**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 |