
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Email	Password	Expected Output	Actual Output	Test Result
1	[empty]	abc	Login failed: missing email or phone	Login failed: missing email or phone	Pass
2	chuaqindi02@gmail.com	[empty]	Login failed: Invalid login credentials	Login failed: Invalid login credentials	Pass
3	a@gmail.com	abc	Login failed: Invalid login credentials	Login failed: Invalid login credentials	Pass
4	a@gmail.com	Password1234!	Login failed: Invalid login credentials	Login failed: Invalid login credentials	Pass
5	chuaqindi02@gmail.com	abc	Login failed: Invalid login credentials	Login failed: Invalid login credentials	Pass

| 6 | chuaqindi02@gmail.com | IncorrectPassword 1234!@ | Login failed: Invalid login credentials | Login failed: Invalid login credentials | Pass |

Test Case 2	Login Successful		
Test Scenario	Account Login	**Test Case ID**	T-LO-2
Test Description	Login with valid credentials	**Test Priority**	High
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Email	Password	Expected Output	Actual Output	Test Result
1	Any existing email. eg. chuaqindi02@gmail.com	Password1234! (assuming correct password)	Login successful	Login successful	Pass

Scenario 3: Add Task

Equivalence Class for Task:

Valid EC	Non-empty field
Invalid EC	Empty field

Test Case 1

Test Case	Invalid Task		
Test Scenario	Add Task	**Test Case ID**	T-TA-1
Test Description	Add invalid task	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Task input	Expected Output	Actual Output	Test Result
1	[empty]	Failed: No Input	Failed: No Input	Pass

Test Case 2

Test Case	Valid Task		
Test Scenario	Add Task	**Test Case ID**	T-TA-2
Test Description	Add valid task	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Task input	Expected Output	Actual Output	Test Result
1	Any Non empty Field: Eg. Do Homework	Task added successfully	Task added successfully	Pass

Test Case 3

Test Case	Task Completed		
Test Scenario	Edit Task	**Test Case ID**	T-TA-3
Test Description	Task Completed	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Task input	Expected Output	Actual Output	Test Result
1	Click the checkbox on the task description to indicate "Completed"	Task completed successfully	Task completed successfully	Pass

Test Case 4

Test Case	Delete Task		
Test Scenario	Edit Task	**Test Case ID**	T-TA-4
Test Description	Delete Task	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Task input	Expected Output	Actual Output	Test Result
1	Click the "trash bin" icon on the task description to delete the task	Task deleted successfully	Task deleted successfully	Pass

Scenario 4: Add Friend

Equivalence Class for Friend's email:

Valid EC	Existing and verified email in database
Invalid EC	Email does not exist in database or email not verified

Test Case 1

Test Case	Empty Friend's Email		
Test Scenario	Add Friend	**Test Case ID**	T-FR-1
Test Description	Empty Friend's Email	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Friend email input	Expected Output	Actual Output	Test Result
1	[empty]	Error Message: "Please enter an email address"	Error Message: "Please enter an email address"	Pass

Test Case 2

Test Case	Invalid Friend's Email		
Test Scenario	Add Friend	**Test Case ID**	T-FR-2
Test Description	Add invalid Friend email	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Friend email input	Expected Output	Actual Output	Test Result
1	abc@gmail.com	Error Message: User not found!	Error Message: User not found!	Pass

Test Case 3

Test Case	Add existing Friend's email		
Test Scenario	Add Friend	**Test Case ID**	T-FR-3
Test Description	Add existing Friend's email	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Friend email input	Expected Output	Actual Output	Test Result
1	Input existing Friend's email	Error Message: "You are already friends."	Error Message: "You are already friends."	Pass

Scenario 5: Search Nearby Library

Equivalence Class for Library:

Valid EC	Valid Library that exists on Google Maps API
Invalid EC	Library that does not exist on Google Maps API

Equivalence Class for Postal Code:

Valid EC	Valid Singapore Postal Code
Invalid EC	Invalid Singapore Postal Code. i.e Contains alphabets or number of digits not equal 6

Test Case 1

Test Case	Invalid Postal Code		
Test Scenario	Search Nearby Library	**Test Case ID**	T-SE-1
Test Description	Invalid Postal Code	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Postal Code input	Expected Output	Actual Output	Test Result
1	Any invalid postal code	Returns default library location: "National Library / Lee Kong Chian Reference Library"	Returns default library location: "National Library / Lee Kong Chian Reference Library"	Pass

Test Case 2

Test Case	Empty Postal Code		
Test Scenario	Search Nearby Library	**Test Case ID**	T-SE-2
Test Description	Empty Postal Code	**Test Priority**	Medium
Prerequisite	Stable Internet Connection	**Post-Requisite**	N/A

No.	Postal Code input	Expected Output	Actual Output	Test Result
1	[empty field]	Error Message: "Please enter a postal code."	Error Message: "Please enter a postal code."	Pass