

Black Box Testing
GROUP 34



Sign-Up Page

Constraints

Radio Buttons

1. At least one radio button must be selected.

Username

1. The username should be between 3 to 20 characters long.

Email

1. Must contain "@" and "." (e.g., example@gmail.com).
2. Must have characters before "@" and after the last ".".
3. No spaces allowed.
4. Length must be between 5 and 320 characters (per RFC 5321).

Password

1. Minimum length: 8 characters.
2. Maximum length: 20 characters.
3. Must contain at least:
 - One uppercase letter (A-Z).
 - One lowercase letter (a-z).
 - One digit (0-9).
 - One special character (!@#\$%^&*).
4. No spaces allowed.

Re-Enter Password

1. Re-Enter password must match with Password

Equivalence Classes:

Radio Buttons Equivalence Classes

1. R1: No radio button selected.
2. R2: One valid radio button selected.

Username Equivalence Classes

1. U1: Valid username (e.g., john_doe).
2. U2: Too short (< 3 characters, e.g., jo).
3. U3: Too long (> 20 characters, e.g., john_doe_super_long).

Email Equivalence Classes

1. E1: Valid email that meets all constraints (e.g., user@example.com).
2. E2: Missing the @ symbol (e.g., examplegmail.com).
3. E3: Missing the . symbol (e.g., user@examplecom).
4. E4: Contains spaces (e.g., user @example.com).
5. E5: Too short (< 5 characters, e.g., a@b.c).
6. E6: Too long (> 320 characters, e.g., repeated 321 times followed by @example.com).
7. E7: Invalid characters in the email (e.g., user#example.com).

Password Equivalence Classes

1. P1: Valid password that meets all constraints (e.g., P@ssw0rd123).
2. P2: Too short (< 8 characters, e.g., P@ss1).
3. P3: Too long (> 20 characters, e.g., P@ssw0rd1234567890123).
4. P4: Missing uppercase letters (e.g., password123!).
5. P5: Missing lowercase letters (e.g., PASSWORD123!).
6. P6: Missing digits (e.g., Password!).
7. P7: Missing special characters (e.g., Password123).
8. P8: Contains spaces (e.g., P@ss word).

Re-Enter Password Equivalence Classes

1. RP1: Matches the password
2. RP2: Doesn't match the password

Test Cases :

The input values are in the following format:

Radio Button
Username
Email
Password
Re-Enter Password

Test Case ID	Input Values	Equivalence Class	Expected Result
TC1	Patient john_doe user@example.com P@ssw0rd123 P@ssw0rd123	R1 (Valid), U1 (Valid), E1 (Valid), P1 (Valid), RP1 (Valid)	Sign-up successful.
TC2	Doctor john_doe user@example.com P@ssw0rd123 P@ssw0rd123	R2 (Invalid), U1 (Valid), E1 (Valid), P1 (Valid), RP1 (Valid)	Error: Invalid radio button selection.
TC3	Patient jo user@example.com P@ssw0rd123 P@ssw0rd123	R1 (Valid), U2 (Too short), E1 (Valid), P1 (Valid), RP1 (Valid)	Error: Username too short.
TC4	Patient john_doe_super_long user@example.com P@ssw0rd123 P@ssw0rd123	R1 (Valid), U3 (Too long), E1 (Valid), P1 (Valid), RP1 (Valid)	Error: Username too long.
TC5	Patient john userexample.com P@ssw0rd123 P@ssw0rd123	R1 (Valid), U1(valid) , E2 (Missing @), P1 (Valid), RP1 (Valid)	Error: Missing @ in Email.

TC6	Patient john user@examplecom P@ssw0rd123 P@ssw0rd123	R1 (Valid), U1(valid) , E3(Missing .), P1 (Valid), RP1 (Valid)	Error: Missing . in Email.
TC7	Patient john user@ example .c om P@ssw0rd123 P@ssw0rd123	R1 (Valid), U1(valid) , E4 (Contains Spaces), P1 (Valid), RP1 (Valid)	Error: Contains Spaces.
TC8	Patient john a@b.c P@ssw0rd123 P@ssw0rd123	R1 (Valid), U1(valid) , E5(Too short), P1 (Valid), RP1 (Valid)	Error: Too short Email.
TC9	Patient john a (repeated 321 times followed by) @example.com P@ssw0rd123 P@ssw0rd123	R1 (Valid), U1(valid) , E6(Too long), P1 (Valid), RP1 (Valid)	Error: Too Long Email.
TC10	Patient john user@examplecom <P>@ssw0rd123 <P>@ssw0rd123	R1 (Valid), U1(valid) , E7(Invalid Character), P1 (Valid), RP1 (Valid)	Error: Invalid characters are used in Email
TC11	Patient john user@example.com P@ss1 P@ss1	R1 (Valid), U1(valid) , E1(valid), P2(Too short), RP1 (Valid)	Error: Password is too short.
TC12	Patient john user@example.com	R1 (Valid), U1(valid) , E1(valid), P3(Too long), RP1 (Valid)	Error: Too Long password.

	P@ssw0rd1234567890123 P@ssw0rd1234567890123		
TC13	Patient john user@example.com password123! password123!	R1 (Valid), U1(valid) , E1(valid), P4(Missing uppercase letters), RP1 (Valid)	Error: Missing uppercase letters in password.
TC14	Patient john user@example.com PASSWORD123! PASSWORD123!	R1 (Valid), U1(valid) , E1(valid), P5(Missing lowercase letters), RP1 (Valid)	Error: Missing lowercase letters in password.
TC15	Patient john user@example.com Password! Password!	R1 (Valid), U1(valid) , E1(valid), P6(Missing digits), RP1 (Valid)	Error: Missing digits in password in password.
TC16	Patient john user@example.com Password123 Password123	R1 (Valid), U1(valid) , E1(valid), P7(Missing special characters), RP1 (Valid)	Error: Missing special characters in password.
TC17	Patient john user@example.com P@ss word P@ss word	R1 (Valid), U1(valid) , E1(valid), P8(Contains spaces), RP1 (Valid)	Error: Contains spaces in password.
TC18	Patient john user@example.com P@ssw0rd123 P@sswordismine	R1 (Valid), U1(valid) , E1(valid), P1(Valid), RP2(Invalid)	Error: Re-enter password is not matching with password