**Blood Stock Management System**

**Business Requirement Specification**

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# 1. Introduction

# Document Purpose

The purpose of this document is to outline the business requirements for the Blood Stock Management System (BSMS). This system is designed to manage the inventory and distribution of blood in a healthcare facility. This paper presents a detailed approach for an efficient blood bank database management system.

# Project Background

The Blood Stock Management System (BSMS) project is initiated to enhance the efficiency and accuracy of managing blood donations, inventory. Blood banks and transfusion services play a crucial role in the healthcare ecosystem, ensuring that patients receive the necessary blood and blood products promptly and safely. The BSMS aims to modernize these processes by leveraging technology to address current challenges and improve overall service delivery.

# Goals of the project

The main objective of this project to maintain an adequate and safe supply of blood to meet the needs of patients and reduce shortages and ensure timely availability of blood.

Additional goals include:

* Streamline the processes of donor registration, receivers registration, blood bank registration and hospital registration.
* Implement robust inventory management practices to track blood stock levels.
* Developing a user-friendly interface to ensure ease of use for all hospitals, including donors, blood banks.

# Customers and Stakeholders

Customers:

* Receiver- This user will look for the availability of blood type he searched for.
* Donor- This user will donate blood at their nearest blood bank.
* Blood Bank-This user will only update the stock and can see all the blood req on their home screen.
* Hospital-This user will check availability of blood on the website.

Stakeholders:

* Healthcare Department.
* Government of India.

# 2. Business Requirements Overview

* Blood stock Management system is the public web application.
* Blood stock Management system will be opened to the global, but in the phase 1, the main target is in the Pune.
* There are mainly four types of users: Blood banks, hospitals, donors and receivers.
* All users can search for the availability of blood.
* Blood Banks can update the blood stock.
* Blood stock Management system provides the user-friendly interface to facilitate ease of use for all users.

# 3. Functional Requirements Overview

Blood stock Management system consists of following modules described as below.

1. Blood Bank Module
2. Donor Module.
3. Receivers Module.
4. Hospital Module.

# 3.1 Blood Bank Module

* Track real-time inventory of blood units
* Log details of each blood collection (donor ID, date, type of donation, volume collected).

# 3.2 Donor Module

* Capture and store donor information (name, contact details, medical history, blood type).
* Verify donor eligibility based on predefined criteria (age, health status).
* Update and maintain donor profiles.

# 3.3 Receivers Module

* Allow individuals to register as recipients by providing personal details and blood type.
* Allow recipients to submit blood requests specifying the type, quantity, and urgency.

# 3.4 Hospital Module

* Allow hospital staff to submit blood requests specifying the type, quantity, and urgency.
* Notify hospital staff when stock levels are low .

# 4. Non-functional Requirements

* The website should use professional design, look and feel and color scheme.
* The system must handle increasing volumes of data and users without performance degradation in performance and should handle more users and data as needed.
* Ensure data consistency and integrity across all modules.
* Ensure all data entered into the system is accurate and reliable and implement data validation checks to prevent incorrect data entry.
* Encourage and implement continuous improvements and innovative solutions.
* Provide around-the-clock (**24/7**) customer support.