

# 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
<b>Property</b>	The physical asset being managed.	Address, Property Type (e.g., Single Family, Condo), Owner Information, Status (e.g., Occupied, Vacant).
<b>Tenant</b>	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).
<b>Document</b>	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.