FR-1: Login page

TC ID	Test Objective	Technique	Explanation of the Technique
FR-1_TC1	Verify that valid users can log in and invalid credentials are blocked.	Decision Table Testing	Checks correct system behavior with valid inputs (username + password).
FR-1_TC2	Verify that the system logs out the user and redirects to the login page.	State Transition Testing	Validates state behavior following a basic user flow.
FR-1_TC3	Ensure "Forgot your password?" The link is visible and functional.	-Usability Testing (Visibility) -Functional Testing	Confirms presence, visibility, and working navigation of a user interface element.
FR-1_TC4	Verify that users can change their password successfully.	-Decision Table - State transitioning	Confirms correct system behavior using valid data(current password/ old password/ password matching).
FR-1_TC5	Verify system validation messages for incorrect or mismatched passwords.	-Decision table -Equivalence Partitioning	Confirms correct system behavior using valid data(incorrect password/ old password/ password matching).
FR-2_TC6	Ensure users can successfully book a free demo and receive confirmation email.	End-to-End Testing	Tests a full valid flow from submitting the form to receiving the email.

FR-2_TC7	Verify that users can contact sales and receive one confirmation email.	Functional Testing	Ensures the feature performs expected operations and avoids defects (such as duplicate emails).
FR-2_TC8	Verify that users can only select future dates when booking a meeting.	Boundary Value Analysis	sets restrictions around date selection—past vs future values.
FR-2_TC9	Ensure users can register for a free trial and receive only the relevant email.	Functional Testing	Checks system logic consistency and avoids unintended email triggers.
FR-2_TC10	Verify proper handling of multiple activation link clicks.	-State transitioning -Desiction table	(Not Activated → Activated → Already Activated). + 1st, 2nd, 3rd click are conditions.
FR-2_TC11	Verify successful login using credentials from the activation email.	-Desiction table -Functional testing	Ensures the system works properly with valid, system-generated data.
FR-2_TC12	Confirm that the system sends a welcome email with login details post-activation.	Functional Testing	Ensures correct system-generated communication after workflow completion.
FR-2_TC13	Verify the dropdown for "Number of Employees" works and allows selection.	Equivalence partitioning / BVA	each edge is a partition.
FR-2_TC14	Verify the phone number field supports valid numbers including country codes.	Equivalence partitioning.	Ensures the input field meets required formatting and validation rules.

FR-2: Recruitment

TC ID	Test Objective	Technique	Explanation & Example
TC_HR_001	Verify HR can access the job posting page.	Equivalence Partitioning	Tests access for HR using valid user data representing a valid user group.
TC_HR_002	Verify HR can post a new job vacancy.	Equivalence Partitioning	"Happy Path" test to confirm successful job posting with valid and complete data.
TC_HR_003	Verify system validates required job fields.	Boundary Value Analysis	Tests the lower boundary (Null/Empty values) to ensure validation messages appear correctly.
TC_HR_004	Verify job vacancy is displayed to candidates.	Decision Table Testing	Tests system output based on multiple conditions: is the job posted? is the candidate active? Ensures correct display.
TC_HR_005	Verify HR can track applications (view data).	Decision Table Testing	Tests rules for viewing applicant data depending on candidate status: Active / Rejected / Hired.
TC_HR_006,007	Verify Search and Filter by Job Title functionality.	Equivalence Partitioning	Uses valid search/filter values to represent large datasets efficiently.
TC_HR_008	Verify input of invalid data in Job Title.	Decision Table Testing	Tests system response for invalid or malicious inputs (e.g., special characters, scripts).
TC_HR_009	Verify system prevents duplicate entries.	Decision Table Testing	Tests business rule for uniqueness by checking all possible input combinations that could cause duplicates.
TC_HR_010	Verify HR can delete a posted job vacancy.	Equivalence Partitioning	Confirms successful deletion using valid data representing a typical posted job.
TC_HR_011	Verify email/notification after posting a job.	Decision Table Testing	Tests system integration with email/notification service based on job posting success/failure.

TC_HR_012	Verify job posting page responsiveness.	Boundary Value Analysis	Tests UI adaptability across different screen sizes (desktop, mobile) to ensure proper display.
TC_HR_013	Verify permission control for HR (Non-HR access).	Decision Table Testing	Tests access rules: authorized vs unauthorized users, ensuring restricted functions are protected.
TC_HR_014	Verify candidate application status update.	State Transition Testing	Tests candidate status transitions (Shortlisted → Rejected → Hired) to ensure workflow is correctly enforced.

FR-3: Leave Management

TC_ID	TC Objective	Technique	Explanation of Technique
TC_LM_001– Leave List	Verify manager can view leave requests and filters work	Equivalence Partitioning + Functional Testing	Inputs (filters) are divided into valid/invalid groups and tested to ensure correct output.
TC_LM_002– Assign Leave	Verify manager/admin can assign leave	Functional testing	Ensures the system behaves correctly with valid data and handles missing/invalid entries.
TC_LM_003– Bulk Assign Leave	Validate leave assignment submission	Boundary Value Analysis	Tests date range boundaries and leave balance calculations.. Valid submission / Invalid submission (missing data, wrong format)
TC_LM_004– Apply Leave	Verify employee can apply for leave	-BVA -Functional testing	Follows real user flow from login → apply leave. max/min days of leave

TC_LM_005– My Leave Usage	Verify correctness of leave usage summary	State transision	leave case changes from (entitlement, taken, balance).
TC_LM_006– Leave Calendar	Verify leave calendar displays correct results	Functional Testing	Tests display and search functionality.
TC_LM_007– My Leave	Validate employee leave history	Functional testing	Displays employee history
TC_LM_008– Entitlements	Verify admin can view and manage entitlements	-Functional Testing -state transitioning	Ensures entitlement list loads and updates correctly.
TC_LM_009– Employee Entitlements Calculation	Verify entitlement totals	Boundary Value + Calculation Verification	Confirms accuracy of totals and leave days.
TC_LM_010– Add New Entitlement	Validate admin can create new entitlement	EP Functional testing	Ensuring correct data leads to successful saves. invalid/ valid entitlement
TC_LM_011– Leave Period Lock	Validate leave period cannot be edited	-Negative Testing - Functional testing	Ensures the system prevents modifications to fixed fields.
TC_LM_012– Leave Types Display	Validate Leave Types list	functional Testing	checks list integrity and attribute correctness.
TC_LM_013– Add Leave Type	Ensure new leave type can be added	EP	checking correct form input leads to creation.
TC_LM_014	Validate required fields	Negative Testing	Ensures missing fields show errors.

TC_LM_015	Validate system allows same name for different countries	Equivalence Partitioning	Compares behavior between same-name/same-country vs same-name/different-country.
TC_LM_016– Holidays	Ensure admin can set official holidays	Functional Testing	Validates addition and saving of holiday details.
TC_LM_017 Multi-Country Holiday Selection (Bug-001)	Validate holiday can have multiple countries	Disicion table	Single country = Valid/invalid Multiple countries = Valid/invalid No country = Invalid
TC_LM_018– Working Weekends Leave Types	Validate leave types list	Functional Testing	Ensures predefined leave types match configurations.
TC_LM_019– Multi-Country Holiday Selection (Bug-002)	Validate selection of multiple locations	EP	partitions :- Select multiple → Valid Select one → Valid Select none → Invalid
TC_LM_020– Bradford Factor Threshold	Validate threshold values displayed	BVA / EP	ensures numeric thresholds match expected boundary values.
TC_LM_021– Notifications	Validate admin can create leave notifications	Functional	Tests full flow from creation to list display.

FR-4 User management role

TC_ID	TC Objective	Technique	Explanation of Technique
TC_UM_001	Check the admin role has permissions to full access modules	Decision table	Admin role has multiple permissions; each module access can be considered a condition in the decision table.
TC_UM_002	check the ESS role has permissions to access to personal info and leave requests only	Decision table	Each permission (personal info / leave requests / restricted modules) is treated as a condition to validate correct access.
TC_UM_003	check the manager role has permissions to access to team data, leave approvals, and reports only.	Decision table	Each module access is a condition in the decision table to verify allowed vs restricted permissions.
TC_UM_004	validate that the user should only have one role	BVA	Tests the boundary between "one role" (valid) and "more than one role" (invalid).
TC_UM_005	Ensure system allow to assign ESS role and allow to update to another role	state transition	User moves through states: ESS → Another Role
TC_UM_006	Ensure system allow to assign admin role and allow to update to another role	state transition	User moves through states: admin → Another Role
TC_UM_008	Ensure that system allow to revoke roles	State transition	Tests transition from Active → Revoked state; ensures user cannot log in after revocation.
TC_UM_009	Verify that when a user role is assigned, the action is logged in the system audit.	Functional testing	Verify correct display.

TC_UM_010	Verify that when a user role is updated the action is logged in the system audit.	Functional testing	Verify correct display.
TC_UM_011	Verify that when a user revoked the action is logged in the system audit.	Functional testing	Verify correct display.
TC_UM_012	Verify that every user should have a role	equivalence partition	EP: Valid partition = user has a role Invalid partition = user has no role
TC_UM_013	Validate Invalid Role Assignment	Decision table	Different conditions are tested to check invalid role assignments (e.g., role not allowed / invalid input).
TC_UM_014	Validate Mandatory Fields Before Assigning a Role	Decision table	Partition inputs: All required fields filled → Valid, Missing required fields → Invalid.
TC_UM_015	Prevent Admin Self-Revocation	Negative testing	because the system must properly handle errors and block invalid operations.
TC_UM_016	Ensure roles persist after logout/login	state transition	ST:Login → Logout → Login Check if role persists across user state changes.
TC_UM_017	Verify that the system correctly displays and handles disabled user status	Functional testing	ST: statuses like Active → Inactive → Suspended. DT: status(disable)&any role

FR-5 Employee Information Management

TC ID	TC Objective	Technique	Explanation of Technique
TC_001	Verify Admin can open Add Employee form	Functional Testing	Tests whether the form is accessible to authorized users; no input boundaries or conditions involved.
TC_002	Verify mandatory fields (Employee ID, First Name, Last Name) are required	Boundary Value Analysis	Confirms the system rejects the transaction when required fields are left blank/ testing the lower boundary condition of zero input.
TC_003	Verify record can be saved with valid details	BVA	Valid inputs allow saving; includes boundary checks for fields like Employee ID length, name length.
TC_004	Verify Employee ID must be unique	EP	is divided into (valid/ invalid) partioins.
TC_005	Verify Employee ID cannot be empty	EP	is divided into (valid/ invalid) partioins.

TC_006	Verify Employee ID format rule enforced	BVA/ EP	-Tests valid vs invalid formats - edge cases (length, allowed characters).
TC_007	Verify unauthorized user cannot access Add form	Negative Testing	Ensures users without permission are blocked from accessing the form
TC_08	Verify Employee ID field is non-editable once saved	State transition	Attempts to modify the Employee ID after the record is created to ensure the field maintains its non-editable property.
TC_09	Verify invalid data (email, phone) cannot be saved	Decision table	Valid / Invalid→ Email Valid/ Invalid → Phone
TC_010	Verify Manager limited update access	Decision table	Different conditions determine what fields the manager can update.

TC_011	Verify partial name search works	Functional Testing	Ensures search returns correct records for partial inputs; no complex boundaries involved.
TC_012	Verify search performance (response time)	Performance Testing	Measures the time taken to load search results to ensure they appear within acceptable response time limits (e.g., < 3 seconds).
TC_013	Verify names reject special characters	EP	Empty/ no charaters/ with characters
TC_014	Verify max character length respected	BVA	Tests limits of fields like name or address; ensures system prevents overflow
TC_015	Verify trimming of extra spaces	Functional testing	Ensures inputs with leading/trailing spaces are handled correctly.

TC_016	Verify all updates logged with timestamp/user/action	Functional testing	Ensures inputs with leading/trailing spaces are handled correctly.
TC_017	Verify session timeout restricts access	State transi	User state changes: Active → Session expired; verifies system blocks access after timeout.

NFR- Usability

TC_ID	TC Objective	Technique	Explanation of Technique
TC_US_001	Verify that all pages have a clean, uncluttered, and visually consistent layout.	usability testing	Ensures visual consistency, proper spacing, and intuitive layout across all pages; does not depend on input values
TC_US_002	Ensure clarify of buttons, menus, and labels.	usability testing	Tests that UI elements are easily understandable and properly labeled for the user
TC_US_003	Verify main pages are accessible within 3 clicks	usability testing	Measures navigation efficiency; ensures users can reach any main page quickly.
TC_US_004	Verify navigation bar consistency.	usability testing	onfirms that the navigation bar is uniform across pages, with consistent options and positioning.
TC_US_005	Verify ease of performing key actions for new users.	usability testing	Ensures first-time users can complete key tasks without confusion or excessive steps.
TC_US_006	Verify tooltips or user guidance availability	usability testing	Checks that tooltips, hints, or help text are provided where needed to guide users.
TC_US_007	Verify error messages for invalid input	usability testing	Ensures system provides clear and actionable messages for input errors.
TC_US_008	Verify confirmation messages after successful actions	usability testing	Confirms that users receive proper feedback after completing an action successfully.

TC_ID	TC Objective	Technique	Explanation of Technique
TC_US_009	Verify modern and visually appealing UI	usability testing	Ensures the interface looks modern, professional, and appealing to the user, supporting overall user satisfaction.

NFR-2 Authentication security

TC_ID	TC Objective	Technique	Explanation of Technique
TC_AS_001	Verify passwords are stored as hashed values	Security Testing	Ensures sensitive data (passwords) is not stored in plain text — validates database security.
TC_AS_002	Verify hashing algorithm type (e.g., SHA-256 or encrypt)	Configuration Testing	Confirms only approved secure algorithms are used in system configuration.
TC_AS_003	Verify secure transmission of passwords over HTTPS	Penetration Testing	Checks that passwords are transmitted securely (no exposure in network traffic).
TC_AS_004	Account lockout	Secutity testing	Boundary Value Analysis: applies to limit checking. EP: Input partitions: valid password / invalid password
TC_AS_005	session timeout	state transition	ST: It involves changing user status from **Active → Idle → Expired**

TC_AS_006	Browser Back Button After Logout	state transition	ST: It involves changing user status from **Logged-In → Logged-Out**
TC_AS_007	Verify that users cannot set weak passwords during registration or change password	Security	EP: Weak vs strong passwords BVA: Min length, special characters, uppercase, digits