

# Phase 10: Final Presentation & Demo Day – Home Maintenance & Repair Management System

---

## Step 1: Prepare the Presentation

### 1. Project Overview

- Purpose:  
To centralize customer, asset, service requests, vendor management, and data analytics for a home maintenance and repair business.
- Objectives:  
Automate service workflows, provide real-time dashboards, support proactive maintenance, improve customer communication, and ensure data security.
- Scope:
  - Assets (homes, appliances)
  - Vendors (plumbers, electricians)
  - Service Requests (repairs, inspections)
  - Automation: Flows for request approval, notifications
  - Apex Triggers: Calculate total service costs, enforce business rules
  - Lightning Pages & UI: Customized record pages, tabs, dashboards
  - Reports & Dashboards: Service metrics, vendor performance, request status
  - Security Setup: Profiles, permission sets, sharing rules

### 2. Phase-wise Implementation

- Phases 1-4: Requirements gathering, data modeling, org setup, process automation
- Phase 5: Apex triggers for cost calculation and validations
- Phase 6: Lightning Pages and UI customization for asset and request views
- Phase 7: App creation for easy navigation and role-specific layouts
- Phase 8: Data import (assets, vendors, service requests) using CSV files
- Phase 9: Reports, dashboards, and security configurations

### 3. Key Features

- Automation: Flows for request approvals, notifications, SLA alerts
- Apex: Triggers for total cost computation, validation rules for data integrity
- Lightning Pages: User-friendly interfaces for asset tracking, request updates
- Custom Tabs: Quick access to assets, requests, vendors

- Utility Bar: Fast access to reports, recent activity

#### 4. Reports & Dashboards

- Top Assets by Issue: Bar chart grouped by asset type or location
- High-Value Service Requests: Requests above a set cost threshold (e.g., ₹10,000) shown in a table
- Vendor Performance: Pie chart based on completion rate or client ratings
- Request Status Overview: Pipeline dashboard showing pending, in-progress, completed requests

#### 5. Data Management

- Import sample data for assets, vendors, service requests, and request line items
- Implement duplicate rules to prevent double entries (e.g., same asset and issue)
- Employ validation rules for data accuracy and completeness

#### 6. Security & Access Control

- Profiles and permission sets for Admins, Service Agents, Vendors, and Customers
- Sharing rules based on asset ownership and request assignment
- Field-level security to protect sensitive data (e.g., payment details)
- Session timeout and IP restrictions for security compliance

#### 7. Business Impact

- Reduced manual entry errors through automation
- Accelerated request processing and approvals
- Actionable real-time dashboards for proactive management
- Secure data access tailored to user roles
- Scalability for future expansion (more assets, vendors, services)

---

### Step 2: Demo Environment Setup

- Use a Salesforce sandbox or developer org.
  - Load sample data: sample assets (homes/appliances), vendor contacts, service requests, and line items.
  - Ensure all flows, triggers, and reports are active.
  - Verify dashboards are populated with recent data.
-

### Step 3: Demo Flow

1. Login & Navigation  
Show accessing the Home Maintenance app, navigating to Asset, Vendor, and Service Request tabs.
  2. Show Key Features
    - Create a new Service Request: demonstrate auto-update of request status and total cost calculation via Apex trigger.
    - Update request status to “In Progress” or “Completed” with real-time dashboard updates.
    - Submit a high-value request (> ₹10,000) to trigger approval workflows and notifications.
  3. Reports & Dashboards
    - Show “Top Assets by Issue” bar chart.
    - Display “High-Value Requests” table.
    - Visualize Vendor Performance pie chart.
  4. Security & Role-Based Access
    - Log in as different user profiles (Service Agent, Vendor, Customer).
    - Show filtered data: requests assigned only to the logged-in user/profile.
    - Verify field restrictions and record access via sharing rules.
- 

### Step 4: Key Highlights to Discuss

- Automation reduces manual effort and speeds up repairs.
  - Custom dashboards provide instant insights into maintenance health and vendor productivity.
  - Data quality maintained through duplicate and validation rules.
  - Role-based security ensures confidentiality and proper access.
  - Use of Lightning Pages and LWCs delivers an intuitive user interface.
  - System scalability for more assets, vendors, and services in the future.
- 

### Step 5: Outcome

- Stakeholders observe a fully functional, role-specific, secure, and insightful Home Maintenance app.
- Demonstrates administrator and developer skills aligned with business needs.
- Validates that the system improves operational workflows and delivers real-time intelligence..

