

NAME	DEXTER B. RAMOS
PROJECT TITLE	RDB-ClinixDocs: A Web-Based Clinic Patient Document Management System
SUBJECT: CODE: TIME:	IT15/L Integrative Programming and Technologies 8441 10:00 AM – 12:00 PM
TOPIC (Type of Business Process)	#17 Document Management System
Products/Services	Medical Clinic
Agile Model - SDLC	<p>Requirements and Planning Phase</p> <p>1. Requirements Identification</p> <p>The Requirements and Planning phase focuses on identifying the core needs of the RDB-ClinixDocs system based on the daily document management activities of small medical clinics. The primary goal of this phase is to define system functionalities that ensure secure, organized, and efficient handling of patient documents.</p> <p>Requirements were identified by analyzing clinic workflows related to document storage, retrieval, version tracking, and access control. These requirements serve as the foundation for planning development tasks in subsequent Agile sprints.</p> <p>2. Functional Requirements</p> <ul style="list-style-type: none"> • The system shall allow clinic administrators and authorized clinic staff to upload patient documents such as medical records, lab results, and prescriptions. • The system shall store patient documents in a centralized and secure digital repository. • The system shall support document version control to maintain previous versions and track document changes. • The system shall enable users to retrieve patient documents using search filters such as patient name, document type, and upload date. • The system shall implement role-based access control to ensure that only authorized users can access specific system features. • The system shall allow authorized users to archive inactive or outdated patient documents. • The system shall automatically manage document retention based on predefined clinic policies. • The system shall record user activities through an audit trail for monitoring and security purposes. <p>3. Non-Functional Requirements</p> <ul style="list-style-type: none"> • The system shall ensure data security and patient confidentiality through authentication and authorization mechanisms. • The system shall provide secure file upload handling to prevent unauthorized or malicious file access.

- The system shall be user-friendly and easy to use for clinic staff with minimal technical knowledge.
- The system shall be scalable to support future enhancements and increased document storage needs.
- The system shall provide reliable system performance with minimal downtime.

4. User Roles and Access Planning

Super Admin

- Full access to all system modules
- Manages user accounts, roles, and permissions
- Oversees document archiving, retention policies, and audit logs

Clinic Administrator

- Manages clinic staff accounts and access permissions
- Uploads, edits, retrieves, and archives patient documents
- Monitors document versions and activity logs

Authorized Clinic Staff

- Uploads and edits patient documents
- Searches and retrieves patient records
- Views document version history
- Archives documents when permitted

5. Product Backlog Planning

Initial Product Backlog Items:

- User authentication and role-based authorization
- Patient Document API for document upload and retrieval
- Document storage and management module
- Version control module for patient documents
- Document retrieval and search module
- Archiving and retention management module
- Activity logs and audit trail module

6. Sprint Planning Strategy

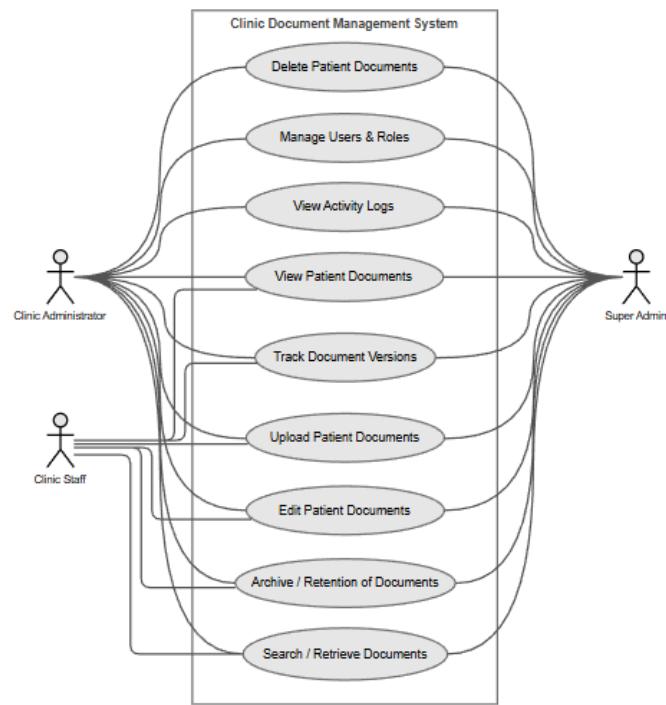
- Early sprints focus on system setup, database design, and core document upload and retrieval features.
- Later sprints focus on advanced functionalities such as version control, archiving, retention policies, and audit logging.

7. Planning Outcome

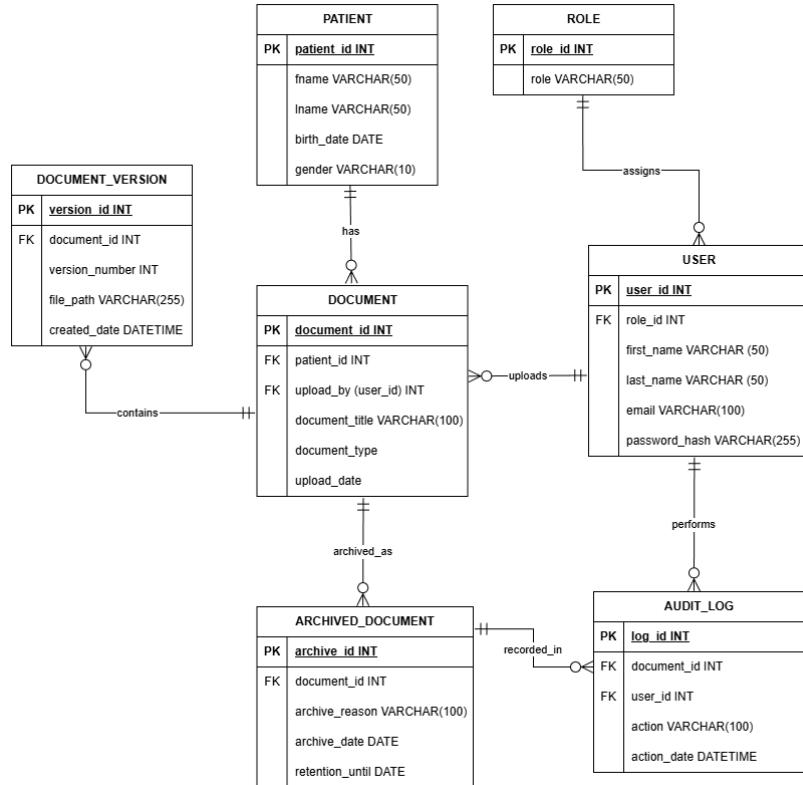
The Requirements and Planning phase establishes a clear understanding of system objectives, user roles, and prioritized features for RDB-ClinixDocs. By applying the Agile SDLC, the project ensures that development remains flexible, secure, and aligned with the operational needs of small medical clinics.

This phase provides a structured yet adaptable roadmap for building a secure and efficient Web-Based Clinic Patient Document Management System.

Use Case Diagram (Diagram Only)



Entity Relational Diagram



Data Dictionary		RDB-ClinixDocs: A Web-Based Clinic Patient Document Management System							
Role table									
Field Names		Datatype	Length	Description					
RoleID-PK		Int-AI	9	Unique identifier for each role					
Role		Text	50	Name of the role					
User table									
Field Names		Datatype	Length	Description					
UserID-PK		Int-AI	9	Unique identifier for each user					
RoleID-FK		Int	9	Role assigned to the user					
FirstName		Text	50	User's first name					
LastName		Text	50	User's last name					
Email		Text	100	User's email address					
PasswordHash		Text	255	Encrypted password of the user					
Patient table									
Field Names		Datatype	Length	Description					
PatientID-PK		Int-AI	9	Unique identifier for each patient					
FirstName		Text	50	Patient's first name					
LastName		Text	50	Patient's last name					
BirthDate		Date	—	Patient's date of birth					
Gender		Text	10	Patient's gender					
Document table									
Field Names		Datatype	Length	Description					
DocumentID-PK		Int-AI	9	Unique identifier for each document					
PatientID-FK		Int	9	Patient associated with the document					
UploadBy		Int	9	User who uploaded the document					
DocumentTitle		Text	100	Title of the document					
DocumentType		Text	50	Type of document (e.g., Lab Report, Prescription)					

UploadDate	Date	—	Date the document was uploaded
------------	------	---	--------------------------------

DocumentVersion table

Field Names	Datatype	Length	Description
VersionID-PK	Int-AI	9	Unique identifier for each document version
DocumentID-FK	Int	9	Associated document
VersionNumber	Int	9	Version number of the document
FilePath	Text	255	File Storage Path
CreatedDate	DateTime	—	Patient's gender

ArchiveDocument Table

Field Names	Datatype	Length	Description
ArchiveID-PK	Int-AI	9	Unique identifier for each archived document
DocumentID-FK	Int	9	Document being archived
ArchiveReason	Text	100	Reason for archiving
ArchiveDate	Date	—	Date the document was archived
RetentionUntil	Date	—	Retention expiration date

AuditLog table

Field Names	Datatype	Length	Description
LogID-PK	Int-AI	9	Unique identifier for audit log entry
DocumentID-FK	Int	9	Document involved in the action
UserID-FK	Int	9	User who performed the action
Action	Text	100	Action performed e.g., (viewed, uploaded, archived)
ActionDate	DateTime	—	Date and time of the action

