**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

**Belagavi, Karnataka-590018, Karnataka**



**A DBMS MINI PROJECT REPORT [5th sem]**

**ON**

**“BLOOD BANK MANAGEMENT SYSTEM”**

Submitted in partial fulfillment of the requirements for the award of the degree of

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE AND ENGINEERING**

**Submitted by:**

**Pinni Raga Sruthi**

**Rakshith V Patil**

**Raunak Singh Rathour**

**Sahithi Srujana C**

**1JS21CS102**

**1JS21CS113**

**1JS21CS115**

**1JS21CS122**

Under the Guidance of

**Mrs K. S. Rajeshwari**

Assistant Professor, Dept of CSE,

JSSATE, Bengaluru



**JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU**

**Department of Computer Science and Engineering**

**2023-2024**

**JSS ACADEMY OF TECHNICAL EDUCATION**

**JSS Campus, Dr.Vishnuvardhan Road, Bengaluru-560060**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**



**CERTIFICATE**

This is to certify that **A** **DBMS MINI PROJECT REPORT entitled “BLOOD BANK MANAGEMENT SYSTEM”** has successfully carried out by **Pinni Raga Sruthi (1JS21CS102) , Rakshith V Patil (1JS21CS113), Raunak Singh Rathour (1JS21CS115), Sahithi Srujana C (1JS21CS122)** in partial fulfilment for the DBMS Laboratory with Mini Project (21CSL58) of 5th Semester **Bachelor of Engineering in Computer Science and Engineering** in **Visvesvaraya Technological University Belagavi** during the year 2023-2024. It is certified that all corrections and suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project report has been approved as it satisfies the academic requirement in respect of the project work prescribed for the said degree.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dr Abhilash C.B** **Mrs K. S. Rajeshwari Dr. Mallikarjuna P B**

**Assoc. Professor, Asst. Professor, Professor & Head,**

Dept. of CSE, Dept. of CSE, Dept. of CSE,

JSSATE, Bengaluru JSSATE, Bengaluru JSSATE, Bengaluru

**External Examiners**

Name of the Examiners: Signature with Date

1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# ABSTRACT

The Blood Management System project aims to develop an integrated software solution to optimize blood donation, storage, and distribution. With a focus on transparency, accessibility, and efficiency, it caters to the critical needs of blood banks, hospitals, donors, and recipients. Key functionalities include donor registration, inventory management and blood request handling . Serving as a centralized platform, the system facilitates seamless coordination among stakeholders, ultimately enhancing patient outcomes and saving lives.

Through innovation and collaboration, the project drives advancements in healthcare technology, fostering significant improvements in blood management practices. It also contributes to global public health initiatives, ensuring efficient management of vital blood resources. Continuous research and development allow the system to address evolving challenges, adapting to meet the needs of healthcare providers and patients.

By refining features and functionalities through iterative development, the project delivers a cutting-edge solution that maximizes efficiency and effectiveness in blood management, revolutionizing practices and improving patient care worldwide.

## **ACKNOWLEDGEMENT**

We express our humble pranams to his holiness **Jagadguru Sri Sri Sri Shivaratri Deshikendra Mahaswamiji** for showering his blessings on us to receive good education and have a successful career.

We express our sincere thanks to our beloved principal, **Dr. Bhimasen Soragaon** for having supported us in all our academic endeavors.

We are also forever grateful to **Dr. P.B. Mallikarjuna**, Head of the Department, Computer Science and Engineering, for his unending support, guidance and encouragement in all our ventures.

We are thankful for the resourceful guidance, timely assistance and graceful gesture of our guide **Mrs. Rajeshwari K S**, Assistant professor, Department of Computer Science and Engineering, who helped us in every aspect of our project work.

The completion of any project involves the efforts of many people. We have been lucky enough to have received a lot of support from all ends during the course of this project. So, we take this opportunity to express our gratitude to all whose guidance and encouragement helped us emerge successful.

I express my sincere thanks to **Dr Abhilash C.B** Associate Professor**,** Department of Computer Science and Engineering, who helped us in every aspect of our project work.

Last but not the least; we would be immensely pleased to express our heartfelt thanks to all the teaching and non-teaching staff of the department of CSE and our friends for their timely help, support and guidance.

**Pinni Raga Sruthi (1JS21CS102)**

**Rakshith V Patil (1JS21CS113)**

**Raunak Singh Rathour (1JS21CS115)**

**Sahithi Srujana C (1JS21CS122)**

**TABLE OF CONTENTS**

|  |  |
| --- | --- |
| **Chapter Title** | **Page No** |
| Abstract……………………………………………………………......... | i |
| Acknowledgement…………………………………………………........ | ii |
| Table of Contents………………………………………………………. | iii |
| List of Figures…………………………………………………………... | iv |

|  |  |  |
| --- | --- | --- |
| **Chapter 1** | **Introduction……………………………………………..** | **1** |
|  | 1.1 Motivation………………………………………. | 2 |
|  | 1.2 Objectives And Scope…………………………... | 3 |
|  | 1.3 Problem Statement……………………………… | 4 |
| **Chapter 2** | **Existing System (Literature Survey)………………….** | **5** |
| **Chapter 3** | **Front End Design and Tools…………………………...** | **7** |
|  | 3.1 Tools Used With Description………………….. | 8 |
| **Chapter 4** | **Database Design………………………………………...** | **10** |
|  | 4.1 ER Diagram…………………………………….. | 10 |
|  | 4.2 Mongodb SCHEMA…………………………... | 11 |
|  | 4.3 Components Description……………………… | 15 |
| **Chapter 5** | **Implementation…………………………………………** | **18** |
| **Chapter 6** | **Results…………………………………………………..** | **23** |
|  | 6.1 Snapshots……………………………………… | 24 |
|  | **Conclusion……………………………………………….** | **29** |
|  | **References……………………………………………….** | **30** |

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **Figure No** | **Title** | **Page no** |
| 4.1 | ER Diagram | 10 |
| 5.1 | Aggregation Stored Procedur**e** | 22 |
| 6.1 | Home Page | 24 |
| 6.2 | Contact Us Page | 25 |
| 6.3 | Donors Sign Up Page | 25 |
| 6.4 | Donor Profile Page | 26 |
| 6.5 | Blood Bank Profile Page | 26 |
| 6.6 | Donations Page | 27 |
| 6.7 | Stock Page | 27 |
| 6.8 | Camps Page | 28 |