Black Box Testing – Login Page

Equivalent Class (EC) for Password Length

Valid EC	• 8 to 16
Invalid EC	• 0 to 7
	• 17 to 20

Boundary Values

Valid EC (8 to 16)	Two Boundary Values	8 (Lower Boundary)
		16 (Upper Boundary)
	Lower Boundary (8)	**7**, 8, **9**
	Upper Boundary (16)	**15**, 16, **17**
Invalid EC (0 to 7)	Two Boundary Values	8 (Lower Boundary)
		16 (Upper Boundary)
	Lower Boundary (0)	-1, 0, **1**
	Upper Boundary (7)	**6, 7, 8**
Invalid EC (17 to 20)	Two Boundary Values	17 (Lower Boundary)
		20 (Upper Boundary)
	Lower Boundary (17)	**16**, 17, **18**
	Upper Boundary (20)	**19**, 20, 21

Final Input Values for Test Cases

- **Length of Password**
  - Valid: 8, 16
  - Invalid: 0, 7, 17, 20, 21
  - -1 is removed as it's impossible for length to be -1

Equivalent Class (EC) for Email

Valid EC	• A valid email address that has been registered in the system: e.g: siekmingjun@hotmail.com
Invalid EC	• Email address without '@' symbol e.g: example.com • Invalid character in recipient name e.g: example.some@mail.com • Missing Domain Name e.g: example@.com • Email is not registered in system e.g: notregistered@mail.com

Final Input Values for Test Cases

- **Email**
    - Valid:
        - siekmingjun@hotmail.com
    - Invalid:
        - example.com
        - example.some@mail.com
        - example@.com
        - notregistered@mail.com

For our subsequent test cases, we assume password is always correct.

Test Cases 1: Valid Email + Invalid Password Length

* - Toast Message

Email	Password Length	Expected Result	Actual Output
valid@mail.com	0	* Please enter a password length of 8 to 16	* Please enter a password length of 8 to 16
valid@mail.com	7	* Please enter a password length of 8 to 16	* Please enter a password length of 8 to 16
valid@mail.com	17	* Please enter a password length of 8 to 16	* Please enter a password length of 8 to 16
valid@mail.com	20	* Please enter a password length of 8 to 16	* Please enter a password length of 8 to 16
valid@mail.com	21	* Please enter a password length of 8 to 16	* Please enter a password length of 8 to 16

Test Cases 2: Invalid Email + Valid Password Length

Email	Password Length	Expected Result	Actual Output
example.com	8	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up
example.com	16	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up
example.some@mail.com	8	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up
example.some@mail.com	16	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up
example@.com	8	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up
example@.com	16	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up
notregistered@mail.com	8	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up

notregistered@mail.com	16	* Authentication failed, check your email and password or sign up	* Authentication failed, check your email and password or sign up

Registration - Password RetypePassword Match

Test Input	Expected Behaviour	Actual Behaviour	Successful	Description
Passwords do not match Password : ABCDEFGH Password : ABCDEFGG	Error Message pops up "Passwords do not match"	Error Message pops up "Passwords do not match"	✘	Password is invalid as both passwords type do not match
Passwords do match Password : ABCDEFGH Password : ABCDEFGH	Account has been created sucessfully	Account has been created sucessfully	✔	Password is valid as both passwords type matched

Login - Validity of Credentials

Test Input	Expected Behaviour	Actual Behaviour	Successful	Description
Incorrect password	Error Message pops up "Authentication Failed, check your email and password"	Error Message pops up "Authentication Failed, check your email and password"	✘	Incorrect password was keyed in and user is not allowed to log in
Correct password	App successfully logs the user in	App successfully logs the user in	✔	Correct password was keyed in and user is allowed to log in

Change Password - Length (Can use BVT)				
Test Input	Expected Behaviour	Actual Behaviour	Successful	Description
7 Characters 0123456	Error Message pops up "Please enter a password between 8 - 16 Characters"	Error Message pops up "Please enter a password between 8 - 16 Characters"	✘	Password length is invalid because it is out of the range of 8 - 16
8 Characters 01234567	Account has been created sucessfully	Account has been created sucessfully	✔	Password length is valid because it is in the range of 8 - 16
16 Characters 01234567890ABCDEF	Account has been created sucessfully	Account has been created sucessfully	✔	Password length is valid because it is in the range of 8 - 16
17 characters 0123456789ABCDEF0	Error Message pops up "Please enter a password between 8 - 16 Characters"	Error Message pops up "Please enter a password between 8 - 16 Characters"	✘	Password length is invalid because it is out of the range of 8 - 16

Registration - Password RetypePassword Match				
Test Input	Expected Behaviour	Actual Behaviour	Successful	Description
Passwords do not match Password : ABCDEFGH Password : ABCDEFGG	Error Message pops up "Passwords do not match"	Error Message pops up "Passwords do not match"	✘	Password is invalid as both passwords type do not match
Passwords do match Password : ABCDEFGH Password : ABCDEFGH	Account has been created sucessfully	Account has been created sucessfully	✔	Password is valid as both passwords type matched

Login - Validity of Credentials				
Test Input	Expected Behaviour	Actual Behaviour	Successful	Description
Incorrect password	Error Message pops up "Authentication Failed, check your email and password"	Error Message pops up "Authentication Failed, check your email and password"	✘	Incorrect password was keyed in and user is not allowed to log in
Correct password	App successfully logs the user in	App successfully logs the user in	✔	Correct password was keyed in and user is allowed to log in

Change Password - Length (Can use BVT)				
Test Input	Expected Behaviour	Actual Behaviour	Successful	Description
7 Characters 0123456	Error Message pops up "Please enter a password between 8 - 16 Characters"	Error Message pops up "Please enter a password between 8 - 16 Characters"	✖	Password length is invalid because it is out of the range of 8 - 16
8 Characters 01234567	Account has been created sucessfully	Account has been created sucessfully	✔	Password length is valid because it is in the range of 8 - 16
16 Characters 01234567890ABCDEF	Account has been created sucessfully	Account has been created sucessfully	✔	Password length is valid because it is in the range of 8 - 16
17 characters 0123456789ABCDEF0	Error Message pops up "Please enter a password between 8 - 16 Characters"	Error Message pops up "Please enter a password between 8 - 16 Characters"	✖	Password length is invalid because it is out of the range of 8 - 16

	Change Password - Password Retype/Password Match				
Test Input		Expected Behaviour	Actual Behaviour	Successful	Description
Passwords do not match Password : ABCDEFGH Password : ABCDEFGG		Error Message pops up "Passwords do not match"	Error Message pops up "Passwords do not match"	✘	Password is invalid as both passwords type do not match
Passwords do match Password : ABCDEFGH Password : ABCDEFGH		Account has been created sucessfully	Account has been created sucessfully	✔	Password is valid as both passwords type matched