

Equivalence Class

1. Status Field

Class ID	Description	Type	Expected Outcome
EC-S1	Valid status: "pending"	Valid	Accepted
EC-S2	Valid status: "in-progress"	Valid	Accepted
EC-S3	Valid status: "resolved"	Valid	Accepted
EC-S4	Valid status: "rejected"	Valid	Accepted
EC-S5	Empty/Unselected status	Invalid	Error: "Please select a status"
EC-S6	Invalid status (e.g., "completed", "cancelled")	Invalid	Error: "Invalid status value"

2. Description Field

Class ID	Description	Type	Expected Outcome
EC-D1	Normal text description	Valid	Accepted
EC-D2	Description with special chars (@, #, !)	Valid	Accepted
EC-D3	Long description (500+ chars)	Valid	Accepted
EC-D4	Empty description	Invalid	Error: "Description is required"
EC-D5	Whitespace only (Spaces/Tabs)	Invalid	Error: "Description cannot be empty"
EC-D6	Text with leading/trailing spaces	Valid	Accepted (System trims spaces)

3. User Role & Authorization

Class ID	Description	Type	Expected Outcome
EC-R1	Admin User	Valid	Authorized
EC-R2	Committee User (Matching Category)	Valid	Authorized
EC-R3	Committee User (Wrong Category)	Invalid	Error: "Permission denied"
EC-R4	Student User	Invalid	Error: "Permission denied"

Test cases

1. Positive Test Cases

Test Case ID	Test Scenario	Input Data	Equivalence Class	Expected Result
TC-01	Update status to "pending"	User: Admin Status: "pending" Description: "Waiting for more information."	EC-S1, EC-D1, EC-R1	Pass Status updates to "pending". Success message displayed.
TC-02	Update status to "in-progress"	User: Admin Status: "in-progress" Description: "Assigned to maintenance team."	EC-S2, EC-D1, EC-R1	Pass Status updates to "in-progress". Success message displayed.

TC-03	Update status to "resolved"	User: Admin Status: "resolved" Description: "Issue fixed and verified."	EC-S3, EC-D1, EC-R1	Pass Status updates to "resolved". Resolved timestamp recorded.
TC-04	Update status to "rejected"	User: Admin Status: "rejected" Description: "Not a valid complaint."	EC-S4, EC-D1, EC-R1	Pass Status updates to "rejected". Success message displayed.
TC-05	Committee updates valid category	User: Hostel Committee Category: "Hostel" Status: "in-progress"	EC-S2, EC-D1, EC-R2	Pass Update allowed. Success message displayed.

		Description: "Worker sent to room."		
TC-06	Description with special chars	Status: "in-progress" Description: "Yes Fixed"	EC-S2, EC-D2, EC-R1	Pass Update accepted. Text saved exactly as entered.
TC-07	Trimming spaces in description	Status: "resolved" Description: " Issue resolved "	EC-S3, EC-D6, EC-R1	Pass Update accepted. Saved as "Issue resolved".
TC-08	Update same status (No change)	Current Status: "pending" New Status: "pending" Description: "Still waiting."	EC-S1, EC-D1, EC-R1	Update accepted. History log updated. No new notification sent.

TC-09	Verify Abbreviation Mapping	User: ICC Committee Member Category: "Internal Complaints"	EC-R2	Pass The system recognizes "ICC" and manages "Internal Complaints". Update accepted.
TC-10	Cancel button functionality	Action: click cancel	N/A (UI Action)	Modal closes. No changes applied to the complaint.

2.Negative Test Cases

Test Case ID	Test Scenario	Input Data	Equivalence Class	Expected Result
TC-11	Empty Status	Status: Unselected/Empty Description: "Valid description"	EC-S5, EC-D1	Error: "Please select a status."
TC-12	Empty Description	Status: "resolved" Description: "" (Empty)	EC-S3, EC-D4	Error: "Description is required."
TC-13	Whitespac e-only Description	Status: "resolved" Description: " " (Spaces only)	EC-S3, EC-D5	Error: "Description cannot be empty."
TC-14	Student attempts update	User: Tirth (ID: 202301075) Role: Student	EC-R4	Button hidden or Error: "Only admins and committee members can update status."

		Action: Attempt to access update modal		
TC-15	Committee updates wrong category	User: Hostel Committee Member Category: "Canteen" Action: Attempt to update	EC-R3	Error: "You do not have permission to update this complaint."
TC-16	Logged out user	User: Guest (No session) Action: Direct URL access to update function	EC-R4	Redirect to Login or

3. UI & Notification Test Cases

Test Case ID	Test Scenario	Input Data	Equivalence Class	Expected Result
TC-18	Verify Modal Content	Action: Open Modal for Complaint #101	EC-S3	Pass Modal shows correct Title and an ID. Current status is pre-selected.
TC-19	Loading State	Action: Click "Update" button	-	Pass Button text changes to "Updating...". Button becomes disabled.
TC-20	Success Notification	Action: Successfully update status to "resolved"	EC-S3	Pass Toast message appears: "Status updated successfully."

TC-21	User Notification Check	Action: Update status to "resolved"	EC-S3	Pass Student receives in-app notification: "Your complaint status is now resolved."
TC-22	Email Notification Check	Action: Update status to "rejected"	EC-S4	Pass Student receives email : "Complaint status update".