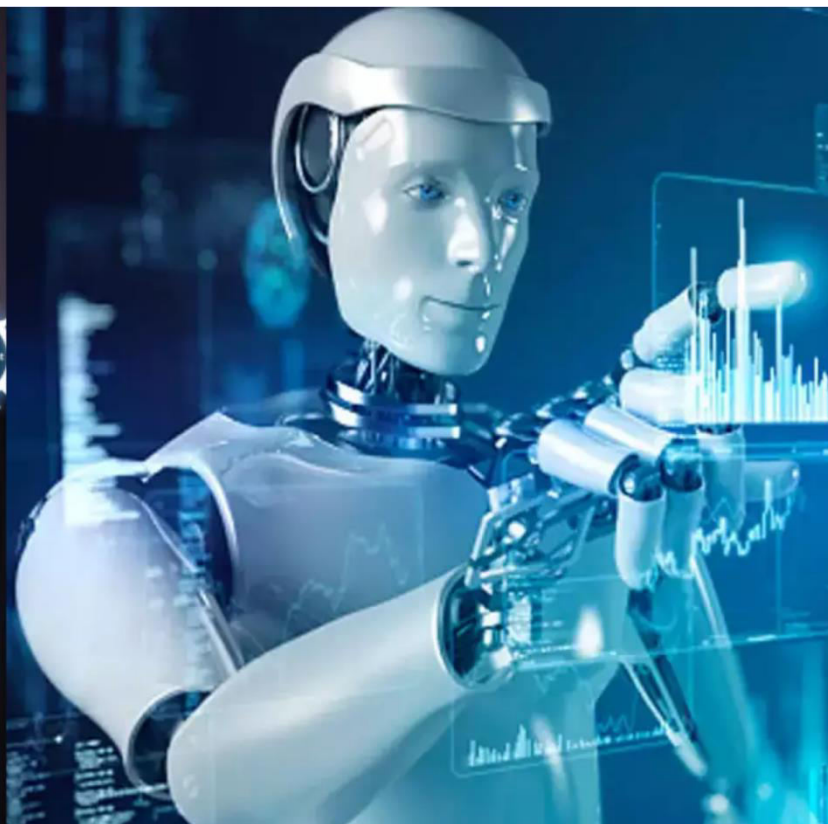




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JEEVAN+ Organ Donation Website

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ABSTRACT: Organ donation is one of the best means of saving lives, but it is underutilized around the world due to several challenges. They range from a lack of awareness, logistics inefficiencies, cultural taboo, and transparency problems. JEEVAN+ is an online platform that aims to handle these challenges comprehensively. This study examines the design, functionality, and potential future of JEEVAN+ in organ donation awareness and availability. With user-friendly features, community participation, and secure data management, JEEVAN+ aims to close the gap between organ donors and recipients.[1][2][3]

KEYWORDS: Organ donation, JEEVAN+, Community engagement, organ donor, awareness

I. INTRODUCTION

Organ donation is, without doubt, the biggest breakthrough in modern medicine, giving patients with end-stage organ failure a second lease of life. It involves transplanting healthy organs of donors, deceased or living, into the recipients. Even though the organ transplantation technology utilized for transplanting has greatly improved, the availability of donor organs is woefully inadequate. This shortage of demand and supply leads to preventable deaths[10] all over the globe with thousands of patients losing their lives every year due to lack of proper organ matches[1][3]. The World Health Organization and related global organizations indicate that the number of transplants currently meets less than 10% of the global need, underlining a critical gap [16].

A closer examination realizes that the organ donation gap is not merely a problem of logistics but a circumstance with various facets of social, cultural, and system issues. Most individuals are hesitant to register as donors due to misconceptions and myths, such as , fear of organ misuse or fear of impacting their treatment. In certain cases, cultural or religious values also discourage frank discussions regarding organ donation and therefore it becomes a taboo in most societies [4]. Moreover, a lack of shared knowledge about the issue exacerbates the problem because individuals are unaware of the process of organ donation and its life-saving potential.

Beyond awareness, logistical inefficiencies and poor technological infrastructure are great stumbling blocks for organ donation. In large parts of the world, it is cumbersome to sign up to be a donor or obtain an organ, with potential donors having to go through cumbersome systems and unclear processes [11]. For the recipients, lack of transparency in organ allocation tends to create distrust and discourage participation [7][9]. These systemic inefficiencies prevent organ donation systems from being effective, putting thousands of lives at risk. To combat these issues, JEEVAN+ was envisioned as an integrated solution. is an online portal that aims to connect organ donors and recipients by the use of technology, community outreach, and the promotion Of transparency. The portal is an integrated solution for raising awareness, registering donors, and streamlining the organ donation process. With easy-to-use interfaces, educational material, and secure data handling, JEEVAN+ aims to encourage people to become a part of the cause of organ donation, eventually leading to higher donor registrations and saving lives.[8]

II. PROBLEM STATEMENT

Organ donation can save thousands of lives, but the number of donors is far lower than the demand for organ transplantation. This demand-supply gap leads to thousands of avoidable deaths annually, with many patients waiting on waiting lists for months or years. The reasons behind this gap are complex. A huge lack of knowledge of the significance and procedure of organ donation deters people from becoming donors [12]. Social and cultural stigmas, based on myths and religious views, also deter discussion and participation in organ donation.[4][5] Furthermore, current organ donation systems are beset by inefficiencies, such as complicated registration systems, poor donor-recipient matching systems, and lack of transparency in organ allocation [13]. These issues erode the confidence of the

public and discourage potential donors and recipients from using the system. Coupled with the problem, fear of compromising confidentiality of data and misuse of personal or medical data deters people from using digital platforms. In total, these barriers need an effective and easy-to-use solution to solve the issues of organ donation [9], promoting confidence, knowledge, and efficiency in the process.

III. SCOPE

The Scope of JEEVAN+ is to address the key organ donation issues by implementing an integrated internet-based platform allowing awareness generation, donor registration, and organ matching. Designed to be used for donors, recipients, and medical authorities, JEEVAN+ seeks to increase donor registration, minimize steps, and adopt transparency.

KEY FOCUS AREAS:

- **AWARENESS BUILDING:** Educating users about organ donation through interactive content, addressing myths, and promoting public campaigns.[5][6]
- **DONOR REGISTRATION:** Simplified forms and data validation make the registration process user-friendly and efficient.[8]
- **RECIPIENT SUPPORT:** Providing tools for organ requests, status tracking, and fair matching based on urgency.[9]
- **TRANSPARENCY:** Real-time updates on allocation and donation statistics enhance trust.[7]
- **COMMUNITY ENGAGEMENT:** Sharing donor and recipient stories to inspire participation and offer emotional support.[2]
- **DATA SECURITY:** Ensuring user privacy with encrypted databases and compliance with data protection standards.[9]
- **GLOBAL REACH:** Accessibility through multilingual support and responsive design for diverse demographics.

By addressing these areas, JEEVAN+ aspires to bridge the gap between donors and recipients, promote trust, and create a lasting impact on organ donation systems globally.[15]

IV. PROPOSED SYSTEM

JEEVAN+ is designed as an intelligent, automated platform leveraging advanced technologies to enhance resume screening and recruitment processes.

4.1 FRONTEND:

- **TECHNOLOGY:** HTML, CSS, JavaScript, CSS tailwind
- **DEVELOPMENT TOOLS:** visual studio code

4.2 BACKEND:

Technology: PHP

- **DEVELOPMENT TOOLS:** xampp or web hosting platform

Through the integration of these technologies, JEEVAN+ ensures a seamless, secure, and efficient organ donation process.

V. METHODOLOGY

The development of JEEVAN+ follows a systematic methodology that incorporates state-of-the-art technologies and user-centered design principles.

1. SYSTEM ARCHITECTURE

The platform operates on a three-tier architecture:

- **PRESENTATION LAYER:** A web-based interface developed using HTML, CSS, and JavaScript to ensure accessibility across devices.

- APPLICATION LAYER: The backend logic implemented using a secure framework like PHP, processes request and matches donors with recipients.

2. DATA FLOW DIAGRAMS

- LEVEL 0 DFD: Illustrates the interaction between donors, recipients, and the system.
- LEVEL 1 DFD: Details processes such as donor registration, organ requests, and record management.

3. USE CASE DIAGRAM

Actors include donors, recipients, and administrators. Key use cases are:

- Donor registration.
- Organ request submission.
- Management and allocation of records by administrators.

4. ACTIVITY DIAGRAM

1. The activity flow includes:
2. Donor submits a form.
3. System validates the form.
4. Valid forms are stored in the database.
5. Recipients are matched with donors.
6. Notifications are sent to all parties.

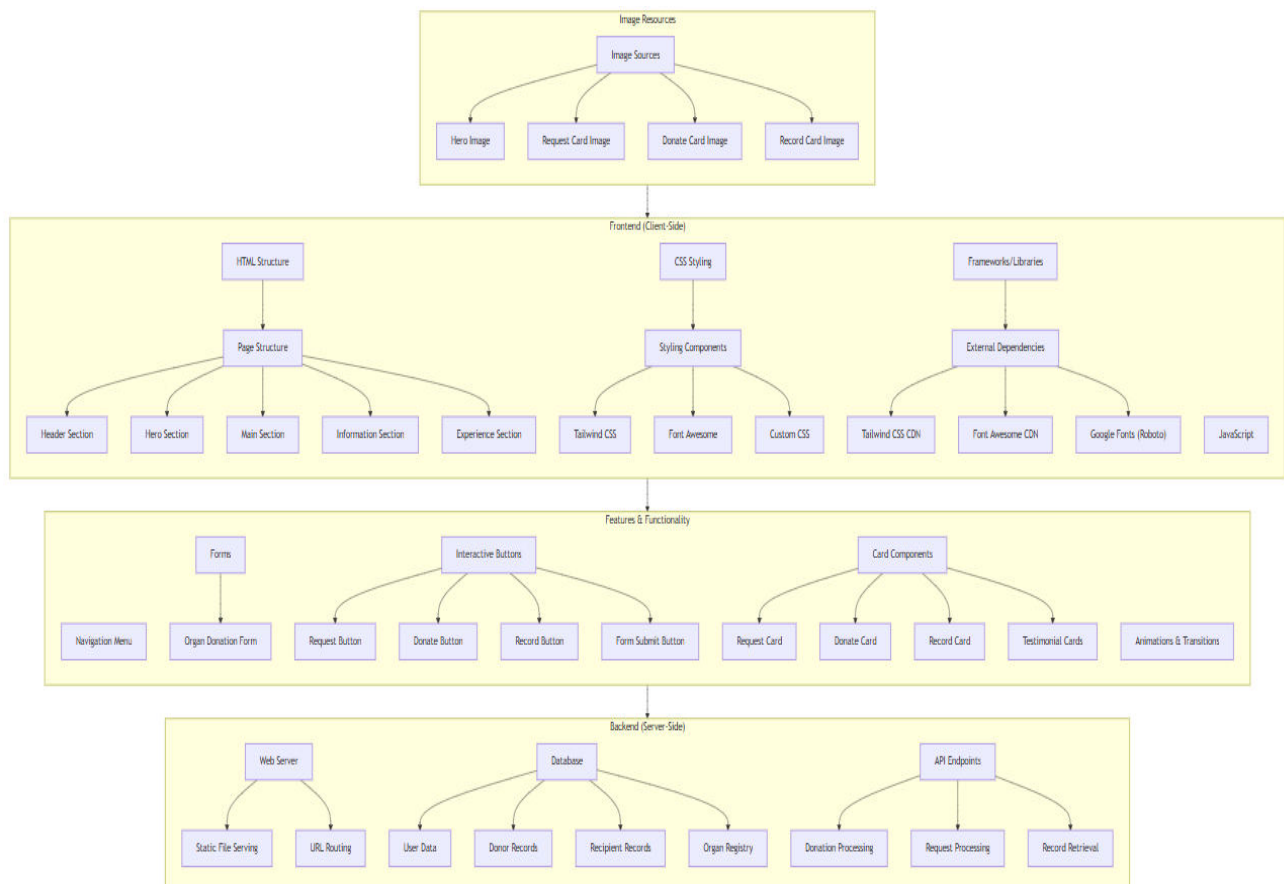


Fig 5.1: Architecture Diagram

Data Flow Diagrams (DFD):

Level 0 DFD:

Illustrates the interaction between donors, recipients, and the system.

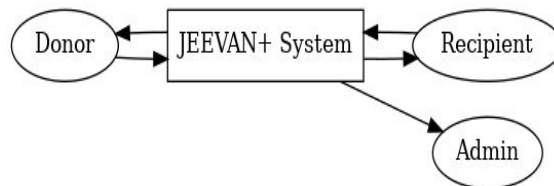


Fig 5.2.1: Level 0 DFD

Level 1 DFD:

Details processes such as donor registration, organ requests, and record management.

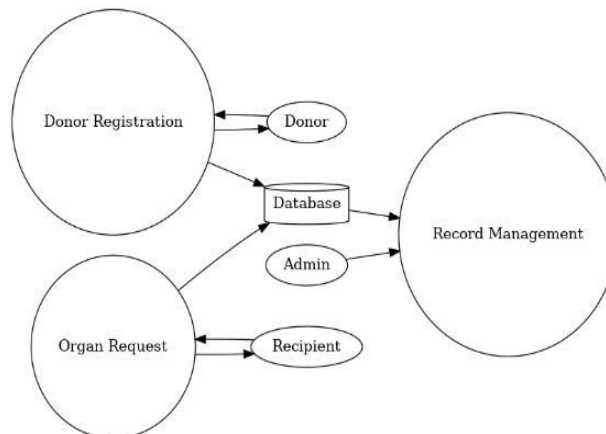


Fig 5.2.2: Level 1 DFD

Use Case Diagram:

Use-case diagrams describe the high-level functions and scope of the system. They identify the interactions between actors (donor, recipient and admins) and the system, specifying expected behaviours.

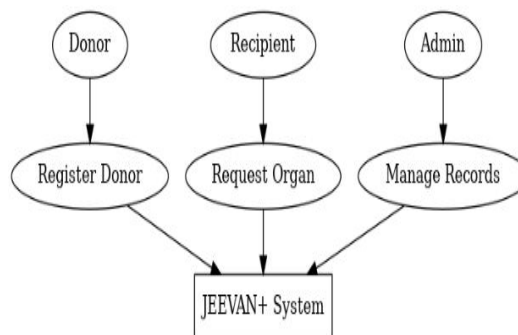


Fig 5.3: Use Case Diagram

Activity Diagram:

Activity diagrams depict workflows of stepwise activities and actions, supporting choice, iteration, and concurrency. The diagram demonstrates user interactions, from viewing stations without logging in to booking slots upon successful authentication.

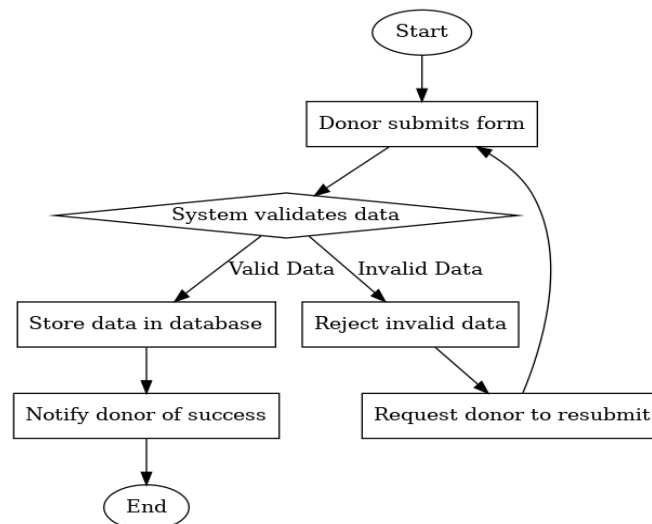


Fig 5.4: Activity Diagram

VI. IMPLEMENTATION

1. Home page:

The JEEVAN+ home page is designed using HTML, CSS, and JavaScript with a visually appealing design. It features a navigation bar, a central tagline ("DONATE ORGAN, SAVE A LIFE") overlaid on an organ-themed image, and smooth scrolling for interactivity. The page is responsive, optimized for performance, and designed to engage users effectively.

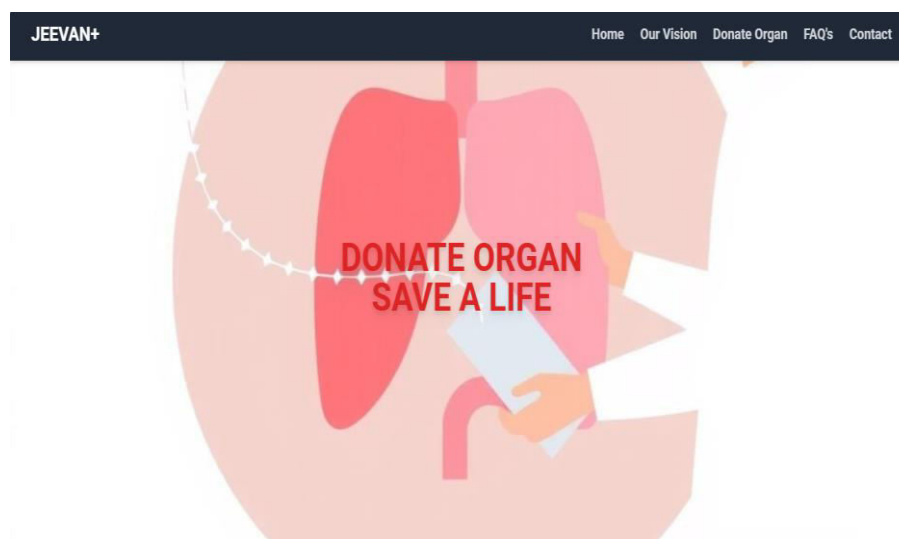


Fig 6.1: Home Page

2. Dashboard page:

This page is implemented using HTML, CSS, and JavaScript to provide three interactive cards: "Request for Organ," "Donate an Organ," and "Donation Record." Each card has a button styled with CSS, linked to respective sections or functionalities using JavaScript for navigation. The design is responsive and visually aligned with the platform's theme to enhance user engagement.

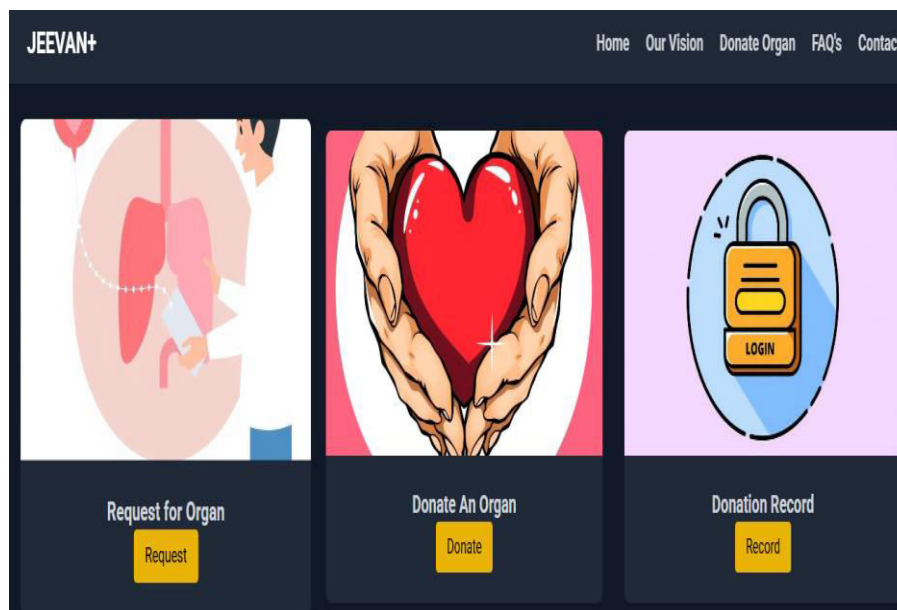


Fig 6.2: Dashboard Page

3. Form Page:

This page is built using HTML, CSS, and JavaScript to create a donation form for organ donors. The form includes input fields for email, phone number, and organ selection, styled for a professional appearance and validated using JavaScript. The "Submit" button is designed for future integration to process and handle form data effectively.

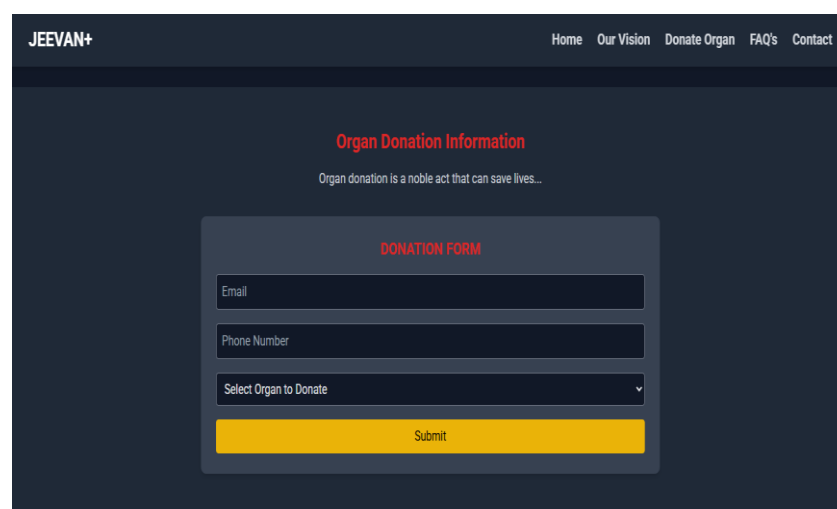


Fig 6.3: Form Page

4. Donor experience page:

In this donor share their experience and how they felt during the donation process

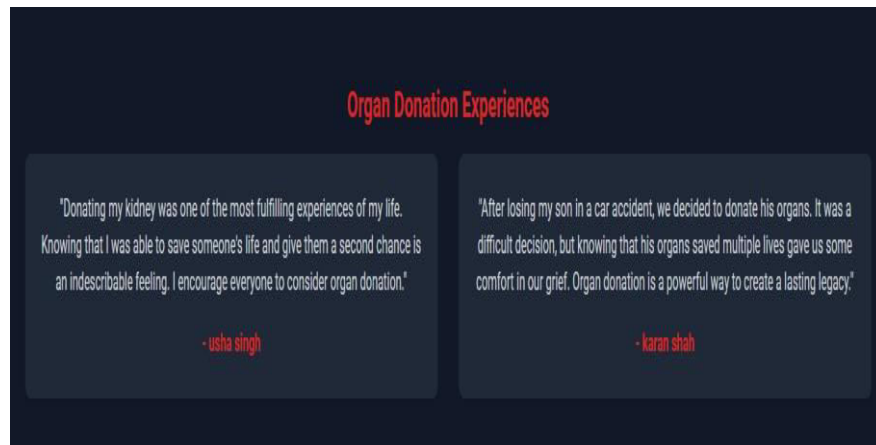


Fig 6.4: Donor experience page

VII. LIMITATIONS

While JEEVAN+ addresses critical issues, certain limitations remain:

1. Digital Divide: Rural areas with limited internet access may find the platform less accessible.
2. Cultural Resistance: Overcoming deeply rooted misconceptions requires long-term efforts.
3. Data Privacy Concerns: Despite robust security measures, absolute data security remains a challenge.

VIII. FUTURE WORK

Future iterations of JEEVAN+ will focus on:

1. Mobile Applications:
Developing a mobile app to enhance accessibility.
2. AI Integration:
Implementing predictive analytics for donor-recipient matching.
3. Government Collaborations:
4. Partnering with authorities to integrate with national health systems.
5. Expanded Outreach:
Organizing workshops and campaigns to promote awareness in rural areas.

IX. PERFORMANCE METRIC

Metric	Value (Local)	Description
Largest Contentful Paint (LCP)	2.25 s	Your local LCP value of 2.25 s is good.
Cumulative Layout Shift (CLS)	0.00	Your local CLS value of 0.00 is good.
Interaction to Next Paint (INP)	8 ms	Your local INP value of 8 ms is good.

The outcomes demonstrate how the JEEVAN+ system empowers organ donation by streamlining the processes of organ requests, donations, and record management. By leveraging technology, it significantly reduces administrative challenges, enhances operational efficiency, and fosters a seamless experience for both donors and recipients, ultimately saving lives and promoting a culture of giving.

X. CONCLUSION

JEEVAN+ has the power to cause a revolution in organ donation. It tackles key awareness issues, makes donation easier, and builds trust through openness. The platform uses cutting-edge tech and gets communities involved. Its goal is to increase donor sign-ups and save many lives. It helps people make smart choices and creates a helpful system for donors and those who need organs. JEEVAN+ keeps working on new ideas. It wants to set the bar for organ donation platforms worldwide raising standards in healthcare, kindness, and making a difference in society. By simplifying processes, promoting trust, and raising awareness [17], JEEVAN+ aims to increase donor sign-ups and save countless lives.

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