



IT314: Software Engineering

G17: StaffGrid

BLACK-BOX TESTING

Login Page:

VC1 The ID field cannot be blank.

VC2 ID must be a 10-digit number.

VC3 Password field cannot be blank.

VC4 Incorrect password should result in an error message.

Test Case ID	Validity Check No.	Username	Password	Expected Output	Remarks
TC1	VC1	(blank)	(blank)	Error: "Username cannot be blank."	Ensures the system detects blank username.
TC2	VC1, VC3	1234567890	(blank)	Error: "Password cannot be blank."	Ensures password field is validated for blank input.
TC3	VC2	12345678	R123456	Error: "Username must be 10 digits."	Ensures username validation for length.
TC4	VC2	12avda6789a	R123456	Error: "Username must be numeric."	Ensures username validation for numeric values.
TC5	VC2, VC3, VC4	1234567890	wrongPass	Error: "Invalid password."	Ensures invalid password detection.
TC6	VC2	2024000001	R123456	Success: Login successful.	Valid username and password.
TC7	VC2	12345	R123456	Error: "Username must be 10 digits."	Shorter username validation.
TC8	VC2	12345678901	R123456	Error: "Username must be 10 digits."	Longer username validation.
TC9	VC3	1234567890	(blank)	Error: "Password cannot be blank."	Verifies blank password validation.
TC10	VC4	1234567890	randomPass	Error: "Invalid password."	Verifies error for password that doesn't match the system-provided password.

Forgot Password Page:

VC1 Employee ID must be 10 digits long.

VC2 New password must be at least 6 characters long.

VC3 Confirm the new password must match the new password.

VC4 OTP must match the one sent to the email via the employee ID.

Test Case ID	Validity Check No.	Employee ID	New Password	Confirm New Password	OTP	Expected Output	Remarks
TC1	VC1, VC2, VC3, VC4	(blank)	(blank)	(blank)	(blank)	Error: "Employee ID cannot be blank."	Verifies blank employee ID field.
TC2	VC1, VC2, VC3, VC4	1234567890	(blank)	(blank)	(blank)	Error: "Password cannot be blank."	Verifies blank password fields.
TC3	VC1, VC2, VC3, VC4	1234567890	abcde	abcde	1234567890	Error: "Password must be at least 6 characters long."	Verifies password length validation.
TC4	VC1, VC2, VC3, VC4	1234567890	abc123	abc123	1234567890	Success: Password reset successful.	Verifies successful password reset.
TC5	VC1, VC2, VC3, VC4	1234567890	abc123	abc1234	1234567890	Error: "Confirm password does not match."	Verifies mismatch between new and confirmed password.
TC6	VC1, VC2, VC3, VC4	1234567890	abc123	abc123	0	Error: "OTP does not match."	Verifies OTP validation.
TC7	VC1	123456789	abc123	abc123	1234567890	Error: "Employee ID must be 10 digits."	Verifies employee ID length validation.
TC8	VC1	12345678901	abc123	abc123	1234567890	Error: "Employee ID must be 10 digits."	Verifies employee ID exceeds length.
TC9	VC2	1234567890	abc	abc	1234567890	Error: "Password must be at least 6 characters long."	Verifies password length below the minimum.
TC10	VC4	1234567890	abc123	abc123	9876543210	Error: "OTP does not match."	Verifies OTP mismatch scenario.

Register Page:

- VC1** Name field cannot be blank.
- VC2** Name must be between 3 and 50 characters.
- VC3** Email field cannot be blank.
- VC4** Email must match the regex pattern for valid email syntax.
- VC5** Select a role to assign

Test Case ID	Validity Check No.	Name	Email	Role	Expected Output	Remarks
TC1	VC1	(blank)	user@example.com	manager	Error: "Name cannot be blank."	Ensures the system detects blank name field.
TC2	VC1, VC3	Ram Charan	(blank)	manager	Error: "Email cannot be blank."	Ensures email field is validated for blank input.
TC3	VC2	Ra	user@example.com	manager	Error: "Name must be at least 3 characters."	Verifies minimum length validation for name.
TC4	VC2	ThisNamelsVeryLongAndExceedsTheMaxLimit	user@example.com	manager	Error: "Name must not exceed 50 characters."	Verifies maximum length validation for name.
TC5	VC4	Ram Charan	invalid-email	hr	Error: "Please enter a valid email address."	Verifies email syntax validation.
TC6	VC4	Ram Charan	user@domain	hr	Error: "Please enter a valid email address."	Verifies missing TLD in email.
TC7	VC2, VC4	Ram	jeetwhatt937@gmail.com	hr	Success: Registration successful.	Valid name and email.
TC8	VC4	Ram Charan	user@.com	hr	Error: "Please enter a valid email address."	Validates incomplete domain in email.
TC9	VC4	Ram Charan	user@domain..com	hr	Error: "Please enter a valid email address."	Ensures email does not allow multiple dots in domain.
TC10	VC4, VC2	Ram Charan	kira80605@gmail.com	employee	Success: Registration successful.	Ensures valid email formats with subdomains.
TC11	VC5	Ram Charan	jeetwhatt937@gmail.com	(don't select)	Error: "Please select a role to assign"	Ensures a role is assigned to user

Profile Page:

VC1 First names cannot be blank and must be between 3 and 50 characters.

VC2 Last name cannot be blank and must be between 3 and 50 characters.

VC3 Father's name cannot be blank and must be between 3 and 50 characters.

VC4 Mother's name cannot be blank and must be between 3 and 50 characters.

VC5 Phone number cannot be blank and must be a 10-digit numeric value.

VC6 Nationality, religion, block, street, village, taluka, district, state, country, and bank name cannot be blank (no validation required).

VC7 Pincode cannot be blank and must be a 6-digit numeric value.

VC8 The IFSC code must be 11 characters long, consisting of 4 uppercase letters for the bank code, followed by a "0", and ending with 6 alphanumeric characters for the branch code.

VC9 Account number cannot be blank and must be between 9 and 18 numeric digits.

VC10 Aadhaar number cannot be blank and must be a 12-digit numeric value.

Test Case ID	Validity Check No.	First Name	Last Name	Father's Name	Mother's Name	Phone Number	Pincode	IFSC Code	Account Number	Aadhaar Number	Nationality	Religion	Block, Street, etc.	Bank Name	Expected Output	Remarks
TC1	VC1	(blank)	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "First name cannot be blank."	Ensures blank first name is rejected.
TC2	VC1	Jo	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "First name must be at least 3 characters."	Ensures minimum length validation for first name.
TC3	VC1	ThisNameIsVeryLongAndExceedsTheMaxLimit	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "First name must not exceed 50 characters."	Ensures maximum length validation for first name.
TC4	VC2	John	Jo	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Last name must be at least 3 characters."	Verifies minimum length validation for last name.

TC5	VC3	John	Doe	John	Mary	9876543210	123456	ABCD01234w5	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Success	Valid input for father's name.
TC6	VC4	John	Doe	John	(blank)	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Mother's name cannot be blank."	Ensures mother's name cannot be left blank.
TC7	VC5	John	Doe	John	Mary	12345	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Phone number must be 10 digits."	Verifies phone number length validation.
TC8	VC5	John	Doe	John	Mary	9876543210	123456	ABCD01234w5	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Success	Valid 10-digit phone number.
TC9	VC7	John	Doe	John	Mary	9876543210	1234	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Pincode must be 6 digits."	Ensures pincode length validation.
TC10	VC8	John	Doe	John	Mary	9876543210	123456	ABX0101234	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Please enter a valid IFSC code."	Verifies IFSC code pattern validation.
TC11	VC8	John	Doe	John	Mary	9876543210	123456	ABCD0EFGHI2	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Success	Valid IFSC code.
TC12	VC9	John	Doe	John	Mary	9876543210	123456	ABCD012345	12345678	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Account number must be between 9 and 18 digits."	Ensures minimum length validation for account number.
TC13	VC9	John	Doe	John	Mary	9876543210	123456	ABCD012345	1234567891234567891	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Account number must not exceed 18 digits."	Ensures maximum length validation for account number.
TC14	VC9	John	Doe	John	Mary	9876543210	123456	ABCD01234w5	123456789	987654321012	Indian	Hindu	Block A, Village X	HDFC	Success	Valid account number with 9 digits.
TC15	VC10	John	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	1234567890	Indian	Hindu	Block A, Village X	HDFC	Error: "Aadhaar number must be 12 digits."	Ensures Aadhaar number length validation.
TC16	VC10	John	Doe	John	Mary	9876543210	123456	ABCD01234w5	123456789012	123456789012	Indian	Hindu	Block A, Village X	HDFC	Success	Valid 12-digit Aadhaar number.
TC17	VC6	John	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	(blank)	Hindu	Block A, Village X	HDFC	Error: "Nationality cannot be blank."	Ensures blank nationality is rejected.
TC18	VC6	John	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	(blank)	Block A, Village X	HDFC	Error: "Religion cannot be blank."	Ensures blank religion is rejected.
TC19	VC6	John	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	(blank)	HDFC	Error: "Address fields cannot be blank."	Ensures blank address fields are rejected.
TC20	VC7	John	Doe	John	Mary	9876543210	abc123	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Pincode must be numeric."	Ensures pincode only allows numeric input.
TC21	VC8	John	Doe	John	Mary	9876543210	123456	abcd012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Please enter a valid IFSC code."	Ensures IFSC code does not allow lowercase letters.
TC22	VC9	John	Doe	John	Mary	9876543210	123456	ABCD012345	abc12345678	98765yi21012	Indian	Hindu	Block A, Village X	HDFC	Error: "Account number must be numeric."	Ensures account number only allows numeric input.
TC23	VC5	John	Doe	John	Mary	abc9876543	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	HDFC	Error: "Phone number must be numeric."	Validates numeric-only restriction for phone number.
TC24	VC6	John	Doe	John	Mary	9876543210	123456	ABCD012345	123456789012	987654321012	Indian	Hindu	Block A, Village X	(blank)	Error: "Bank name cannot be blank."	Ensures blank bank name is rejected.

Salary Page:

VC1 Employee ID cannot be blank and must be 10 digits.

VC2 Salary cannot be blank and must be a non-negative value.

Test Case ID	Validity Check No.	Employee ID	Salary	Expected Output	Remarks
TC1	VC1	(blank)	50000	Error: "Employee ID cannot be blank."	Ensures blank employee ID is rejected.
TC2	VC1	12345	50000	Error: "Employee ID must be 10 digits."	Ensures employee ID length validation.
TC3	VC1	12345678901	50000	Error: "Employee ID must be 10 digits."	Validates maximum length for employee ID.
TC4	VC1, VC2	2024030001	50000	Success	Valid 10-digit employee ID.
TC5	VC2	1234567890	(blank)	Error: "Salary cannot be blank."	Ensures blank salary field is rejected.
TC6	VC2	1234567890	-100	Error: "Salary must be a non-negative value."	Ensures salary cannot be negative.
TC7	VC2, VC1	2024030001	0	Success	Ensures zero salary is accepted.
TC8	VC2, VC1	2024030001	50000.5	Success	Ensures decimal salaries are accepted.
TC9	VC2, VC1	2024030001	10000000000	Success	Verifies large salary values are accepted.
TC10	VC1	abcdefghij	50000	Error: "Employee ID must be numeric."	Ensures employee ID only allows numeric input.
TC11	VC2	1234567890	abc123	Error: "Salary must be a numeric value."	Ensures salary only allows numeric input.

Upload Project Page:

VC1 Title cannot be blank.

VC2 Description cannot be blank.

Test Case ID	Validity Check No.	Title	Description	Expected Output	Remarks
TC1	VC1	(blank)	This is a test project.	Error: "Title cannot be blank."	Ensures blank title is rejected.
TC2	VC2	Project A	(blank)	Error: "Description cannot be blank."	Ensures blank description is rejected.
TC3	VC2	Project A	This is a test project.	Success	Valid description is accepted.
TC4	VC1, VC2	(blank)	(blank)	Error: "Title and description cannot be blank."	Verifies both fields are validated simultaneously.