

Phase 2: Detailed Feature Set and Functional Specification

This document outlines the core features and functional requirements for the proposed Customer Relationship Management (CRM) system, specifically tailored for documentation management within a property management context. The system is designed to be the primary tool for the **Property Manager** to efficiently organize, track, and manage all tenant and property-related documents.

1. Core Data Model and Organization

The system will be structured around three primary entities: **Property**, **Tenant**, and **Document**. All documents must be linked to at least one of these entities.

Entity	Description	Key Attributes
Property	The physical asset being managed.	Address, Property Type (e.g., Single Family, Condo), Owner Information, Status (e.g., Occupied, Vacant).
Tenant	The current or past occupant(s) of a property.	Full Name, Contact Information, Associated Property ID, Lease Start/End Dates, Status (e.g., Current, Former).
Document	Any file related to a Property or Tenant.	Document Type (e.g., Lease, Invoice), File Name, Upload Date, Expiration/Review Date, Associated Property ID, Associated Tenant ID.

2. Document Management Features

These features ensure secure storage, easy retrieval, and proper handling of all files.

2.1. Secure Storage and Upload

- Requirement:** All documents must be stored securely in a cloud-based environment with data encryption at rest.

- **Functionality:**
 - **Drag-and-Drop Upload:** Simple interface for uploading single or multiple files.
 - **Automatic Tagging:** Upon upload, the manager must link the document to a **Property** and/or **Tenant**.
 - **Document Type Classification:** A mandatory field to select the document's type from a predefined list (e.g., Lease Agreement, Inspection Report, Maintenance Invoice).
 - **File Format Support:** Support for common formats including PDF, DOCX, XLSX, JPG, and PNG.

2.2. Organization and Hierarchy

- **Requirement:** Documents must be intuitively organized to minimize search time.
- **Functionality:**
 - **Primary View:** A hierarchical structure allowing the manager to navigate: **Property List** -> **Selected Property** -> **Associated Tenants** -> **Documents** .
 - **Tenant-Centric View:** A view to see all documents related to a specific tenant, regardless of the property they currently occupy (useful for tracking past tenancy documents).

2.3. Advanced Search and Filtering

- **Requirement:** Fast and flexible search capabilities are essential for a document-heavy system.
- **Functionality:**
 - **Full-Text Search:** Ability to search for keywords within the content of PDF and text-based documents.
 - **Metadata Filtering:** Filter documents by:
 - Property Address
 - Tenant Name
 - Document Type
 - Date Range (Upload Date, Expiration Date)
 - **Saved Searches:** Ability to save frequently used search queries (e.g., "All active leases expiring in the next 90 days").

2.4. Versioning and Audit Trail

- **Requirement:** Track changes and maintain a history of document access and modification.
- **Functionality:**
 - **Document Versioning:** Automatically save previous versions when a document is updated or replaced.
 - **Audit Log:** Record every action taken on a document (upload, view, download, edit metadata, deletion) with a timestamp and the user (Property Manager).

3. Property Manager Workflow Features

These features automate tracking and ensure the manager stays ahead of critical deadlines.

3.1. Critical Date Tracking and Alerts

- **Requirement:** Proactive notification system for time-sensitive documents.
- **Functionality:**
 - **Expiration Date Field:** A dedicated, optional field for documents that expire (e.g., Lease, Insurance).
 - **Automated Alerts:** System-generated notifications for the Property Manager when a critical date is approaching (e.g., 90, 60, and 30 days before lease expiration).
 - **Dashboard Widget:** A dedicated section on the main dashboard displaying a list of "Upcoming Critical Dates."

3.2. Document Retention and Archival

- **Requirement:** Adherence to legal document retention policies.
- **Functionality:**
 - **Retention Policy Tags:** Ability to tag documents with a required retention period (e.g., 3 years, 7 years, Permanent).
 - **Archival Automation:** Automatically move documents to an "Archived" status after their associated Tenant/Property status changes (e.g., Tenant moves out) and the retention period has passed.
 - **Secure Deletion:** Functionality for the secure, irreversible deletion of documents that have passed their retention period.

3.3. Reporting and Export

- **Requirement:** Ability to generate lists and reports for administrative tasks.

- **Functionality:**
 - **Standard Reports:**
 - List of all active leases and their expiration dates.
 - List of all documents missing a required field (e.g., missing Expiration Date).
 - Summary of document volume by type and property.
 - **Bulk Download:** Ability to select multiple documents (e.g., all documents for a specific property) and download them as a single ZIP file.

4. Security and Compliance Features

Given the sensitive nature of property and tenant data, security is paramount.

4.1. Access Control

- **Requirement:** The system must be secured for the Property Manager only.
- **Functionality:**
 - **Role-Based Access:** A single "Property Manager" role with full read/write/delete permissions. Future-proofing for additional roles (e.g., Administrator, Owner View) should be considered.
 - **Strong Authentication:** Mandatory use of strong passwords and support for Multi-Factor Authentication (MFA).

4.2. Data Privacy and Compliance

- **Requirement:** Compliance with general data privacy best practices (e.g., GDPR, CCPA principles) regarding personal identifiable information (PII).
- **Functionality:**
 - **PII Masking:** Consider masking sensitive PII (e.g., Social Security Numbers, Bank Account details) in document previews, requiring an explicit action to reveal the full content.
 - **Data Location:** The system should clearly define where the data is physically stored to meet any regional compliance requirements.

4.3. Disaster Recovery

- **Requirement:** Ensure business continuity in case of system failure.
- **Functionality:**
 - **Automated Backups:** Daily, encrypted backups of all documents and the database.

- **Redundancy:** Storage infrastructure should be highly redundant to prevent data loss.

This specification provides a solid foundation for the development of the CRM. The next phase will focus on the technical architecture required to support these features.