# **Organ Donation Management System**

#### A MINI-PROJECT REPORT

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of

# BACHELOR OF ENGINEERING IN

COMPUTER SCIENCE AND ENGINEERING



# RAJALAKSHMI ENGINEERING COLLEGE AUTONOMOUS, CHENNAI NOV-DEC 2024

# **BONAFIDE CERTIFICATE**

Certified that this mini project "Organ Donation Management System" is the bonafide work of "PAVENDHAN (21162207701194)" who carried out the project work under my supervision.		
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Submitted for the practical examination to be held on \_\_\_\_\_\_

INTERNAL EXAMINER

**EXTERNAL EXAMINER** 

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My sincere thanks to my family members, friends and other staff members of Computer Science and Engineering.

#### **ABSTRACT**

Reboot is a comprehensive organ donation management platform designed to streamline the process of organ donation and transplantation. The platform connects donors, recipients, and medical professionals (Admin) through an intuitive and secure interface.

Reboot facilitates the registration of organ donors, enables recipients to request organs, and provides real-time tracking and updates for both parties. The system also includes an admin panel to oversee and manage operations, ensuring the validity and transparency of all activities.

By incorporating advanced search features for finding suitable donors based on organ type and location, Reboot enhances the matching process. Additionally, the platform integrates educational resources, promoting awareness about the importance of organ donation and addressing common misconceptions. With a user-friendly design and focus on accessibility, Reboot aims to save lives by encouraging more people to become organ donors and ensuring that organs are distributed efficiently and fairly.

Reboot represents a significant step toward modernizing organ donation systems, fostering a collaborative community while reducing delays, enhancing equity, and improving overall outcomes in organ transplantation

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## INTRODUCTION

#### 1.1 INTRODUCTION

In recent years, the need for efficient and accessible organ donation systems has become increasingly evident, as demand for organ transplants continues to rise. However, many individuals face challenges in navigating the donation process, from registering as donors to finding suitable matches. This project, Reboot, addresses these challenges by creating a comprehensive platform that simplifies organ donation management. Reboot integrates user-friendly registration, real-time organ matching based on organ type and location, and accessible information about organ donation. By streamlining the process, this platform fosters awareness, promotes timely transplants, and enhances the overall efficiency of organ donation management, ultimately contributing to saving more lives

#### 1.2. Scope of the Work

The scope of the Reboot project encompasses the development of a user-friendly web-based application designed for organ donation management. Key features of the platform include:

- 1. **User Registration:** Individuals can register as donors and recipients, providing essential details for matching purposes.
- 2. **Organ Matching System**: A real-time matching algorithm connects recipients with donors based on organ type and geographical location.
- 3. **Organ Information**: The platform provides detailed information about different organ types, donation eligibility, and the donation process.

4. **Admin Dashboard**: A central dashboard for administrators to oversee donor and recipient activities and manage system functions.

This project primarily targets individuals in need of organ transplants and those willing to donate, aiming to streamline the organ donation process

#### 1.3. Aim and Objectives of the Project

The aim of the **Organ Donation Management System** is to create an efficient and user-friendly platform that facilitates organ donation and requests, empowering users to seamlessly connect donors and recipients through technology, while promoting transparency, accessibility, and increased awareness of organ donation

#### **Objectives:**

- 1. To Streamline Donor and Recipient Registration: Develop a simple, user-friendly registration system where individuals can sign up as organ donors or recipients.
- 2. To Implement a Real-Time Organ Matching System: Create an efficient matching algorithm that connects potential organ donors with recipients based on location, organ type, and availability.
- **3. To Provide Organ Donation Information:** Offer detailed resources about organ donation, including the types of organs that can be donated and the process for both donors and recipients.
- **4. To Build an Interactive Platform:** Foster an environment where users can track their requests or donations and engage with others through system features such as notifications and updates.
- **5. To Increase Awareness of Organ Donation:** Promote the importance of organ donation and encourage people to contribute, helping reduce the gap between organ supply and demand.

## **SYSTEM SPECIFICATIONS**

#### 2.1 SOFTWARE SPECIFICATIONS

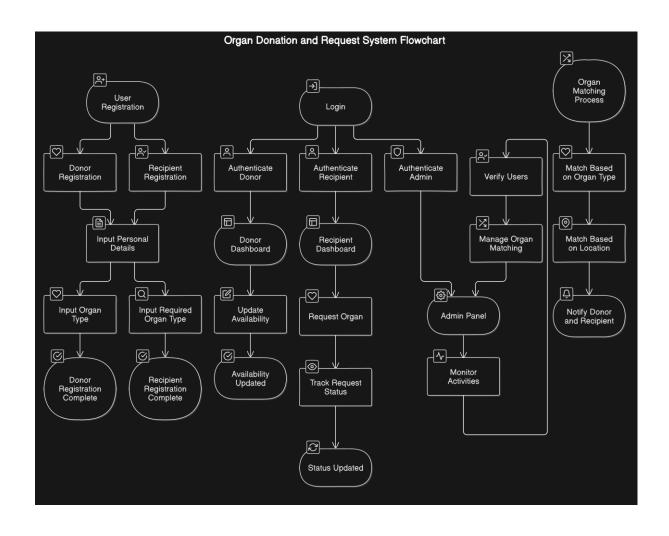
❖ Operating System : WINDOWS 11

❖ Front – EndHTML,CSS,JAVASCRIPT,□ DOOTGTD ADDITION

BOOTSTRAP,PHP

❖ Back – End: PHP, MYSQL

## **ARCHITECTURE DIAGRAM**



#### MODULE DESCRIPTION

#### User Registration and Login Module:

The User Registration and Login Module in the Reboot Organ Donation Management System allows individuals to register as donors or recipients. This module securely stores user details such as personal information, organ type (for donors), and required organs (for recipients). It provides secure authentication through role-based access, ensuring that users can efficiently manage their accounts and access personalized information related to organ donation or requests.

#### **Donor and Recipient Management Module:**

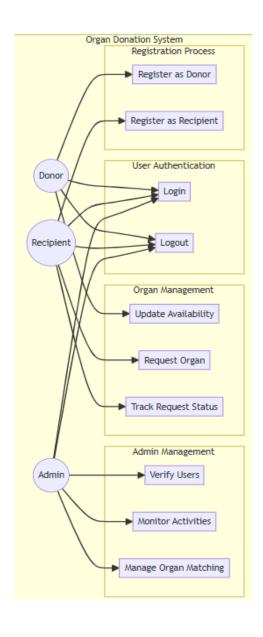
Plant Database Module within the Plant Care Management System serves as a comprehensive repository, providing users with a detailed inventory of plant species, care instructions, and resources for plant maintenance. This module facilitates efficient management and access to information, ensuring that users have the necessary tools and knowledge for successful plant care.

#### **Admin Dashboard Module:**

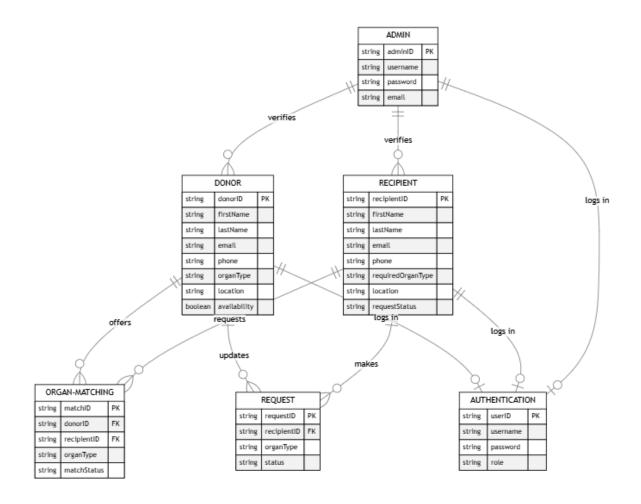
The Admin Dashboard Module empowers administrators to oversee and manage all platform activities. Admins can monitor donor and recipient records, verify organ donation details, and manage user profiles. They also handle approval processes for donations and requests, ensuring that all activities comply with the platform's guidelines.

# **SYSTEM DESIGN**

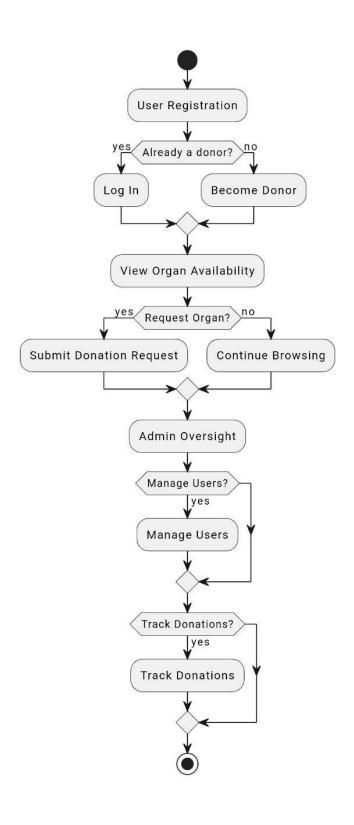
#### **5.1 USE CASE DIAGRAM**



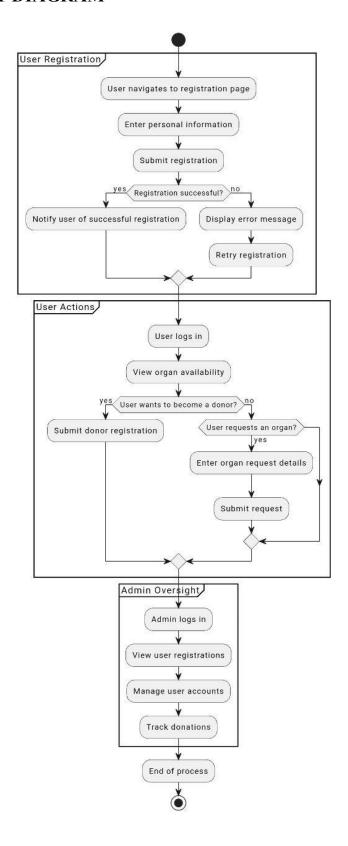
#### **5.2. ER DIAGRAM**



#### **5.3 DATA FLOW DIAGRAM**



#### 5.4. ACTIVITY DIAGRAM



#### **SAMPLECODING**

#### SIGN IN/UP.HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8"/>
<meta http-equiv="X-UA-Compatible" content="IE=edge" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Sign in & Sign up Form</title>
k rel="icon" type="image/x-icon" href="Images/favicon-img.jpg">
<link rel="stylesheet" href="sign-in-up-form1.css">
link
href="https://fonts.googleapis.com/css2?family=Roboto:wght@400;700&displa
y=swap" rel="stylesheet">
                             href="https://cdnjs.cloudflare.com/ajax/libs/font-
link
         rel="stylesheet"
awesome/5.15.4/css/all.min.css">
<style>
.navbar-brand:hover {
color: #b30000; /* Darker red on hover */
}
.navbar-brand i {
margin-left: 10px;
color: #ff4d4d; /* Red color for icon */
.font-weight-bold {
```

```
font-weight: 700; /* Ensures bold text */
}
.font-italic {
font-style: italic; /* Italic styling */
.navbar-brand {
font-weight: bold; /* Make text bold */
font-style: italic; /* Make text italic */
text-decoration: none; /* Remove underline */
}
.blink {
animation: blink 1s infinite; /* Apply blinking animation */
}
@keyframes blink {
0%, 100% {
color: transparent; /* Fully transparent at start and end */
}
50% {
color: #b30000; /* Red color at the midpoint */
}
}
.logo span {
color: white; /* Change this to the desired color for "RE" */
}
.logo span:last-child {
color: blue; /* Change this to the desired color for "BOOT" */
.typing-animation {
border-right: 2px solid; /* Cursor effect */
```

```
white-space: nowrap; /* Prevent text wrap */
overflow: hidden; /* Hide text overflow */
animation: typing 10s steps(10, end), blink-caret 0.75s step-end infinite;
@keyframes typing {
from {
width: 0; /* Start with no width */
}
to {
width: 100%; /* End with full width */
}
@keyframes blink-caret {
50% {
border-color: transparent; /* Blink effect */
</style>
</head>
<body>
<main>
<div class="box">
<div class="inner-box">
<div class="forms-wrap">
<!-- Sign In Form -->
<form autocomplete="off" method="post" class="sign-in-form">
<div class="logo">
<h1>
<a class="navbar-brand font-weight-bold font-itali
```

#### **INDEX.HTML**

```
<!DOCTYPE html>
<html lang="zxx">
<head>
  <title>Organ Donation Management System | Home Page</title>
  <script>
    addEventListener("load", function() {
       setTimeout(hideURLbar, 0);
     }, false);
    function hideURLbar() {
       window.scrollTo(0, 1);
  </script>
  <!--// Meta tag Keywords -->
  <!-- jQuery library -->
  <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"></script>
  <!-- Popper JS library -->
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js"
></script>
  <script type="text/javascript" src='js/bootstrap.js'></script>
  <script src="Scripts/umd/popper.min.js"></script>
```

```
<!-- Custom-Files -->
  <link rel="stylesheet" href="css/bootstrap.css">
  <!-- Bootstrap-Core-CSS -->
  k rel="stylesheet" href="css/style.css" type="text/css" media="all" />
  <!-- Style-CSS -->
  <link rel="stylesheet" href="css/fontawesome-all.css">
  <!-- Font-Awesome-Icons-CSS -->
  <!-- //Custom-Files -->
  <!-- Web-Fonts -->
  link
href="//fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,60
0i,700,700i,800,800i&subset=cyrillic,cyrillic-ext,greek,greek-ext,latin-
ext, vietnamese"
    rel="stylesheet">
  link
href="//fonts.googleapis.com/css?family=Roboto+Condensed:300,300i,400,400
i,700,700i&subset=cyrillic,cyrillic-ext,greek,greek-ext,latin-
ext, vietnamese"
    rel="stylesheet">
  <!-- //Web-Fonts --><style>
   .card {
  border: 1px solid #dc3545;
  border-radius: 8px;
  transition: transform 0.3s ease;
}
.card:hover {
  transform: scale(1.05);
  background-color: #f8d7da;
}
```

#### SEARCH DONOR.HTML

```
f (isset($ POST['sub'])) {
Ensure that status, organ type, and location are set
status = 1;
$orgType = $ POST['orgType'];
$location = $ POST['location'];
Define your SQL query with AND to match both OrganType and Location
$sql = "SELECT * FROM tblblooddonars WHERE status = :status AND
OrganType = :orgType AND Address LIKE :location";
$query = $dbh->prepare($sql);
// Bind parameters
$query->bindParam(':status', $status, PDO::PARAM INT);
$query->bindParam(':orgType', $orgType, PDO::PARAM_STR);
$query->bindParam(':location', $location, PDO::PARAM_STR);
// Execute the query
if ($query->execute()) {
  $results = $query->fetchAll(PDO::FETCH OBJ);
  if (query->rowCount()>0) {
    // Display the results
    echo '<div class="w3ls-titles text-center mb-5">
         <h3 class="title">Search Donor</h3>
         <span><i class="fas fa-user-md"></i></span>
        </div>';
```

#### **CONTACT.HTML**

```
f (isset($ POST['sub'])) {
// Ensure that status, organ type, and location are set
status = 1;
$orgType = $ POST['orgType'];
$location = $ POST['location'];
// Define your SQL query with AND to match both OrganType and Location
$sql = "SELECT * FROM tblblooddonars WHERE status = :status AND
OrganType = :orgType AND Address LIKE :location";
$query = $dbh->prepare($sql);
// Bind parameters
$query->bindParam(':status', $status, PDO::PARAM INT);
$query->bindParam(':orgType', $orgType, PDO::PARAM STR);
$query->bindParam(':location', $location, PDO::PARAM STR);
// Execute the query
if ($query->execute()) {
$results = $query->fetchAll(PDO::FETCH OBJ);
if (query->rowCount()>0) {
// Display the results
echo '<div class="w3ls-titles text-center mb-5">
<h3 class="title">Search Donor</h3>
<span><i class="fas fa-user-md"></i></span>
</div>':
echo '<div class="d-flex"><div class="row package-grids mt-5"
style="padding-left: 50px;">';
```

#### **ABOUT.HTML**

Keywords -->

```
<!-- Custom-Files -->
<link rel="stylesheet" href="css/bootstrap.css">
<!-- Bootstrap-Core-CSS -->
<link rel="stylesheet" href="css/style.css" type="text/css" media="all" />
<!-- Style-CSS -->
<link rel="stylesheet" href="css/fontawesome-all.css">
<!-- Font-Awesome-Icons-CSS -->
<!-- //Custom-Files -->
<!-- Web-Fonts -->
link
href="//fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,60
0i,700,700i,800,800i&subset=cyrillic,cyrillic-ext,greek,greek-ext,latin-
ext, vietnamese"
rel="stylesheet">
link
href="//fonts.googleapis.com/css?family=Roboto+Condensed:300,300i,400,400
i,700,700i&subset=cyrillic,cyrillic-ext,greek,greek-ext,latin-
ext, vietnamese"
rel="stylesheet">
<!-- //Web-Fonts -->
</head>
<body>
<?php include('includes/header.php');?>
<!-- banner 2 -->
```

```
<div class="inner-banner-w3ls">
<div class="container">
</div>
<!-- //banner 2 -->
</div>
<!-- page details -->
<!-- <div class="breadcrumb-agile">
<div aria-label="breadcrumb">
class="breadcrumb">
<a href="index.php">Home</a>
</1i>
About Us
<\!\!0
</div>
</div> -->
<!-- //page details -->
<!-- about -->
<section class="about">
<div class="container py-xl-2 py-lg-2">
<div class="w3ls-titles text-center mb-md-5 mb-4">
<h3 class="title">Who We Are?</h3>
<span>
<i class="fas fa-user-md"></i>
</span>
```

# CHAPTER 7 SCREENSHOTS

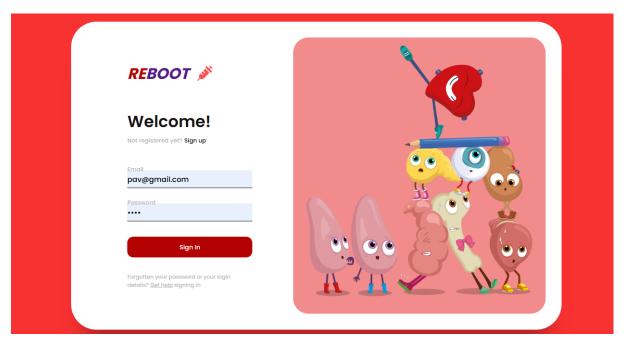


Fig.7.1 SIGN IN/UP PAGE



Fig.7.2 HOME PAGE

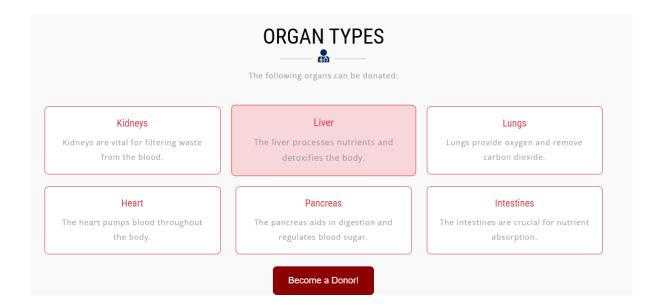


Fig. 7.3 ORGAN INFO

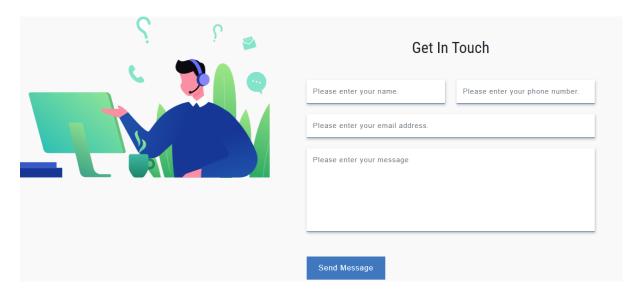


Fig. 7.4 HELP CENTER



Fig. 7.5 Registering as Donor Details

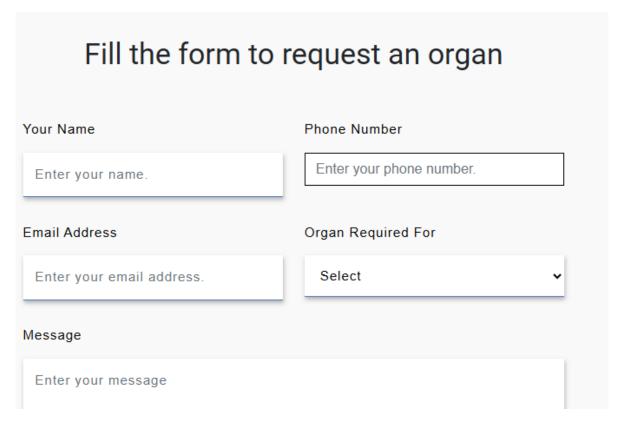


Fig. 7.6 Requesting the Donor

# CHAPTER 8 CONCLUSION

The *Reboot* organ donation management system revolutionizes the approach to managing organ donation processes by providing a streamlined and user-friendly platform. With *Reboot*, users can explore donor options, request donations, and manage their profiles with ease. This system is invaluable for organ donation organizations as it enhances operational efficiency by automating numerous administrative tasks like donor registration, search functionality, and request management. For users, *Reboot* offers a clean interface where they can search for specific organs, filter based on availability and location, and connect seamlessly with potential donors.

One of *Reboot's* main advantages is its ability to manage real-time updates, ensuring that both donors and recipients access the most current information, minimizing errors in availability and enhancing the system's reliability. Although *Reboot* does not involve medical professionals, its clear, efficient structure and targeted features empower users to make well-informed decisions independently.

### REFERENCES

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