

ORGAN SHARING AND DONAR FINDER MOBILE APP

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Abstract

We are developing the application aims at bridging the coordination and communication gap between patients and donors, we know that lot of patients die without access to a proper donor, be it organ or blood. A mobile application that would bridge the gap is the need of the hour, Our application is no different and it is a bit different from the existing system, our application makes use of a mobile app at both the ends, anyone can register and turn out to be a user, the hospital when in need raises a request for blood/organ of a specific type with all the details, and this request will notify all the users and the nearest medical bank centers of it, the request will have an authorized e signature of the handling doctor with their contact details, and the application will let the recipient choose the most feasible and nearby donor for help.

1. INTRODUCTION

Welcome to organ sharing app, a comprehensive Android application that revolutionizes healthcare by seamlessly integrating an organ- sharing platform with a doctor-patient portal. Organ sharing app is designed to enhance the quality of care by connecting patients, healthcare providers, and potential organ donors in a secure and efficient environment. Our application addresses two critical aspects of healthcare:

Organ Sharing: organ sharing app facilitates the process of organ donation and transplantation, offering a user-friendly interface for both donors and recipients. The app uses advanced matching algorithms to connect those in need with suitable donors, ensuring timely and life- saving transplants. With real-time updates and secure communication channels, users can stay informed and engaged throughout the donation process.

Doctor-Patient Portal: The app also serves as a robust doctor-patient portal, where patients can easily connect with healthcare providers for consultations, follow-ups, and medical advice. Through secure messaging, appointment scheduling, and access to medical records, Life Link Health empowers patients to take control of their health while enabling doctors to provide personalized care. Organ transplantation is a life-saving medical procedure that offers a second chance to individuals with end-stage organ failure. However, the To address this critical issue, we have developed "LifeSaver", a revolutionary mobile application designed to streamline organ sharing and donor finding, connecting individuals in need of organ transplants with potential donors. Life Saver is more than just an app - it's a lifeline. By harnessing the power of technology and community, we aim to increase organ donation rates, enhance patient outcomes, and save lives. With its user-friendly interface, robust features, and secure platform, "LifeSaver" has the potential to transform the organ donation landscape, making it more accessible, efficient, and life-saving. organs has resulted in a significant gap between organ demand and supply, leaving thousands of individuals on waiting lists, hoping for a timely match. To address this critical issue, we have developed "LifeSaver", a revolutionary mobile application designed to streamline organ sharing and donor finding, connecting individuals in need of organ transplants with potential donors. Life Saver is more than just an app - it's a lifeline. By harnessing the power of technology and community, we aim to increase organ donation rates, enhance patient outcomes, and save lives. With its user-friendly interface, robust features, and secure platform, "LifeSaver" has the potential to transform the organ donation landscape, making it more accessible, efficient, and life-saving.

2. LITERATURE SURVEY

Title: Mobile Application for Doctor Appointment Scheduling Author:

S. Usharani; S. Prithivi Abstract: Medical appointments and consultations are needed in order for a doctor to access, evaluate, study, and diagnose a patient with such a disease or illness. Several studies have been completed in this region, with some enabling a patient to schedule an appointment with a specialist doctor and the main stream of these study only interacting with the appointment. That prompted the researcher to investigate real-time patient choice, in which a patient simply selects a date and time, and the system assigns a doctor who is accessible at the moment and date, as well as handling patient setting a date with physicians. In addition, the device includes a live video appointment with a doctor. Additionally, portable wide range of application used in a few fields to cut down on time handling in capacities and incorporating a few fields. The combination of clinical fields and portable applications is studied and presented in this paper. Furthermore, the effectiveness and influence of flexible applications in the testing and examination of human services frameworks are depicted. This paper illustrates use of such Android devices in the development of mobile apps.

Title: The Study of Online Appointment System - A Case Study Author: Sabale Pankaj; Ashwin Tomar Abstract: The Online Appointment application provides security which is a smart web appointment of patient. The project developed is considered as Case study to find the efficacy of system with other doctor-patient appointment system application where doctors register themselves and finalize

Title: mHealth: Blood donation application using android smartphone Author: Muhammad Fahim; Halil Ibrahim Cebe Abstract: mHealth is new horizons for health that offers healthcare services by utilizing the mobile devices and communication technologies. In health care services, blood donation is a complex process and consumes time to find some donor who has the compatibility of blood group with the patient. We developed android based blood donation application as mHealth 1 solutions to establish a connection between the requester and donor at anytime and anywhere. The objective of this application is to provide the information about the requested blood and number of available donors around those localities. It assists the requester to broadcast the message across the maintained volunteer blood donor network by our application and update the requester at the same time who is willing to donate the requested blood. To evaluate our application, we created requester-donor profiles and analysed that it will help to improve the timely access of the information and rapid response in emergency situation.

Title: Blood Donor Management System - An Android Based Model and Implementation Author: R. Elakya; M. Dhanam Abstract: Blood Donor Management System is an associate work that brings voluntary blood donors and those in need of blood to an emergency. The purpose of this paper is to develop a mobile application that will help the seekers to identify the blood donors near their location. The donors as well as the seekers have to register themselves by providing their basic details in the mobile application. When there is a need for blood, the person should raise request through the mobile application that is visible to all donors. Then the seeker can also find the nearby blood banks. After the request is made by the seeker, the notification will be sent to all donors. And the donor can be able to accept or reject the request. Only if the donor wishes to donate the blood, his/her details will be shared with the seeker and also the seeker will be provided with the directions to reach the donor's location. The personal information of the donor will not be sent to the seeker without his/her knowledge ensuring data security. After the donation process is over, the donor can update the status. One Time Password is generated to authenticate the users while registering into the application.

3. PROPOSED SYSTEM

The system is designed to integrate existing medical systems, application, and services. We also illustrate the design and implementation of the access control engine and some medical services. Public-oriented Health care Information Service Platform, which is based on such technologies. It can support numerous health care tasks, provide individuals with many intelligent and personalized services, and support basic remote health care and guardianship. With the rapid development of information and communication technologies and the change of medical and health care service models, creating various public-oriented health care service systems has become a trend.

ADVANTAGES

- Supports personal health information management.
- Personal health risk assessment and guidance.
- Active recommendation of personalized medical treatment.
- Dynamic personal health monitoring and real-time early warning.

Applications:

The proposed system has a wide range of applications, including:

1. Facilitating Donor Registration and Information: Easy Registration:

Users can easily register as organ donors through the app, specifying their preferences, blood type, and other relevant information.

Organ Donation Hospitals Directory:

The app can provide a directory of nearby organ donation centres and hospitals, allowing users to easily find resources and information.

Organ and Blood Type Specification:

Users can search for specific organs or donors based on blood type compatibility, making it easier to find suitable matches.

NGO Information:

The app can provide information about NGOs involved in organ donation, helping users find resources and support.

2. Connecting Donors and Recipients:

Real-time Matching:

The app can facilitate real-time matching between potential donors and recipients, based on organ type, blood type, and other compatibility factors.

Prompt Notifications:

Upon a successful donation, the system can send prompt notifications to the designated recipient, updating them about the availability of the donated organ.

Patient-Specific Information:

Patients can access information about available organs and potential donors, empowering them to make informed decisions.

Hospital Integration:

The app can integrate with hospital systems, allowing doctors to access relevant information and manage organ allocation efficiently.

3. Enhancing the Donation Process:

Step-by-Step Instructions:

The app can provide step-by-step instructions for creating Facebook posts to share with friends and family, raising awareness about the need for live organ donation.

Personalized Narratives:

Users can personalize their posts with pictures or videos, making them more engaging and effective.

Supplemental Resources:

The app can provide links to supplemental resources, offering vetted information about the risks, benefits, and process of live donation.

Advantages:

- **Proactive Filtering:** The system's proactive nature is a significant advantage. Instead of relying on users to report issues, it automatically detects and removes unwanted messages in real-time. This reduces the burden on users, minimizing their exposure to harmful or irrelevant content and preventing frustration. The automation allows for consistent and immediate action, ensuring a smoother and more positive user experience.
- **Enhanced User Experience:** By effectively eliminating spam, abusive language, and irrelevant content, the system creates a significantly cleaner and more enjoyable environment for users. This improvement in content quality reduces distractions and promotes a more focused and engaging social media experience. Users can interact with content that is relevant and meaningful to them, leading to increased satisfaction and a more positive perception of the platform.
- **Customization:** The ability for users to define their filtering preferences is crucial for personalization. This allows individuals to tailor their social media experience to their specific needs and priorities. Users can control the type of content they see, ensuring that it aligns with their personal values and preferences. This level of customization empowers users and provides a sense of control over their online environment.
- **Increased Safety:** The system plays a critical role in creating a safer online environment by proactively managing and removing harmful or offensive content. This includes hate speech, cyberbullying, and other forms of online harassment. By addressing these issues in real-time, the system helps to protect vulnerable users and fosters a more inclusive and respectful online community. This ensures that users feel safe and secure while interacting on the platform.

4. EXPERIMENTAL ANALYSIS

The Admin, User, Registration Pages are the experimental results for the project.



Figure1 : Home Page



Figure2: User Login Page

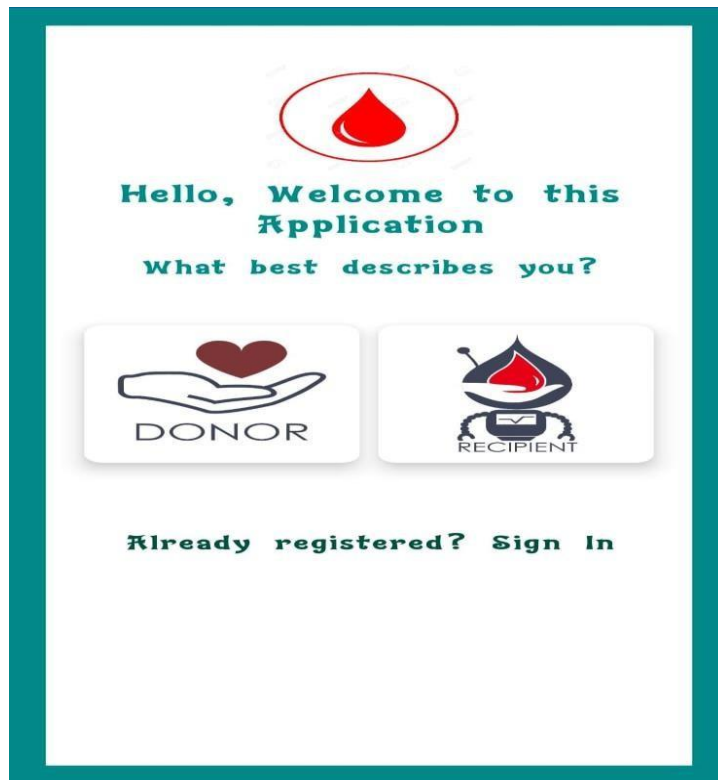
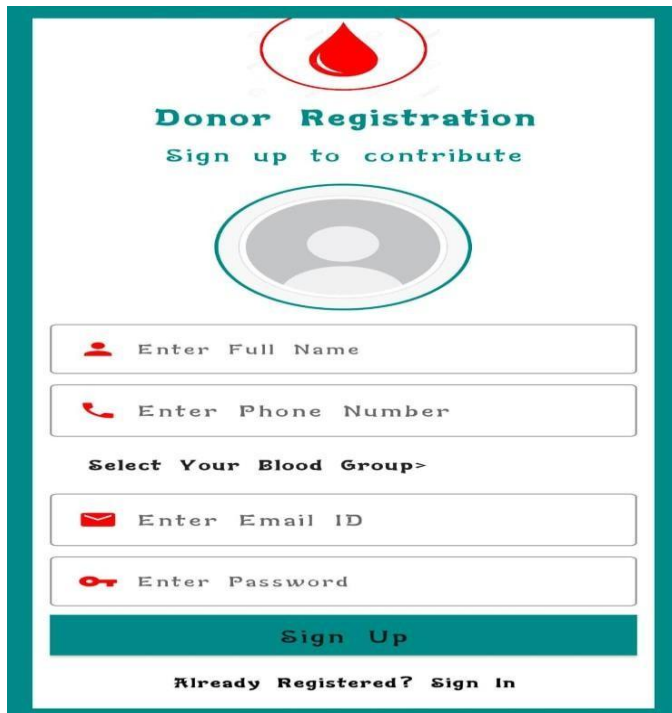





Figure3 : sign up Page




Donor Registration
Sign up to contribute




 Enter Full Name

 Enter Phone Number

Select Your Blood Group>

 Enter Email ID

 Enter Password

Sign Up

Already Registered? [Sign In](#)

Figure4 : Donar registration page



Recipient Registration
Sign up to continue



 Enter Full Name

 Enter Phone Number

Select Your Blood Group>

 Enter Email ID

 Enter Password

Sign Up

Already Registered? [Sign In](#)

Figure5 : Recipient registration page

5. CONCLUSION

The proposed doctor-patient portal will pave the way for easy and quick access to better healthcare. In a country like Bangladesh where mobile phone and internet has spread almost every corner, this type of application can help mitigate many hurdles in the path of good healthcare. This information system will arm the masses with up-to date information through which they will be able to choose the right thing in day-to day healthcare. Although we have some limitations in our software, we still hope that the software will be helpful for the user.

In future, we wish to include in this application several other features like area wise disease prevalence alarm, disease stricken zone alarm, vaccination alert system, health condition monitoring with built-in phone sensors, remote healthcare service etc.

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