**AN EFFICIENT APPROACH TO A WEB BASED LEAVE MANAGEMENT SYSTEM USING MVC FRAMEWORK**

# D84 Project

*Submitted in partial fulfillment for the requirement of B.E. degree in Electronics and Communication Engineering of Anna University*

#### Submitted by

***SRIMMATI.S***

***(Reg. No: 13D96)***

#### Guided by

## ***Mrs.E.MURUGAVALLI***



# *Department of Electronics and Communication Engineering*

### **THIAGARAJAR COLLEGE OF ENGINEERING**

(An Autonomous Institution Affiliated To Anna University, Chennai)

**MADURAI – 625 015**

***April 2017***

###### **THIAGARAJAR COLLEGE OF ENGINEERING**

**(An Autonomous Institution Affiliated to Anna University, Chennai)**

**MADURAI – 625 015.**



BONAFIDE CERTIFICATE

This is to certify that the D78 Project entitled “**AN EFFECTIVE BASED BLOOD BANK MANAGEMENT SYSTEM USING MVC FRAMEWORK**”, being submitted by *SRIMMATI.S* (13D96) in partial fulfillment for the requirement of Bachelor of Engineering Degree in Electronics and Communication Engineering, is a record of bonafide work done by them during the year 2016-2017 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

Dr.V.R.Venkatasubramani,M.E.,Ph.D Dr.Mrs.R.Sukanesh, M.E.,Ph.D

Assistant Professor, Professor and Head,

Department of ECE, Department of ECE,

Station: Madurai Date:

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

INTERNAL EXAMINER EXTERNAL EXAMINER HDECE.

ACKNOWLEDGEMENTS

First of all I thank God, the Almighty for strengthening me throughout this project and helping me to complete it successfully.

I would like to express my heartfelt gratitude to **Dr. V. ABHAI KUMAR**, Principal, for permitting me to undertake the internship and work at iNautix Technologies.

I express my heartfelt thanks to **Dr. Mrs. R. SUKANESH**, Professor and Head of Department of ECE for her complete support and encouragement.

I feel immense pleasure in thanking my internal guide **Mrs.E.Murugavalli**, Asst. Professor, ECE Department for her inspiring guidance, valuable suggestions, encouragement and support during the course of this project work.

I feel grateful to my external guide **Mr. B. Ramasubramanian,** Manager-Training, Global Talent Development Team, iNautix Technologies for his continuous support and guidance throughout the terms of the project work.

I convey our sincere thanks to all the teaching, and non-teaching staff members of our college, for helping me directly or indirectly by all means throughout the course of my study and project work.

I would like to thank the Learning and Development team of iNautix Technologies for the complete support and encouragement during the internship.

I submit my gratitude to my parents and my friends without them nothing could be done.

SRIMMATI.S

## **LIST OF CONTENTS**

|  |  |
| --- | --- |
| **Item** | **Page No.** |
| Title Page | i |
| Certificates | ii |
| Acknowledgement | iii |
| List of contents | iv |
| List of figures | vi |
| Abstract | viii |
| CHAPTER.1.INTRODUCTION | 1 |
| CHAPTER.2. LITERATURE REVIEW | 3 |
| CHAPTER.3. PROBLEM DESCRIPTION | 6 |
| CHAPTER.4.METHODOLOGY.  4.1 Dot Net  4.2 .Net Framework  4.3 ASP .Net  4.3.1 ASP .Net Web Forms Model  4.3.2 ASP .Net Component Model  4.4 Components of .Net Framework  4.5 ASP .Net Application Life Cycle  4.6 ASP .Net Page Life Cycle  4.7 ASP .Net Page Life Cycle Events  4.8 MVC Framework  4.8.1 MVC Components  4.8.2 ASP .Net MVC Features  4.8.3 MVC Flow Diagram  4.8.4 MVC Flow Steps  4.9 Microsoft SQL Server  4.9.1 Usage of SQL Server  4.9.2 SQL Server Components  4.9.3 Architecture of SQL Server | 7  7  7  8  8  9  10  12  12  14  16  16  17  18  19  19  19  20  20 |
| CHAPTER.5. PRESENT WORK  5.1 Unified Modeling Language  5.1.1 Use Case Diagram  5.1.2 Activity Diagram  5.1.3 Class Diagram  5.1.4 Sequence Diagram  5.2 Entity Relationship Diagram | 27  27  28  29  32  33  34 |
| CHAPTER.6. RESULTS AND DISCUSSIONS | 35 |
| CHAPTER.7. CONCLUSION | 49 |
| REFERENCES | 50 |

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **Figure No.** | **Description** | **Page No.** |
| 4.1 | MVC Components | 16 |
| 4.2 | MVC Flow Diagram | 18 |
| 5.1 | Use Case Diagram For Blood Bank Management System | 28 |
| 5.2 | Activity Diagram for Admin | 29 |
| 5.3 | Activity Diagram for Donor | 30 |
| 5.4 | Activity Diagram for Patient | 31 |
| 5.5 | Class Diagram for Blood Bank Management System | 32 |
| 5.6 | Sequence Diagram for Blood Bank Management System | 33 |
| 5.7 | ER Diagram for for Blood Bank Management System | 34 |
| 6.1 | Home Page | 35 |
| 6.2 | Blood Tips | 35 |
| 6.3 | Search Donor | 36 |
| 6.4 | Searched Donor Result | 36 |
| 6.5 | Donor Login | 37 |
| 6.6 | Donor Registration | 37 |
| 6.7 | Membership Table | 38 |
| 6.8 | Donor Table | 39 |
| 6.9 | Donor My Profile | 39 |
| 6.10 | Donor Make Donation | 40 |
| 6.11 | Donor My Donation | 40 |
| 6.12 | Donation Details Table | 41 |
| 6.13 | Hospital Login | 41 |
| 6.14 | Hospital Table | 42 |
| 6.15 | Hospital My Profile | 42 |
| 6.16 | Hospital Make Request | 43 |
| 6.17 | Hospital Make Request Made | 43 |
| 6.18 | Request Details Table | 44 |
| 6.19 | Blood Table | 44 |
| 6.20 | Blood Bank View Request | 45 |
| 6.21 | Blood Bank View Request Details | 45 |
| 6.22 | Blood Bank Check Availability | 46 |
| 6.23 | Blood Bank Allocation | 46 |
| 6.24 | Allocation Table | 47 |
| 6.25 | Triggered Request Details Table | 47 |
| 6.26 | Triggered Donation Details Table | 48 |

**ABSTRACT**

Online Leave management system project is an intranet based application which can be accessed all over the organization. This application is an automated software application for handling leaves related information of employees. With the help of this system users can apply leave online, supervisors can approve or escalate to higher levels, and HR can update leave status online. The users can see the status of all Leave Transactions and their Leave Balances from this system. Each employee is provided with unique id and password for log in to system and send request for leave. This method will improve the process of leave management inside organization by saving time and resources. This project will reduce the paperwork and maintain record in an efficient and systematic way.