Live Project – Waterfall Deliverables – Part 1/2

Document 1: Business case document Template

Project initiation:

The Smart CRM App project is initiated to address the inefficiencies of the current app. It helps to make communication between the employees easy. Also helps to save time by removing duplicates and increasing employees' efficiency by tracking their performance. It helps to create transparency, so that sales-person can track their cases.

Current Problem:

- **Duplications of Requirements**: Users upload the same requirements many times which takes a lot of time to evaluate.
- **Contact Management**: Every user has no access to see contact information of the user.
- **Stage of Cases**: The salesperson cannot able to track their respective cases on the app.
- **Analysis:** The app didn't able to generate performance report of their employees.
- **Built-in telephony**: App didn't able to provide a telephony feature.

Solution:

- **Remove Duplicity**: The user will not be allowed to add the same requirement again and again. If they do so then it pops up a message that the requirement already exists.
- **Communication:** Allow user to see the contact of another user so that they can communicate with each other.
- **Enhance Efficiency:** Managers can track the performance of employees which helps to increase the efficiency of employees:
- **Transparency:** It should help to create transparency in the process so that employee can manage the cases and track the stage of the case.

Required Resources:

The successful implementation of the project will require resources including:

Human resources

- Project Manager: Oversees the project.
- Business Analyst: Gather and analyzes requirement
- Developers: Build the app
- UI/UX Designer: Design the interface.
- Testers: Ensure functionality and reliability.
- IT Support: Handle deployment and support.
- Trainers: Provide user training.

Technical Resources:

- Development Tool
- Design Tool
- Testing Tool
- Hosting Tool
- Security Tool

Financial Resources:

Budget-For salaries, software licenses, hardware and training material.

Documents and Training material:

- Guides for portal use.
- Structured training sessions

Process Change

- Requirements management: User can manage the requirement of client easily.
- Contact Information: User can manage their contact information.
- Training and supporting session: Provide training and supporting to the user so that can use the app easily

Communication & Collaboration:

- Enhanced Communication: Improved channels between users so that they can communicate with each other easily.
- Stakeholder Involvement: It helps to increase the involvement of stakeholders in planning and development.

Technology Integration:

- IT infrastructure: Upgrading to increase the efficiency of app.
- Data Management: Manage the information of user and their clients.

ROI Timeframe:

The expected timeframe for the smart crm app is 10-12 months, with tangible benefits and cost saving becoming evident within the first year and full ROI realized by the end of the second year.

Stakeholder Identification:

Primary Stakeholder:

Administrator: oversee the implementation and alignment with company goal.

Employees: Main user who upload documents and manage them for the smooth flow of communication.

IT staff: Manage technical aspects, including deployment, integration and support.

Project Team.

- Project Manager: It ensures that the project will finish within the timeframe and budget.
- Business Analyst: Gather and make sure that it meets the project need
- Developers: Build the app
- UI/UX Designer: Design and create a user-friendly interface.
- Testers: Ensure functionality and reliability.
- Trainer: Develop and deliver training program for end user.

Document Business Analyst Strategy:

1. Project Initiation:

- In this project we first we find out the main problem that employees facing in the system.
- After knowing that problem we decide the objectives and scope of the project so that we can solve the problem.
- After knowing the problem, we identify the stakeholders of the project by conducting

2. Elicitation Technique:

- Interviews: At this stage we conduct one-to-one interviews with the sales team, operations team, and IT team to gather the information and requirements of the project.
- Surveys and questionnaires: We distribute questionnaire to all employees so that we can collect quantitative data on needs and expectations.
- Focus group: We organizes a focus group session with employees to discuss about challenges and solutions collaboratively.
- Observation: We observe the employees while working to understand their workflow, pain points and areas of improvement.
- Document analysis Review existing documents such as the current system and workflow diagram to understand the current state and identify gaps.
- Prototyping: Develop and present the prototype of the pennant app to the stakeholders and get feedback from them for any improvement required.
- Brainstorming: We also organizes a brainstorming session with the stakeholders and project team to generate ideas and identify innovations.

Stakeholder Analysis:

- Identify stakeholders and their roles using RACI (Responsible, Accountable, Consulted, Informed) or ILS (Influencer, Leader and Supporter).
- Determine each stakeholder's level of involvement and expectations regarding the project.
- Need to use this analysis to allocate responsibilities, manage expectations, and ensure effective communication.

Stakeholder	Responsible	Accountable	Consulted	Informed
Company Administrator		A	C	I
Employees	R		C	I
IT Staff			C	I
Project Manager	R	A		
Business Analyst	R			
UI/UX Designer	R			
Tester	R			
Trainers	R			

Documents to write:

- Business Requirement Documents
- Functional Requirement Specification.
- Use Case Document
- User Stories
- Test Plan
- User Acceptance testing
- Training Material
- Project Management Plan

Document Sign-off process:

- Share draft documents with stakeholders for review and feedback.
- Incorporate feedback revisions as necessary.
- Obtain formal sign-off from stakeholder indicating their acceptance of the documents.

- Maintain version control to track changes and updates.

Approval for the Project :

- For final approval we provide all clarification and specification of the project to the higher authorities so that we can move forward in the process.

Communication Channel:

- To take regular update on the project we take meeting in the morning and in the evening so that we can fix our day to day target and try to find out the completion of the project and also communicate to all stakeholders.
- We utilize E-mail and collaboration tool to communicate about the project to all team members.

Change Request Handling:

- Establish In this process we get the change request of adding a section of contact details. After getting this request we analyze the effect on current process, what will be the effect on our budget and timeline. By analyzing all these factors we communicate it to all team members so that we can make changes.

Progress reporting to stakeholders:

- To track the project's progress, we use the RTM requirement traceability matrix to get updates and communicate this information to the stakeholders.

UAT – Client Project Acceptances:

- In this stage we coordinate with the employees who are using the app and try to find out that it meets the requirement or not. In this stage employees uses the software and give their feedback whether they are satisfied with the software changes or not.

Document 3. Functional Specification

Functional Specification:

Project Name	Smart CRM APP
Customer Name	Encove Global Services Pvt. Ltd.
Project Version	1.0
Project Sponsor	Encove Global
Project Manager	Anuj Dixit
Project Initiation Date	31/07/2025

Functional Specification:

Req. ID	Req. Name	Req. Description	Priority
FR0001	User Authentication and authorization	The system should provide a secure login to employees, administrators, and IT staff.	10

FR0002	User Profile Management	The system should provide the option to manage the profile of the user.	9
FR0003	Update data and Enter Data	The system should allow user to enter and update data.	10
FR0004	Search data and filtering	The system allows the user to search the client information	9
FR0005	Enter and update data	System should allow the user to enter the data of client and update it.	9
FR0006	Client Data	Employee can able to see the information client.	8
FR0007	Save and delete	System should have saved and delete option for the data they entered	8
FR0008	Move in queue	It allows the employee to move the case to another department queue.	7
FR0009	Add query	If employee have any query than system should have the option to add query.	7
FR0010	Approval and rejection	The system should provide an option to approve and reject the case.	9
FR0011	Previous History	System should display the previous history of the client if they applied previously.	9
FR0012	Admin Dashboard	The system shall display admin dashboard.	9
FR0013	Reporting and analytics	The system should generate report on the performance of employees.	8
FR0014	Security and privacy	The system shall provide security and privacy to the data stored.	8
FR0015	Generate reference ID	The system should generate reference ID for each client.	7

Non-Functional Requirement:

Req. ID	Req. Name	Req. Description	Priority
NFR001	Page Load	The system should load the page efficiently and quickly	10
NFR002	Quality of page	The quality of the page should be good so that it can be understandable by everyone	9
NFR003	Load Capacity	The system should be efficient to handle high traffic.	9
NFR004	Availability	The system should be available 24/7 without scheduled downtime.	8
NFR005	Authentication	Generate authentication to protect user data.	8
NFR006	Logging	Maintain detailed logs of all system activities for troubleshooting	7
NFR007	Disaster Recovery	Ensure the system can recover from disasters within 24 hours	8
NFR008	User Management	Admin should manage user roles and permissions.	10
NFR009	Data Input	Users must be able to input data through various forms.	10
NFR010	Interoperability	Ensure compatibility with existing internal systems.	7
NFR011	Backups and Recovery	Automatically back up data daily and support recovery within an hour	8
NFR012	Energy Efficiency	Minimize energy consumption for sustainability	8

Document 4- Requirement Traceability Matrix

Req. ID	Req. Name	Req. Description	Design	D1	T1	D2	T2	UAT
FR0001	User Authentication and authorization	The system should provide a secure login to employees, administrators, and IT staff.	Yes	Completed	Completed	Yes	Yes	Pending
FR0002	User Profile Management	The system should provide the option to manage the profile of the user.	Yes	Completed	Completed	Yes	Yes	Pending
FR0003	Update data and Enter Data	The system should allow user to enter and update data.	Yes	Completed	Completed	Yes	Yes	Pending
FR0004	Search data and filtering	The system allows the user to search the client information	Yes	Completed	Completed	Yes	Yes	Pending
FR0005	Enter and update data	System should allow the user to enter the data of client and update it.	Yes	Completed	Completed	Yes	Yes	Pending
FR0006	Client Data	Employee can able to see the information client.	Yes	Completed	Completed	Yes	Yes	Pending
FR0007	Save and delete	System should have saved and delete option for the data they entered	Yes	Completed	Completed	Yes	Yes	Pending
FR0008	Move in queue	It allows the employee to move the case to another department queue.	Yes	Completed	Completed	Yes	Yes	Pending

FR0009	Add query	If employee have any query than system should have the option to add query.	Yes	Completed	Pending	Yes	Pending	Pending
FR0010	Approval and rejection	The system should provide an option to approve and reject the case.	Yes	Completed	Pending	Yes	Pending	Pending
FR0011	Previous History	System should display the previous history of the client if they applied previously.	Yes	Completed	Pending	Yes	Pending	Pending
FR0012	Admin Dashboard	The system shall display admin dashboard.	Yes	Completed	Pending	Yes	Pending	Pending
FR0013	Reporting and analytics	The system should generate report on the performance of employees.	Yes	Completed	Pending	Yes	Pending	Pending
FR0014	Security and privacy	The system shall provide security and privacy to the data stored.	Yes	Completed	Pending	Yes	Pending	Pending
FR0010	Approval and rejection	The system should provide an option to approve and reject the case.	Yes	Completed	Pending	Yes	Pending	Pending
FR0015	Generate reference ID	The system should generate reference ID for each client.	Yes	Pending	Pending		Pending	

SMART CRM APP

Version 1.0

AdityaSingh

Content:

1. Document Revision

Revision Number	Date	Document Changes
1	01/08/2025	Initial draft of the project documentation
2	07/08/2025	Added project objectives and success criteria
3	15/08/2025	Included stakeholder analysis and elicitation technique
4	21/08/2025	Completed functionality requirement and requirement traceability matrix
5	23/08/2025	Updated priority and status in requirement traceability matrix
6	24/08/2025	Added detailed business requirement
7	29/08/2025	Incorporated Appendices and final requirement
8	05/09/2025	Final Review and formatting adjusting.

2. Approvals

Role	Name	Signature	Date
Project Sponsor	Amit Chavan	[Signature]	01/08/2025
Business Owner	Ajay Amberkar	[Signature]	01/08/2025
Project Manager	Anuj Dixit	[Signature]	01/08/2025
Business Analyst	Aditya Singh	[Signature]	02/08/2025
System Architect	Ajay Singh	[Signature]	02/08/2025
Development Lead	Kunal Kapoor	[Signature]	04/08/2025
User Experience Lead	Jatin Lele	[Signature]	04/08/2025
Quality Lead	Vishal Singh	[Signature]	05/08/2025
Content Lead	Ankita Singh	[Signature]	05/08/2025

3. RACI Chart for this Document
   Codes used in RACI Chart:
   - R: Responsible
   - A: Accountable
   - C: Consulted
   - I: Informed

Stakeholder	Responsible	Accountable	Consulted	Informed
Company Administrator		A	C	I
Employees	R		C	I
IT Staff			C	I
Project Manager	R	A		
Business Analyst	R			
UI/UX Designer	R			
Tester	R			
Trainers	R			

In this RACI Chart:

The company administrator is accountable and has ultimate authority over any changes in the requirement.

Employees, IT staff, Project manager, Business Analyst. UI/UX Designer, Tester, and Trainer are responsible for their respective role.

The project manager is accountable for requirement management.

Company Administrator, Employees, and IT staff are consulting during the requirement process.

4. Introduction:

Smart CRM App helps the employee to upload the requirement and enter the data of the client so that it can be analyze and provide the license according to their requirement. It also helps to track the performance of the employee. It provides the contact information of the employee so that they can communicate with each other.

Business Goal:

The purpose of this project is to enhance the app's features so that employees can easily manage their tasks, decrease the duplication of requirements, contact each other, and review their performance. The app also helps sales persons track their case stages.

Business Objective:

- Data Entry: Entering the data of client in the system with accuracy and validity.
- Analysis: The system helps to analyze the data of clients and give the license as per their requirement.
- Security: It should store the data with the security so that unauthorized cannot reach to that data.
- Streamline Process: The process should be simple and easy to follow.

Business Rules:

Role Based Access Control: User can access only functionality and data relevant to their role.

Data Validation: All data entered in the system must validate automatically and must ensure that they are within the acceptable range before being saved.

Automatic Logout: User should automatically logout if the user is not using the system for a longer time.

Background:

Smart CRM app is the in house app that helps the company to manage the data of the clients. In this app salesperson upload the requirements and on the basis of available information sales officer decide the license details of the client for the requirement or case. In this process we face the problem of duplicity of requirements, lack of communication, analysing the performance of employees and cases. This project helps to remove all this challenge and make the flow of work easy.

Project Objective:

- Free Flow of Communication: Every employee can contact with each other and discuss their query.
- Requirement management: Manage the requirement so that it can easily accessible to every employee who are working on it.

- Maintain Transparency: The APP should able to maintain transparency so that employees can see the stage of the employee.
- Track Performance: Employers can track employees' performance to provide incentives and give them suggestions.
- Time Saving: Easy communication and availability of requirements can save the time of employee.

Project Scope:

The project scope outlines the boundaries and deliverables of the Smart CRM project. It defines what features and functionalities will be included in the final product and what aspects are considered out of scope. The project scope encompasses both the in-scope functionality that will be developed as part of the project and the out-of-scope functionality that will not be addressed.

In Scope functionality:

- User Authentication and Authorization: Secure login and role-based access control.
- Data Entry and Management: Functions for entering, updating, and managing student marks.
- Data Validation: Automated checks to ensure data entered or requirement upload are valid or not.
- Reporting Tools: Customizable performance reports of employees.
- Integration with SIS: Seamless integration with the existing Company Information System.
- User Interface (UI): Responsive design for desktops.
- Security Measures: Data encryption, audit trails, and automatic logout.
- Training and Support: User guides, training materials, and technical support.
- Scalability: Design for increased data volumes and user loads.

Out Scope Functionality:

- Hardware Procurement: No hardware for end-users.
- Legacy System Overhaul: No major upgrades to existing systems beyond SIS integration.
- Extended Customization: No customizations outside predefined features.

5. Assumptions:

1. User Readiness: All users are the employees of the company.

2. SIS Integration: The existing Company Information System (SIS) has stable APIs for seamless integration.

6. Constraint:

- Budget: The project must stay within the budget.
- Timeline: The project must complete within the timeframe.

7. Risk:

Technological Risks:

- Integration Challenges: Difficulty in integrating Smart CRM with existing systems.
- Scalability: Ensuring that the portal can handle large volumes of data and users simultaneously.
- Data Security: Protecting sensitive client information from breaches and unauthorized access.
- Reliability and Uptime: Ensuring the system is robust and consistently available.
- Technology Obsolescence: The chosen technology stack becoming outdated quickly.

Skill Risk

- Technical Expertise: Availability of skilled developers and IT staff proficient in the required technologies.
- Training and Support: Ensuring Employees can effectively use the new system.
- Project Management: Ensuring the project managers have the necessary experience in managing large-scale IT projects.

Business Risk

- Cost Overruns: The project exceeding budget due to unforeseen issues or scope changes.
- Return on Investment (ROI): The project may not deliver the expected financial benefits or improvements in efficiency.
- Vendor Dependence: Over-reliance on third-party vendors for critical components, which could lead to delays or additional costs.

Requirements Risk

- Changing Requirements: Evolving needs from stakeholders leading to scope creep and potential delays.
- Incomplete Requirements: Initial requirements may not fully capture the needs of all users, leading to rework.
- Requirement Conflicts: Different stakeholders might have conflicting requirements, complicating the development process.

Other Risks

- Project Timeline: Unanticipated delays extending the project timeline.
- User Adoption: Resistance from teachers or students in adopting the new system, leading to underutilization.
- Maintenance and Support: Ensuring ongoing support and maintenance post-launch to address bugs, updates, and user issues.

8. Business Process Overview:

Legacy System (AS-IS):

The legacy system for data updating, requirement upload and management in the company is characterized by manual processes, basic digital tools, and significant inefficiencies. This system poses several challenges, including data inconsistency, limited accessibility, security risks, and scalability issues. A transition to a modern, integrated system like Smart CRM aims to address these challenges by automating and streamlining the entire process, thereby improving efficiency, accuracy, and accessibility for all stakeholders.

- Requirement Upload: Sales Person upload same requirement many times.
- Data entry: Data entered manually so it causes some errors.
- Report generation: system should able to generate performance report
- Communication: In current situation employees did not able to contact each other.

Proposed Recommendation:

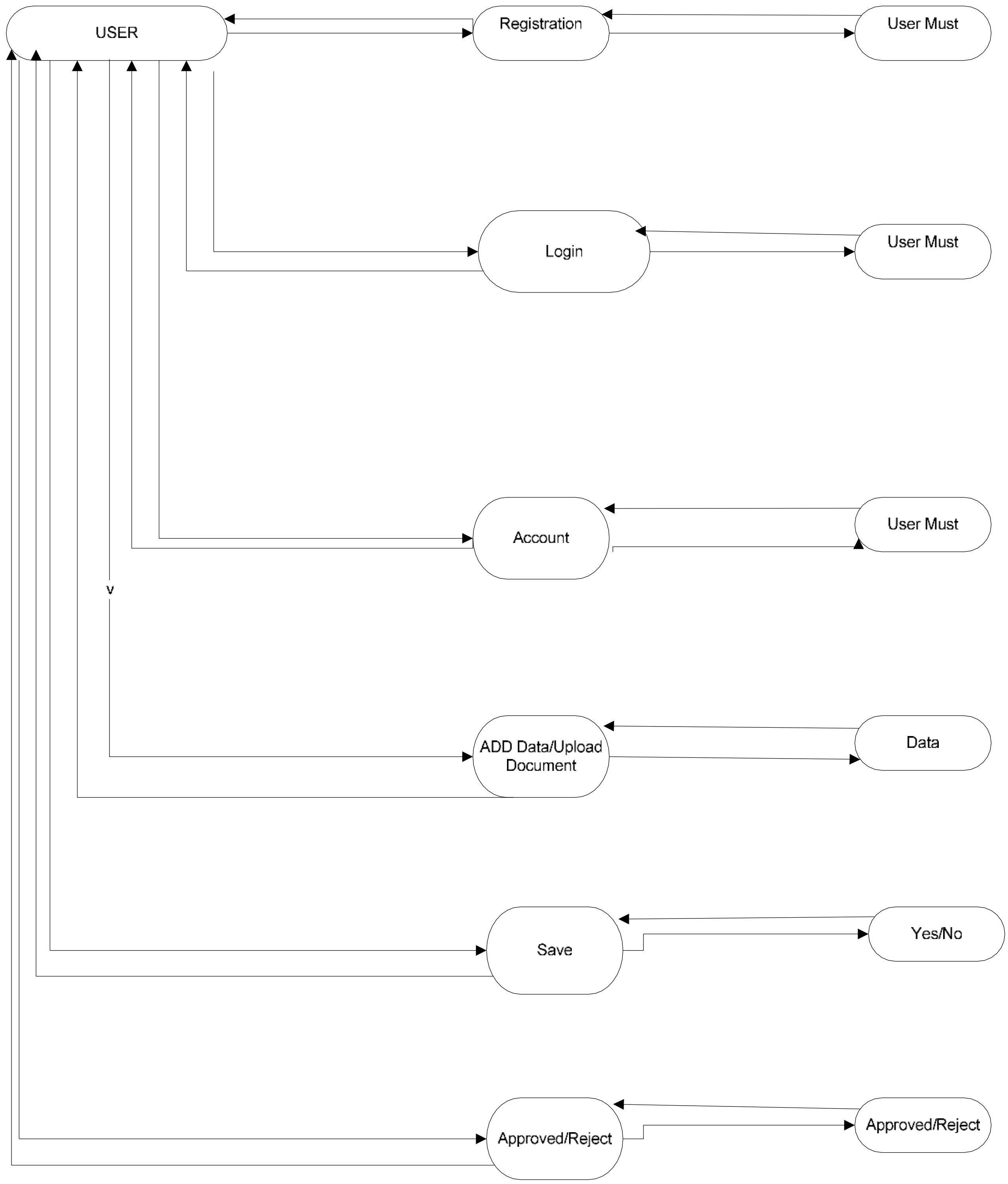
To address the challenges identified in the legacy system and improve employee management processes, the proposed recommendations (TO-BE) include implementing enhancements and solutions aimed at streamlining operations and maximizing efficiency. Key recommendations include:

- Availability of requirement: It should remove the duplicate requirement by prompting message of the available requirement to the person who uploading the requirement.
- User information: All users' information should be easily manageable.
- Report generation: The app should generate a report on the performance of the employees.
- Built-in telephony: The app should have built in telephony so that they can contact with each other easily.
- Tracking of Cases: It should provide transparency of the process so that employee can track their respective cases.

9. **Business Requirement:**

Req. ID	Req. Name	Req. Description	Priority
BR0001	User Authentication and authorization	The system should provide a secure login to employees, administrators, and IT staff.	High
BR0002	Role-based access control	The system should provide role-based access control restricting functionality based on the user's role	High
BR0003	Requirement Upload	The system should allow user to add requirement	High
BR0004	Requirement Validation	It should validate the requirement and restrict duplicate requirement s from being uploaded.	High
BR0005	Contact Information	System should store contact information of employees that can accessible to every user.	High
BR0006	Case Stage	Employee can able to track the stage of cases.	Medium
BR0007	Employee Performance	System should generate report on the performance of employee.	Medium
BR0008	Download Requirement Details	It allows the employee to download the requirement details.	Low
BR0009	Data encryption	The System should encrypt sensitive data to ensure confidentiality.	High
BR0010	User Friendly Interface	The system should provide a user-friendly interface for entering, viewing and managing data.	Medium
BR0011	Alerts	The system shall alert user on any discrepancies or error in data entry.	Low

BR0012	Technical Support	The system shall provide access to technical support for troubleshooting.	Medium
BR0013	Compliance reporting	The system should generate compliance report for regulatory bodies.	Low
BR0015	Training Material Access	The system shall provide access to training material for users.	Medium
BR0016	User Feedback	The system should allow user to provide feedback on the portal functionality.	Low
BR0017	Help Section	The system shall include help section for any kind of enquiry.	Low
BR0018	Notification	The system shall give notification to employee on pending task.	Medium
BR0019	Data Security	Data shall be secure	Medium
BR0020	Auto Logout	The system should be logout automatically if the system is open for a while and user is not active.	High



10. Appendices

List of Acronyms:

UAT-User Acceptance Testing

BRD- Business Requirement Document

BR- Business Requirement

UI- User interference

Glossary of Terms

API (Application Programming Interface)

Data Validation: Procedures implemented to ensure the accuracy, consistency, and quality of data entered into the system.

User Role: A set of permissions that define what actions a user can perform within the system.

Related Documents:

- Functional Specifications
- Technical Design Document
- This Business Requirements Document (BRD) provides a comprehensive overview of the objectives, scope, requirements, and other relevant aspects of the project.
- Stakeholder Analysis