***+ANUDIP FOUNDATION***

A Project Report on

**BLOOD BANK MANAGEMENT SYSTEM**

By

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**BLOOD BANK MANAGEMENT SYSTEM**

**Introducing our Java-based Blood Bank Management System (BBMS):**  
Efficiently manage and oversee every aspect of blood donation and transfusion with our intuitive system. From maintaining donor records and tracking blood inventory to handling requests and ensuring timely distribution, our BBMS empowers healthcare facilities to streamline operations and save lives with efficiency and precision.

**Entities**

❖ **Donor**

❖ **Blood**

❖ **Patient**

❖ **Employee Team**

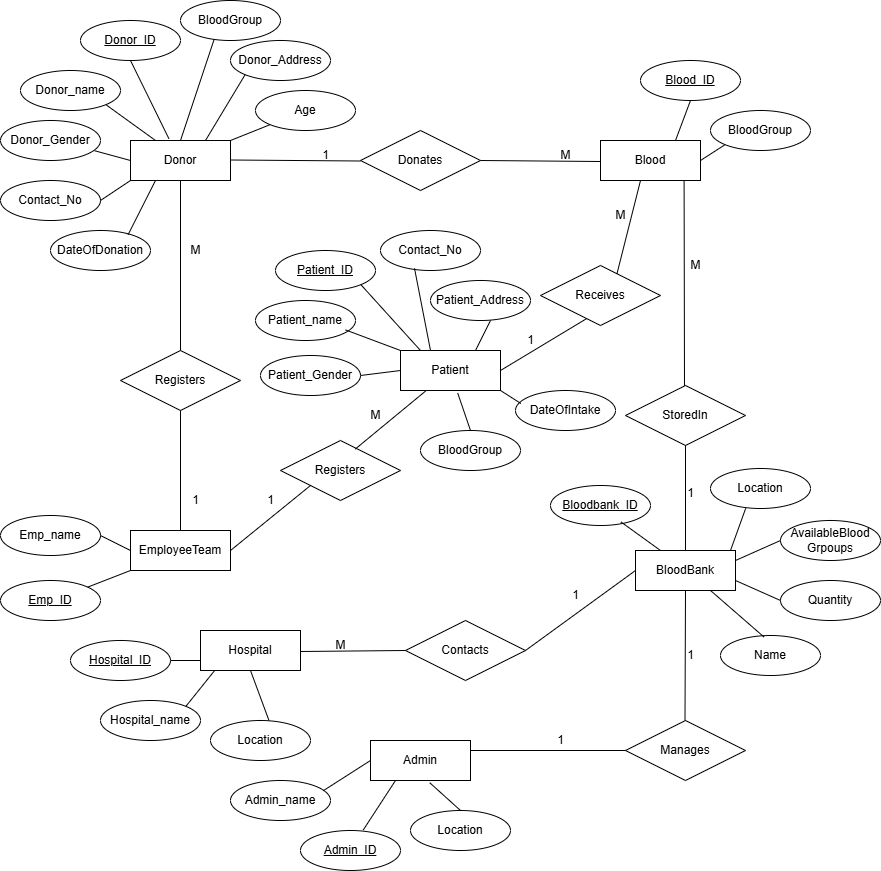
❖ **Hospital**  
 ❖ Admin

❖ Blood Bank

**ATTRIBUTES OF ENTITIES:**

1. **Donor**
   * **Primary Key: Donor\_ID**
   * **Attributes: Donor\_name, Donor\_Gender, Contact\_No, DateOfDonation, BloodGroup, Donor\_Address, Age**
2. **Blood**
   * **Primary Key: Blood\_ID**
   * **Attributes: BloodGroup**
3. **Patient**
   * **Primary Key: Patient\_ID**
   * **Attributes: Patient\_name, Patient\_Gender, Contact\_No, Patient\_Address, BloodGroup, DateOfIntake**
4. **EmployeeTeam**
   * **Primary Key: Emp\_ID**
   * **Attributes: Emp\_name**
5. **Hospital**
   * **Primary Key: Hospital\_ID**
   * **Attributes: Hospital\_name, Location**
6. **Admin**
   * **Primary Key: Admin\_ID**
   * **Attributes: Admin\_name, Location**
7. **BloodBank**
   * **Primary Key: Bloodbank\_ID**
   * **Attributes: Location, AvailableBloodGroups, Quantity, Name**

**ENTITY RELATIONSHIP DIAGRAM – BLOOD BANK MANAGEMENT SYSTEM**



**CONCLUSION:**

In summary, a Blood Bank Management System (BBMS)provides a comprehensive solution designed to optimize the management of blood donations, inventory, and distribution. By integrating crucial processes such as donor registration, blood tracking, and hospital requests, the system enhances efficiency, accuracy, and transparency in blood bank operations. It fosters seamless communication between donors, hospitals, and blood banks, ensuring the timely availability of safe and compatible blood for patients in need. Additionally, by offering real-time access to critical data, including blood stock levels, donor eligibility, and transfusion history, the system empowers administrators to make informed decisions that improve service quality and patient care. Overall, a BBMS plays a crucial role in modernizing blood bank operations, enhancing reliability, and ultimately contributing to life-saving efforts.

**DATABASE CREATION QUERY:**

**1️. Donor Table**

**CREATE TABLE Donor (**

**Donor\_ID INT PRIMARY KEY,**

**Donor\_name VARCHAR(100),**

**Donor\_Gender VARCHAR(10),**

**Contact\_No VARCHAR(15),**

**DateOfDonation DATE,**

**BloodGroup VARCHAR(5),**

**Donor\_Address TEXT,**

**Age INT**

**);**

**2️. Patient Table**

**CREATE TABLE Patient (**

**Patient\_ID INT PRIMARY KEY,**

**Patient\_name VARCHAR(100),**

**Patient\_Gender VARCHAR(10),**

**Contact\_No VARCHAR(15),**

**Patient\_Address TEXT,**

**BloodGroup VARCHAR(5),**

**DateOfIntake DATE**

**);**

**3️. Blood Table**

**CREATE TABLE Blood (**

**Blood\_ID INT PRIMARY KEY,**

**BloodGroup VARCHAR(5)**

**);**

**4️. Blood Bank Table**

**CREATE TABLE BloodBank (**

**Bloodbank\_ID INT PRIMARY KEY,**

**Location TEXT,**

**AvailableBloodGroups VARCHAR(50),**

**Quantity INT,**

**Name VARCHAR(100)**

**);**

**5️. Employee Team Table**

**CREATE TABLE EmployeeTeam (**

**team\_id INT AUTO\_INCREMENT PRIMARY KEY,**

**team\_name VARCHAR(100) NOT NULL,**

**bank\_id INT,**

**FOREIGN KEY (bank\_id) REFERENCES BloodBank(bank\_id) ON DELETE CASCADE**

**);**

**6️. Hospital Table**

**CREATE TABLE Hospital (**

**Hospital\_ID INT PRIMARY KEY,**

**Hospital\_name VARCHAR(100),**

**Location TEXT**

**);**

**7️. Admin Table**

**CREATE TABLE Admin (**

**Admin\_ID INT PRIMARY KEY,**

**Admin\_name VARCHAR(100),**

**Location TEXT**

**);**