Q. Business Case Document

1. Why is this project initiated?

The project is initiated with the clear intention of addressing operational bottlenecks, reducing manual dependency, and bringing every hospital function into one unified digital platform.

Currently, Provision Hospitals operates in a partially manual environment, patient details are recorded in registers or basic spreadsheets, doctor schedules are handled by phone calls or in-person discussions, and billing is done manually. This approach is time-consuming, increases the risk of human error, and causes unnecessary delays.

By implementing a centralized Hospital Management CRM, the hospital will be able to:

- Store, access, and update all patient data in real time.
- Provide doctors with instant visibility into appointments, medical history, and treatment plans.
- Automate complex processes like revenue sharing between hospital and consultants.
- Improve transparency and build stronger trust among patients, doctors, and administration.

This initiative is not just about adopting technology, it's about modernizing hospital operations for efficiency, accuracy, and long-term growth.

2. What are the current problems?

a. Scattered & Inconsistent Patient Data
Medical records are stored in multiple formats, paper files, personal notes, or disconnected systems. Retrieving a complete patient history is slow and sometimes incomplete, impacting decision-making.

b. Coordination Gaps Between Doctors & Patients
Consultants, especially honorary ones, do not have a shared platform to view appointment schedules, case updates, or billing information. This results in follow-up delays and occasional miscommunication with patients.

c. Manual Revenue Sharing Calculations
The hospital follows a 50-50 revenue split with consultants. Manual calculations lead to disputes, missing entries, or errors in payment settlements.

d. Delayed Interdepartmental Communication
Departments rely on verbal updates, physical movement of files, or phone calls. This slows down processes like approvals, patient transfers, and treatment updates.

3. With this project how many problems could be solved?

a. Centralized & Secure Patient Records
All patient history, lab reports, prescriptions, and billing details will be stored in one secure system, accessible to authorized staff instantly.

b. Real-Time Doctor–Patient Coordination
Doctors can view patient status, schedule, and reports anytime, ensuring timely medical interventions and smooth consultation flow.

c. Automated & Transparent Revenue Sharing
The CRM will automatically calculate revenue splits and generate reports, eliminating disputes and ensuring clarity in financial settlements.

d. Streamlined Interdepartmental Communication
A built-in communication module will allow instant sharing of updates, documents, and approvals between departments without physical delays.

4. What are the resources required?

Human Resources:

- **Project Manager:** M. Raghu (overseeing planning, execution, and delivery).
- **Technical Team:** Java & ReactJS developers, UI/UX designers, QA testers.
- **Support Team:** Hospital admin staff, finance department representatives, IT support.

Technology Resources:

- Dedicated server infrastructure or reliable cloud hosting.
- Development tools (Java frameworks, ReactJS libraries, database systems).
- Data migration tools for shifting old records into the CRM.

Timeframe:

- 12 months total, including requirement gathering, development, testing, deployment, and staff training.

Financial Resources:

- Estimated **₹10,00,000** for development, testing, deployment, licenses, and hardware procurement.

5. How much organizational change is required to adopt this technology?

Transitioning to this CRM will require moderate changes in daily workflows.

- **Staff Training:** Doctors, nurses, receptionists, and admin staff will receive hands-on training for CRM usage.
- **Process Realignment:** Existing manual steps will be re-mapped into digital workflows for speed and accuracy.
- **Cultural Shift:** Staff will move from a paper-based comfort zone to a data-driven, technology-enabled approach.

6. Time frame to recover ROI?

The Return on Investment (ROI) is expected to be recovered within 1-2 years after the system goes live. This is based on:

- Reduced administrative overhead due to automation.
- Higher accuracy in billing and financial settlements.
- Improved patient experience leading to better retention and referrals.

Over time, the CRM will also help in strategic planning by providing data-driven insights into hospital operations.

7. How to identify Stakeholders?

Primary Stakeholders:

- Hospital management and administrative staff.
- Doctors (including honorary consultants).
- Finance and billing teams.

Secondary Stakeholders:

- Patients (benefiting from better service).
- Internal IT team supporting maintenance.
- CRM development and project execution team.

Tertiary Stakeholders:

- External vendors for hardware/software procurement.
- Hosting and cloud service providers.

Q. Business Analyst Approach Strategy

1. Project Understanding and Objective

The goal of this BA strategy is to ensure complete clarity between the client and the project team, define the correct processes for requirement gathering, documentation, communication, and approvals, and deliver a solution that meets the agreed scope within the planned timeline and budget.

2. Requirement Elicitation Approach

To ensure all requirements are captured accurately, the following elicitation activities will be conducted:

- **Stakeholder Interviews** – One-on-one sessions to understand functional and operational needs.
- **Workshops**: Group sessions with multiple departments to finalize common requirements.
- **Observation**: Reviewing the current hospital processes to identify improvement areas.
- **Document Analysis**: Studying existing reports, forms, and records for baseline information.
- **Surveys / Questionnaires**: For larger teams where quick inputs are required.

All elicitation sessions will be scheduled in coordination with the client's availability to ensure minimum disruption to ongoing hospital operations.

3. Stakeholder Analysis

RACI Matrix:

Stakeholder / Role	Responsible (R) – Does the work	Accountable (A) – Final decision & ownership	Consulted (C) – Gives expert input	Informed (I) – Kept updated on progress
Hospital Administrator	Oversee requirement discussions, validate processes	✓Final sign-off on all major decisions	✓On scope and process changes	✓Receives weekly/monthly project updates
Honorary Consultants / Doctors	Provide medical process inputs, validate patient workflow		✓For clinical process requirements	✓On CRM features impacting consultations
Finance & Accounts Team	Share revenue process details, billing requirements		✓On payment modules & revenue sharing logic	✓On financial reports and automation benefits
IT Support Team (Hospital)	Coordinate with development team for integrations		✓On technical feasibility and infrastructure readiness	✓On deployment timelines & maintenance plan
CRM Development Team	Build, configure, and test CRM modules	✓On technical delivery and releases	✓On aligning features with requirements	✓On project milestones
Project Manager (BA Lead - M. Eswar)	Coordinate all BA activities, ensure documentation & sign-offs	✓On scope closure & change control	✓On requirement prioritization	✓On progress, risks, and mitigation
External Vendors (Cloud / Hosting)	Provide infrastructure setup and support		✓On hosting/security compliance	✓On go-live schedules
Patients (Indirect Stakeholders)	Feedback during UAT usability checks		✓For service experience improvement	✓On service enhancements post-launch

ILS Classification:

Stakeholders will also be assessed based on **Influence, Level of Interest, and Support** to determine the right engagement strategy for each.

4. Project Documentation

The following documents will be prepared during the project lifecycle:

1. **Business Requirements Document (BRD)**: Captures all high-level and detailed requirements.
2. **Functional Requirements Specification (FRS)**: Defines the exact functionalities expected in the CRM.
3. **Current vs Proposed Process Flow Diagrams**: Visual comparison for clarity.
4. **Change Request Forms**: For any updates after initial sign-off.
5. **Meeting Minutes & Decision Logs**: Records of all discussions and agreed points.
6. **UAT Test Cases & Sign-off Form**: For project acceptance after testing.

5. Document Review and Sign-off Process

- The draft versions will be sent to the designated client reviewers for their feedback.
- All feedback will be gathered and necessary updates will be made based on the input received.
- Final versions will be submitted for written sign-off (via email confirmation or signed hard copy).
- Version control will be maintained for all documents to ensure clarity on updates.

6. Client Approval Process

- All major deliverables will be submitted formally with a summary note highlighting key points.
- Approvals will be received in writing before proceeding to the next stage.
- No development or testing will commence without documented approval.

7. Communication Plan

- **Email:** Primary channel for official communications and document submissions.
- **Project Management Tool:** For tracking deliverables, timelines, and tasks.
- **Weekly Review Meetings:** To monitor progress and discuss blockers.
- **Instant Messaging (Teams/Slack):** For urgent queries and updates.

8. Change Request (CR) Handling

- Any new requirement post sign-off will be logged as a Change Request.
- CR document will include description, reason, and impact on cost, timeline, and resources.
- Work on CRs will start only after written client approval.

9. Project Progress Updates

- **Weekly Status Reports:** Progress, upcoming tasks, risks, and mitigation actions.
- **Monthly Summary Reports:** High-level overview for senior stakeholders.
- Immediate escalation for critical issues impacting timelines or deliverables.

10. UAT and Final Acceptance

- UAT will be conducted jointly with the client team using pre-approved test cases.
- Defects identified will be recorded, fixed, and re-tested.
- Final sign-off will be taken on the **Client Project Acceptance Form**, confirming successful delivery against agreed requirements.

Q. Functional Specifications

The CRM will centralize patient, doctor, and hospital operations into a single platform. The requirements listed below are prioritized to address both critical business needs and operational efficiency, ensuring delivery within the agreed timelines and budget.

Project name	Provision Hospitals
Customer name	G. Suman
Project Version	1.0
Project Sponsor	Provision Healthcare Pvt. Ltd.
Project Manager	M. Eswar
Project Initiation date	13th August 2025

Functional Requirement Table:

Requirement ID	Requirement Name	Description	Priority
FR0001	Login	Secure login module enabling authorized users to access patient records, appointments, and other assigned functionalities. Multi-factor authentication will be enabled for added security.	10
FR0002	Patient Management	Ability to add, update, and retrieve patient profiles with medical history, contact details, and billing information from a single interface.	9
FR0003	Doctor Coordination	Real-time view for doctors to access their scheduled appointments and patient case details, enabling faster decision-making.	8
FR0004	Revenue Sharing Automation	Automatic calculation of the agreed 50-50 revenue split between hospital and consultants, with transparent reporting and audit trails.	10
FR0005	Reports	On-demand generation of reports covering admissions, revenue, doctor performance, and patient trends, with export options to PDF/Excel.	7
FR0006	Appointment Scheduling	Patient self-service portal to schedule appointments with available doctors. Admin can also schedule appointments on behalf of patients if needed.	8
FR0007	Billing System Integration	Automated bill generation based on treatments, procedures, and services used, integrated with hospital finance systems.	9
FR0008	Payment Processing	Support for online payment gateways and real-time payment status updates, with receipts generated instantly.	9

FR0009	Medical History Tracking	Comprehensive tracking of a patient's complete medical history, including diagnoses, prescriptions, lab reports, and treatments.	8
FR0010	Doctor Availability	Doctors can update their available slots in the system, which will automatically reflect in appointment scheduling.	7
FR0011	Staff Management	Admin module for managing hospital staff details, assigning roles, defining access levels, and scheduling shifts.	8
FR0012	Notifications	Automated notifications for doctors and patients regarding appointments, test results, billing reminders, and other key updates via email/SMS.	8
FR0013	Patient Follow-up	Tracking and reminders for follow-up consultations to improve patient care continuity.	7
FR0014	Prescription Management	Doctors can create and manage prescriptions digitally, with access provided to the pharmacy for dispensing medicines.	8
FR0015	Data Security	High-level encryption protocols for data storage and transfer. Secure login mechanisms to safeguard sensitive patient data in compliance with healthcare regulations.	10
FR0016	Role-Based Access Control	Controlled access levels for different roles (doctors, administrators, finance team, etc.) ensuring each role can only access relevant modules.	9
FR0017	Integration with External Systems	Smooth data exchange with existing systems like pharmacy, laboratory, and imaging services to ensure seamless operations.	8
FR0018	Data Backup and Recovery	Automated daily backups stored securely, with a tested disaster recovery process to restore data in case of loss.	10

Q. Requirement Traceability Matrix (RTM)

This Requirement Traceability Matrix ensures every approved functional requirement in the Hospital Management CRM is tracked from its initial definition to its successful delivery. It provides a clear line of sight between requirements, design, development, testing, and User Acceptance Testing (UAT). By maintaining this matrix, we ensure no requirement is missed, altered without approval, or delivered without meeting the agreed expectations.

Req ID	Requirement Name	Requirement Description	Design(D)	D1	T1	T2	UAT
FR0001	Login	Secure login to allow authorized users access to application modules and data.	Yes	Pending	No	Yes	YES
FR0002	Patient Management	Add, update, and retrieve patient records with full medical history and billing details.	Yes	Pending	No	Yes	YES
FR0003	Doctor Coordination	Real-time view of appointments and patient case details for doctors.	Yes	Pending	No	Yes	YES
FR0004	Revenue Sharing Automation	Automatic calculation of 50-50 revenue split between hospital and consultants with clear reports.	Yes	Pending	No	Yes	YES
FR0005	Reports	Real-time reports on admissions, revenue, doctor performance, and patient trends.	Yes	Pending	No	Yes	YES
FR0006	Appointment Scheduling	Patients can schedule appointments through the CRM; admin can schedule on behalf if required.	Yes	Pending	No	Yes	YES
FR0007	Billing System Integration	Automated billing based on treatment details, integrated with hospital finance system.	Yes	Pending	No	Yes	YES
FR0008	Payment Processing	Online payment support with real-time payment status updates.	Yes	Pending	No	Yes	YES
FR0009	Medical History Tracking	Complete history of patient treatments, diagnoses, prescriptions, and test reports.	Yes	Pending	No	Yes	YES
FR0010	Doctor Availability	Doctors can set/update their available time slots for appointments.	Yes	Pending	No	Yes	YES
FR0011	Staff Management	Manage hospital staff details, assign roles, define access levels, and schedule shifts.	Yes	Pending	No	Yes	YES

FR0012	Notifications	Automated notifications for appointments, test results, and billing updates.	Yes	Pending	No	Yes	YES
FR0013	Patient Follow-up	Track follow-up appointments and send automated reminders to patients and doctors.	Yes	Pending	No	Yes	YES
FR0014	Prescription Management	Doctors can issue prescriptions digitally; accessible by pharmacists.	Yes	Pending	No	Yes	YES
FR0015	Data Security	Encryption and security features to protect sensitive patient information.	Yes	Pending	No	Yes	YES
FR0016	Role-Based Access Control	Access permissions based on user role (doctor, admin, finance, etc.).	Yes	Pending	No	Yes	YES
FR0017	Integration with External Systems	Integration with pharmacy, laboratory, and other existing hospital systems.	Yes	Pending	No	Yes	YES
FR0018	Data Backup and Recovery	Daily automated backups and data recovery protocols in case of loss.	Yes	Pending	No	Yes	YES

Q. BRD Template

1. Document Revisions

This section records the official change history and approvals for your project documentation. Each revision captures what has been updated, ensuring full transparency and alignment between our teams.

Date	Version Number	Change Summary	Approvals
05/02/2025	0.1	Initial draft created for your project, outlining the core functional requirements and basic system scope.	Project Sponsor, Business Owner, Project Manager
10/02/2025	0.2	Added detailed system design and end-to-end functionality coverage for Patient Management.	Project Sponsor, Business Owner, Project Manager

15/02/2025	0.3	Incorporated interface design enhancements based on Development Team feedback for better usability.	Project Sponsor, Business Owner, Project Manager
20/02/2025	0.4	Updated with the finalized Requirement Traceability Matrix and mapped Test Cases for each function.	Project Sponsor, Business Owner, Project Manager
25/02/2025	1.0	First release version – All requirements and design documents finalized and locked for development.	Project Sponsor, Business Owner, Project Manager
05/03/2025	1.1	Minor updates applied to Payment Processing and Billing Logic based on UAT feedback from your stakeholders.	Project Sponsor, Business Owner, Project Manager
10/03/2025	1.2	Project scope and deployment timeline finalized in coordination with your operations team.	Project Sponsor, Business Owner, Project Manager
15/03/2025	1.3	Security protocols refined and user access management updated to align with your compliance standards.	Project Sponsor, Business Owner, Project Manager

2. Approvals

These approvals confirm that the document reflects agreed-upon requirements, design, and execution approach for your project. All signatories have reviewed and accepted the latest version prior to implementation.

Role	Name	Title	Signature
Project Sponsor	G. Suman	CEO, Provision Healthcare Pvt. Ltd.	
Business Owner	T. Vivek	Business Head	
Project Manager	M. Eswar	Project Manager	
System Architect	Q. Sanjay	Lead Architect	
Development Lead	K. Arjun	Lead Developer	
User Experience Lead	Q. Naveen	UX Lead	
Quality Lead	T. Rohit	Quality Manager	
Content Lead	M. Sai	Content Head	

3. RACI Chart for This Document

This RACI Matrix outlines how we will manage and control any changes or updates to this document during the lifecycle of your project. Our objective is to ensure full transparency, clear ownership, and seamless communication between all stakeholders whenever revisions are made.

We have defined each role's involvement based on the RACI framework - Responsible, Accountable, Consulted, and Informed, ensuring there is no ambiguity in decision-making or execution.

RACI Codes for This Project

- **A – Authorize**: Holds the final authority to approve any changes.
- **R – Responsible**: Leads the creation and execution of the document updates.
- **A – Accountable**: Ensures the document's accuracy, completeness, and alignment with project objectives.
- **S – Supports**: Assists with data, resources, and other inputs to complete the document.
- **C – Consulted**: Provides expert advice or inputs during updates.
- **I – Informed**: Receives updates about changes but is not directly involved in making them.

RACI Table – Document Change Management

Role	Name	RACI Responsibility	Role in This Project's Document Updates
Project Sponsor	G. Suman	A	Final approval authority for all document revisions.
Business Owner	T. Vivek	I	Kept informed on changes to ensure alignment with business vision.
Project Manager	M. Eswar	R / A	Oversees creation, accuracy, and timely delivery of document updates.
System Architect	Q. Sanjay	C	Provides system-level insights and technical validation for updates.
Development Lead	K. Arjun	S	Supports with technical input and implementation feasibility checks.
User Experience Lead	Q. Naveen	S	Ensures updates reflect optimal user experience and interface design.
Quality Lead	T. Rohit	C	Reviews updates for compliance with quality standards.
Content Lead	M. Sai	I	Informed of document changes to maintain content consistency.

4. Introduction

The Provision Hospitals CRM Project is designed to modernize and streamline your hospital's operations through a centralized, secure, and automated platform. This CRM will integrate patient management, doctor coordination, billing, revenue sharing, and reporting into one seamless system.

Our focus is to replace manual processes with real-time, transparent, and efficient workflows, improving service delivery for patients and enabling better coordination among departments. The solution will be custom-built to match your hospital's requirements, with provisions for scalability and mobile accessibility to support future growth.

4.1. Business Goals

The Provision Hospitals CRM will be implemented to directly address your operational needs, improve patient care delivery, and provide a unified platform for hospital administration and medical coordination. Our approach is to ensure every feature is aligned with your current pain points and long-term growth goals.

Key Goals for Your Project:

1. **Streamline Hospital Operations**
   We will replace time-consuming manual processes with an automated CRM that manages patient records, doctor scheduling, billing, and department coordination — reducing administrative overhead and improving workflow efficiency.
2. **Enhance Patient Care**
   By giving doctors and staff **real-time access** to complete patient information, we will enable faster, more informed decision-making and ensure timely treatment.
3. **Increase Financial Transparency**
   We will automate revenue-sharing calculations (50-50 split between the hospital and honorary consultants) to remove manual errors and ensure every financial transaction is clear and accurate.
4. **Improve Inter-Department Communication**
   A centralized CRM will ensure smooth, instant communication between medical, administrative, and finance teams — enabling faster responses and more effective collaboration.

4.2. Business Objectives

Our implementation will be guided by the following objectives, directly tailored to your hospital's operations:

1. **Automate Patient Data Management**
   All patient registration, appointment booking, medical history, and billing will be managed within a single, secure platform.
2. **Improve Doctor-Patient Coordination**
   Doctors will have live access to schedules, medical history, and patient status from any device, ensuring quick and accurate decisions.
3. **Automate Financial Workflows**
   The system will automatically process consultant revenue sharing, apply the 50-50 split, and generate clear transaction records for audit purposes.
4. **Deliver Powerful Reporting Tools**
   Real-time reports on admissions, revenue, consultant performance, and patient trends will be available, supporting management in data-driven decision-making.
5. **Increase Overall Operational Efficiency**
   Routine admin work will be minimized, freeing staff to focus on patient care.

Planned Functionalities

1. **Patient Management Module**: Add, update, search, and retrieve patient records instantly.
2. **Doctor Coordination Dashboard**: Real-time appointments, patient details, and treatment tracking.
3. **Automated Revenue Sharing**: Accurate calculation and recording of 50-50 hospital-consultant splits.
4. **Analytics & Reporting**: Customizable reports for operational, financial, and patient care metrics.
5. **Appointment Scheduling System**: Online booking, reminders, and patient self-service options.
6. **Integrated Billing**: End-to-end bill generation, payment processing, and record keeping.

Additional Enhancements

- **Mobile Application (Android & iOS)**: Giving doctors, staff, and patients instant access to the CRM anywhere, anytime.
- **Learning Management System (LMS)**: Training materials and e-learning tools for staff to quickly adapt to the new system.
- **Human Resource Management System (HRMS):** Staff database, payroll processing, and performance management within the same ecosystem.

4.3. Business Rules

For Provision Hospitals CRM, the following business rules will be implemented to ensure smooth daily operations, regulatory compliance, and accountability across all departments. These rules will be configured directly into the CRM system to avoid manual dependencies:

1. **Patient Data Security** – All patient records will be encrypted and stored within a secure, cloud-hosted environment.
2. **Role-Based Access** – CRM permissions will be configured so that each role (Doctors, Admin Staff, Finance Team, Management) can only access the functions and data relevant to their duties.
3. **Audit Trails** – The system will record a complete history of all updates, edits, and deletions in patient, billing, and reporting modules for full traceability.
4. **Revenue Sharing Automation** – The agreed **50-50 split** revenue-sharing model between the hospital and consultants will be pre-set in the CRM, ensuring calculations are done automatically and transparently.
5. **Data Integrity Check** – Every entry (patient intake, appointment booking, and billing record) will pass through system-based validation before being stored.
6. **Integrated Standard Operating Procedures (SOPs)** – Your hospital's existing SOPs for patient care, treatment, billing, and scheduling will be mapped into CRM workflows to ensure operational consistency.
7. **Data Backup & Recovery** – Automatic backups will run on a predefined schedule, with recovery protocols in place for critical data such as patient history and billing.
8. **Regulatory Compliance** – The system will be designed and tested to meet all applicable legal, financial, and healthcare standards before deployment.

4.4. Background

The is being implemented to modernize and streamline core hospital operations, replacing outdated manual processes with a fully integrated, automated system. This initiative is based on our detailed understanding of your hospital's existing challenges and the need to enhance patient care, operational efficiency, and financial transparency.

Current Challenges Identified

1. **Fragmented Patient Records** – Patient details are stored in multiple formats and locations, causing delays in retrieving complete medical histories when needed.
2. **Manual Billing Process** – Billing relies on manual calculations, which increases the risk of errors and slows down payment processing.
3. **Inefficient Interdepartmental Communication** – Coordination between departments such as Medical, Administration, Marketing, and Finance is slower than desired, leading to service delays.
4. **Manual Revenue Sharing with Consultants** – The existing revenue-sharing model between the hospital and honorary consultants is calculated manually, creating possibilities for discrepancies and disputes.

Business Impact

- Delays in patient service and treatment decisions.
- Increased administrative workload and costs.
- Difficulty in maintaining accurate, real-time financial and operational data.
- Risk of communication gaps impacting patient satisfaction.

How This Project Will Address These Issues

- **Automation of Core Processes**: Patient management, billing, and revenue-sharing will be fully automated to reduce manual effort and improve accuracy.
- **Centralized Data Access**: All patient, doctor, and financial information will be stored in one secure CRM platform, accessible in real time.
- **Improved Departmental Coordination**: The CRM will streamline communication channels, enabling faster responses and decision-making.
- **Transparent Revenue Sharing**: The agreed 50-50 revenue-sharing model will be system-driven, ensuring fairness, accuracy, and elimination of disputes.

4.6 Project Scope

The scope outlines the functionalities that will be developed and delivered in this phase of the project, along with the exclusions to avoid any scope-related unclear.

4.6.1 In-Scope Functionality:

The following features and functionalities will be delivered as part of this CRM implementation:

Feature	Description
Patient Management	Registration, demographic details, medical history tracking, appointment scheduling, and case sheet management.
Doctor & Consultant Management	Profile management, scheduling, and automated revenue-sharing calculation based on agreed 50-50 model.
Billing & Payment Processing	Automated billing generation, invoice tracking, payment recording, and financial reconciliation.
Department Coordination	Interlinked workflows between Medical, Administration, Finance, and Marketing departments for faster service delivery.
Reporting & Analytics	Real-time operational, financial, and patient care reports for management decision-making.
Role-Based Access Control	Secure system access with permissions based on roles (e.g., doctors, administrators, finance team).
Integration with Laboratory & Pharmacy	Smooth data exchange between CRM and existing lab/pharmacy systems to avoid duplicate entries.

4.6.2 Out-of-Scope Functionality

The following functionalities are not included in the current project phase and may be considered for future upgrades:

Feature	Reason for Exclusion
Mobile App Development	Planned for Phase 2 to focus on core system stability first.
Video Consultation Module	Not part of current operational requirements.
Insurance Claim Processing Integration	Will be scoped separately as per insurance partner requirements.

5. Assumptions

The following assumptions have been considered while defining requirements and planning the CRM implementation. These assumptions form the basis of project timelines, scope, and delivery approach:

Assumption ID	Description
A1	All required stakeholder inputs, approvals, and sign-offs will be provided within agreed timelines to avoid delivery delays.
A2	Provision Hospitals will provide access to all existing systems (Lab, Pharmacy, Billing, etc.) required for CRM integration.
A3	Any changes to business processes during the project will be formally communicated through the agreed Change Request (CR) process.
A4	Test data (including patient records, billing samples, and doctor schedules) will be provided by Provision Hospitals for User Acceptance Testing (UAT).

A5	End-users (administrators, doctors, finance staff) will be available for training sessions as per the project training schedule.
A6	All third-party software, tools, or licenses required for CRM integration will be procured and provided by Provision Hospitals before integration begins.
A7	Internet connectivity and hardware infrastructure at the hospital premises will be adequate for smooth CRM operations.

6. Constraints

The following constraints have been identified for this project and will be factored into our delivery plan to ensure smooth execution:

Constraint ID	Description	Impact
C1	Project must be completed within the agreed timeline of 12 months to align with hospital operational goals.	Limits flexibility for adding new features mid-phase.
C2	The budget will stay within the agreed amount mentioned in the project contract.	Any additional requirements will require separate approval and costing.
C3	Integration will be limited to the existing hospital systems. Cross-hospital network integration will not be included in Phase 1.	Expansion will require a future phase.
C4	CRM will operate within the compliance framework of healthcare data privacy regulations.	Strict security and privacy measures will be mandatory.
C5	Key stakeholders will be available for requirement checks, UAT, and approvals only as per fixed schedules.	May affect approval timelines if schedules are missed.
C6	Stick to the decided technical and architecture for the whole project; no changes in technology will be made in the middle.	Avoids rework and scope creep.

7. Risks

This section outlines potential risks that could affect the success of the project, along with our proactive strategies to manage them. We will regularly review and update this risk register throughout the project lifecycle to ensure early identification and effective mitigation of any emerging risks.

Risk Register

Risk ID	Category	Description	Likelihood	Impact	Mitigation Strategy
R1	Technological	Delay or failure in integrating new technology components due to unforeseen compatibility issues.	Medium	High	Conduct early-stage compatibility testing; keep backup integration approach ready.
R2	Skills	Non-availability of resources with the required technical and domain expertise at critical stages.	Medium	High	Maintain a resource backup pool; arrange cross-training for internal team members.
R3	Political	Regulatory or policy changes that could impact system operations or compliance requirements.	Low	Medium	Closely monitor policy updates; keep compliance team engaged for immediate adaptation.
R4	Business	Loss of potential ROI if project timelines are significantly extended or project is canceled.	Low	High	Implement strict project governance with milestone-based reviews to ensure continued business justification.
R5	Requirements	Incorrectly captured requirements leading to rework or feature gaps.	Medium	High	Implement structured requirement validation sessions with all key stakeholders before development begins.
R6	Other	Unforeseen third-party vendor delays impacting deliverable timelines.	Medium	Medium	Include penalty clauses in vendor agreements; maintain alternative vendor options.

Risk Handling Strategies

For each identified risk, we will apply one or more of the following approaches:

- **Avoid:** Modify the project plan to eliminate the risk entirely.
- **Mitigate:** Reduce the probability or impact of the risk through preventive measures.
- **Transfer:** Assign risk responsibility to an external party (e.g., insurance, vendors).
- **Accept:** Acknowledge the risk and prepare to handle the consequences if it occurs.

Continuous Risk Monitoring

We will conduct risk reviews at every major milestone, updating the likelihood, impact, and mitigation strategies as the project progresses. This ensures that risks remain visible, measurable, and manageable, keeping the project aligned with agreed timelines, scope, and quality expectations.

8. Business Process Overview

This section presents the overall process flow for your project, highlighting the existing Legacy (AS-IS) process and our recommended Proposed (TO-BE) process. Our objective is to clearly demonstrate how the new system will address current challenges, streamline operations, and improve efficiency.

8.1 Legacy System (AS-IS)

The current process in the legacy system involves multiple manual interventions, limited integration between modules, and a dependency on human checks at each stage. While functional, this results in slower turnaround times, higher error rates, and limited real-time reporting capabilities.

Key Observations in the Current System:

- Multiple data entry points increase duplication.
- Limited automation; heavy reliance on manual follow-ups.
- Lack of centralized data visibility.
- Delayed reporting and analytics due to fragmented data sources.

8.2 Proposed Recommendations (TO-BE)

The proposed system will integrate all core functions into a unified digital platform, automating routine tasks, centralizing data storage, and enabling real-time insights.
By replacing manual steps with system-driven workflows, we will reduce operational delays, minimize errors, and enhance decision-making speed.

Key Improvements in the Proposed System:

- Single data entry point with automatic updates across all modules.
- Automated notifications for approvals and escalations.
- Centralized database for instant access to information.
- Real-time dashboards for performance tracking and decision support.

Legacy vs Proposed Process

Aspect	Legacy System (AS-IS)	Proposed System (TO-BE)
Data Entry	Multiple manual entries in different modules.	Single unified entry point updating all modules automatically.
Approvals	Paper-based, time-consuming.	Automated, system-driven approvals with instant notifications.
Data Storage	Fragmented across different locations.	Centralized and accessible in real time.
Reporting	Generated manually; delayed access.	Instant, real-time dashboards and reports.
Error Handling	Errors detected late in the process.	Automated validation ensures early error detection.

How the Proposed System Addresses Current Challenges:

Current Challenge	Proposed Solution
High manual workload	Automation of repetitive tasks.
Delayed approvals	Digital approval workflows with notifications.
Limited visibility	Centralized data with real-time dashboards.
High error rates	In-built validation checks at data entry stage.

9. Business Requirements

This section documents the specific business requirements gathered from stakeholders during the requirements elicitation process. All requirements are aligned with the agreed project objectives and are classified by priority and functional area for easy tracking.

Functional Requirements:

Requirement ID	Requirement Description	Category	Priority	Reference / Use Case I'd
FR-001	The system should allow patient registration with mandatory fields: Name, Age, Gender, Contact, Address.	Functional	High	[UC-001 - Patient Registration]
FR-002	The system must provide role-based access control (Admin, Doctor, Receptionist).	Functional	High	[UC-002 - Role Management]
FR-003	Appointment booking should be available via both web and mobile portals.	Functional	Medium	[UC-003 - Appointment Scheduling]
FR-004	The system should allow doctors to view and update patient medical history.	Functional	High	[UC-004 - Medical History Management]
FR-005	Integration with existing billing and inventory modules must be supported.	Functional	High	[UC-005 - Billing Integration]
FR-006	Patient search should be available with filters (Name, Contact Number, Date Range).	Functional	Medium	[UC-006 - Patient Search]
FR-007	System should allow automated report generation (Daily, Weekly, Monthly).	Functional	Medium	[UC-007 - Report Generation]
FR-008	System should allow appointment reminders via SMS and Email.	Functional	Low	[UC-008 - Reminder Notifications]

Non-Functional Requirements:

Requirement ID	Requirement Description	Category	Priority
NFR-001	Dashboard loading time should be under 3 seconds.	Performance	High
NFR-002	System should have 99.9% uptime availability.	Reliability	High
NFR-003	Secure data backup should occur every 24 hours.	Security	Medium
NFR-004	All sensitive patient data should be encrypted in storage and transit.	Security	High
NFR-005	System should handle up to 500 concurrent users without performance degradation.	Scalability	Medium
NFR-006	User interface should be accessible on desktop, tablet, and mobile.	Usability	Medium

Requirement Priority Definitions

- **High** - Must be implemented in the current release; critical to business operations.
- **Medium** - Important for business but can be implemented in later phases.
- **Low** - Desirable feature can be considered for future enhancements.

Functional & Non-Functional Requirements Traceability Matrix (FRTM):

Requirement ID	Business Objective	Functional Module	Design Document Ref	Test Case Ref
FR-001	Improve registration process efficiency	Registration Module	DD-001	TC-001
FR-002	Ensure secure access control	User Management Module	DD-002	TC-002
FR-005	Enhance operational integration	Billing & Inventory	DD-005	TC-005
NFR-001	Improve system performance	Dashboard Module	DD-010	TC-010
NFR-004	Ensure patient data security	Security Layer	DD-015	TC-015

10. Appendices

The appendices section provides supporting references and resources to ensure clarity and alignment throughout the project lifecycle. This will serve as a quick-reference repository for your project team, helping to maintain consistency in understanding terminology, abbreviations, and related documentation.

List of Acronyms:

Acronym	Full Form	Purpose in This Project
CRM	Customer Relationship Management	Centralized system to manage client interactions and records
UI	User Interface	The front-end design that users interact with
API	Application Programming Interface	Enables communication between different systems/modules
DB	Database	Stores and manages structured project data
UAT	User Acceptance Testing	Final testing phase to validate system readiness
SLA	Service Level Agreement	Defines agreed performance and availability metrics
AS-IS	Current State	Existing system/process before project changes
TO-BE	Future State	Proposed improved process/system post-implementation

Glossary of Terms:

Term	Definition (Project Context)
Legacy System	The existing system currently in use before the proposed upgrade
Stakeholder	Any individual or group impacted by the project outcomes
Functional Requirement	A feature or function the system must perform
Non-Functional Requirement	Performance, security, and other quality attributes
Module	A self-contained functional unit within the system
Workflow	The sequence of steps followed to complete a process
Integration	Linking two or more systems to work seamlessly together
Data Migration	Moving data from the old system to the new system
Dashboard	A visual interface showing real-time key metrics and reports
Change Request (CR)	A formal proposal to modify the system after baseline approval

Related Documents:

Document Name	Reference ID	Description
Business Case Document	DOC-BC-001	Outlines the justification and expected value of the project
Requirements Specification	DOC-RS-001	Detailed list of functional and non-functional requirements
Process Flow Diagrams	DOC-PFD-001	Visual representation of AS-IS and TO-BE workflows
Use Case Documentation	DOC-UC-001	Step-by-step system interaction scenarios
Project Plan & Gantt Chart	DOC-PP-001	Timelines, milestones, and resource allocation
Test Plan Document	DOC-TP-001	Defines testing approach, cases, and acceptance criteria
Change Management Log	DOC-CM-001	Tracks all approved and pending change requests
UAT Sign-Off Document	DOC-UAT-001	Confirms system readiness for go-live