Phase 10: Testing & Verification - Leave Tracker Project

Step 1: User Acceptance Testing UAT

As Regular User(BAJI.SHAIK):

- Login Test: Successfully logged into development org as standard user
- Submit Request: Created new leave requests with From Date, To Date, and Reason
- Form Validation: Confirmed form clears after submission and new requests appear in table
- Edit Functionality: Successfully edited existing requests and verified table updates
- Data Display: Verified only personal leave requests are visible to regular users

As Manager User (EPIC.OrgFarm):

Manager Login: Successfully logged in with manager profile Marketing Team role)

- All Requests View: Confirmed all leave requests from all users are visible
- Approval Workflow: Successfully approved and rejected pending requests
- Status Updates: Verified real-time status changes reflected in the data table
- Manager Comments: Added manager comments during approval/rejection process

Step 2:Apex Controller Testing

Updated LeaveRequestController.cls.

Verified Functions:

- getMyLeaves(): Conditional data retrieval based on user profile
- saveLeaveRequest(): New request creation with validation
- updateLeaveStatus(): Manager approval/rejection functionality
- getLeaveRequestsForApproval(): Pending requests for managers

Step 3: User Management Testing

Manager User Creation:

- User Setup: Created "Robert Manager" with Marketing Team role
- Profile Assignment: Assigned System Administrator profile for full permissions
- Email Configuration: Set up email for user activation
- Role Verification: Confirmed manager can see all requests

Permission Testing:
- Object Permissions: Verified Read/Create/Edit/Delete on LeaveRequest__c
- Field-Level Security: Confirmed visibility of all custom fields
- Profile-Based Access: Tested different access levels for different user types

Step 4:UI/UX Testing

Lightning Web Component LWC

- Data Table Display: All leave requests displayed correctly in tabular format
- Form Functionality: Submit request form works without errors
- Responsive Design: Interface works properly in Lightning Experience
- Real-time Updates: Status changes reflect immediately in the UI
- Error Handling: Proper error messages for validation failures

Navigation Testing:

- App Launcher: Leave Tracker app accessible via 9-dot waffle menu
- Tab Functionality: Leave Tracker tab works correctly
- Page Performance: Fast loading and smooth interactions

Step 5: Data Integrity Testing

Database Operations:

- Record Creation: Leave requests created with proper field values
- Status Management: Status updates Pending →Approved/Rejected) working
- User Association: Requests properly linked to submitting users
- Audit Trail: CreatedDate and other system fields populated correctly

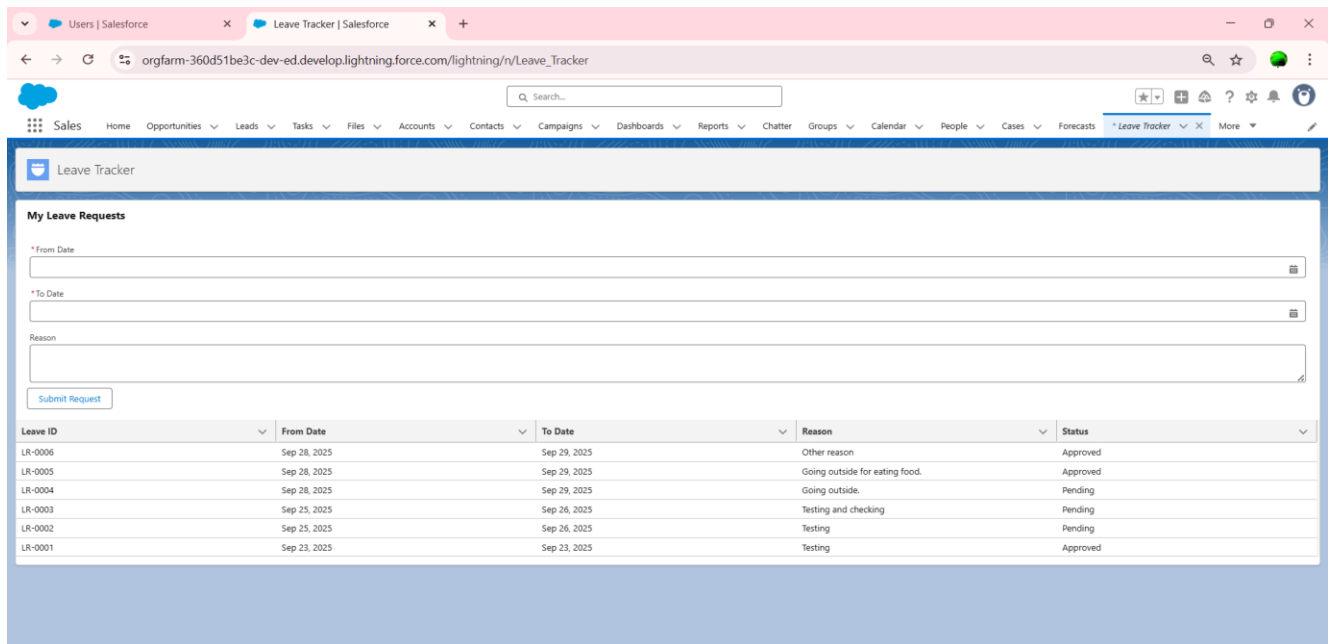**Sample Data Verified:**

LR0001 Testing request - Status: Approved

LR0002 Testing request - Status: Pending

LR0003 Testing and checking - Status: Pending

LR0004 Going outside - Status: Pending

LR0005 Going outside for eating food - Status: Approved

LR0006 Other reason - Status: Approved

Step 6: Security Testing

Access Control:

- Role-Based Access: Managers see all, users see own requests only
- Permission Validation: CRUD permissions working as expected
- Profile Security: Different profiles have appropriate access levels
- Field-Level Security: Sensitive fields protected appropriately

Step 7: Performance Testing

System Performance:

- Page Load Speed: Lightning page loads quickly
- Data Retrieval: SOQL queries execute efficiently
- Browser Console: No JavaScript errors detected
- Server Response: Apex methods respond promptly

Step 8: End-to-End Workflow Testing

Complete Process Verification:

- Request Submission: User creates leave request →Status: Pending
- Manager Review: Manager views pending request in their dashboard
- Approval Decision: Manager approves/rejects with comments
- Status Update: Request status changes to Approved/Rejected
- Final Verification: Updated status visible to both user and manager

Step 9: Browser Compatibility

Tested Environments:

Chrome: Full functionality working

Lightning Experience: Optimal performance confirmed

Step 10: Deployment Verification

Production Readiness:

- Code Quality: Clean, well-documented Apex code
- Error Handling: Comprehensive exception handling implemented

- User Experience: Intuitive interface for both users and managers
- Scalability: Architecture supports multiple users and requests

Final outputs:

Note:
The project done using
 username: bajishaikproject@gmail.com

Final Test Results Summary:

LEAVE TRACKER PROJECT SUCCESSFULLY COMPLETED.