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# Organ Donation Application

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**Abstract:** *This Application acts as an essential role in saving the lives of human beings and which is also its main aim is to help the user to get the required blood and organs at the correct time. And it is a mobile-based Application developed in the android platform. This Android application provides an easy and fast way to search for blood and organs. This app enables users to find blood and organs in emergency situations. Users need to register with the Application which is available on the app. And also, they can get brief information on the donor's contact details includes their location. The user can Contact them By making a call or message directly by using this BIO-Donation Application. The Objective of this Mobile Application is to design an Android Application to maintain necessary information of the Patients, Donors, and report details for any bio-related organization. Project Android Blood Bank Management system was developed so that users can view the information about registered Bio donors such as Name, Address, and other such personal details along with their details of blood group and other Medical Details of the donor. This Mobile Application also has a login page where the user is required to register and only then they can view the availability of blood and organ, and even register to donate blood if he/she wishes to. The main aim of developing this Android Application is to reduce the time to a great extent to avoid spending time in searching for the right donor and the availability of blood and organ required.*

**Keywords:** *Organ Donation App, Android Application*

## I. INTRODUCTION

The main aim of developing this Android Application is to provide blood to the people who require blood and organs. The numbers of persons who need blood are increasing in massive amounts day by day. Using this system user can search blood groups available in the city, and he can also get the contact number of the donor who has the same blood group he needs[1]. To help people who need blood, this Android Application is used effectively for getting the details of available blood groups, and also to get the contact number of the donors with the same blood group and within the city. So if the blood group is Unavailable in the blood bank user can request the donor to donate the blood to him/her and save someone's life. Using this Blood and Organ bank management system Application people can register himself or herself who want to donate blood. To log in the Application, they have to enter their contact information like address mobile number, etc. This blood bank management system is a Mobile Application, so it is easily reachable to everybody. When a Human/Person wants to donate blood, he/she has to register in the Application. Donor registration is effortless; to get register to the system, he has to fill up the registration form. After submitting the registration form, he/she create a username and password. The donor has to give information like blood group, contact details, etc. [2]. The donor can also change his account information when he wants to use his username and password. People can search for blood groups available in which they were needed. They check it online using our blood bank management website. If in case the blood group is not open in blood bank they can also get contact numbers of the persons who have the2317 Same blood group, he needs. And he can request the person to donate the blood for saving someone's life.

## II. LITERATURE SURVEY

- A. Citations used in this document were selected from searches of the MEDLINE database from 1966 until present, using search terms "brain death", "organ donation", "organ donor", "heart/kidney/lung/liver and transplant", "thyroid/insulin/diabetes insipidus and brain death". Other citations were extracted as references from the initial citations, from the personal databases of the author and members of the Fo- rum Steering Committee and from three previous consensus confer- ence documents from the American Society of Transplant Surgeons, the American Society of Transplantation and the Pulmonary Council of the International Society for Heart and Lung Transplantation.3-6 Unfortunately, the existing scientific literature is largely comprised of small animal experiments, human case series and retrospective reviews. Although these studies have an important role in elucidating the patho- physiology of brain death and its effects on the inflammatory, cardiovascular, respiratory, renal, hepatic and hormonal systems, there are any limitations to the existing literature:
- B. Many of the therapeutic strategies investigated in animal experiments and human case series have not been evaluated in clinical trials.

- C. The majority of human case series that advocate specific therapeutic interventions often fail to control for the illness severity of the donor at baseline, do not adjust for the potential confounding effect of the quality of transplant services provided or may be selective in their choice of donors.
- D. Donor experiments involving animals utilize healthy living animals as donors, and these animals may not resemble the global pathophysiology of the brain-dead donor.

### III. LIMITATIONS OF EXISTING SYSTEMS

However, Having a Manual ID card Have some drawbacks such as loss or damage to the ID Card. To ensure donors, we can identify themselves with the Android Application, other credentials, such as username and password, can act as a safeguard if their donor I.D. card is lost or damaged. The Administrator then will deposit the blood into the inventory for future requests. The need for blood and organ is increasing as it is life, as there is no replacement for human blood and organ. Every day blood and organ is required in hospitals and emergency treatment of patients with diseases, for organ transplant recipients, and to save the lives of accident Patients. With the Advancement in medical procedures and treatments, blood and Organ transfusions and the demand for blood and organ continue to increase [2]. In India, many people are losing their life because they are suffering from lack of blood & organ; they are unable to receive the blood and organ in time. The relatives and friends of the victims start searching for a donor to help, but there is no guarantee about the Donor's Presence and Health Condition. , and also, there are a lot of people who are willing to help and donate others to save their life. There is a number of existing systems that have become increasingly tried to activate the blood and organ donation process. However, this is still not efficient up today. We propose to use the latest technologies and the tools to find a system that fills the gap and provides an organized solution. Our policy has a quick means to find the donors easily by their nearest location, available time, and the same blood type, facilitate the search process for needy people, and make it easier than before. Increase the number of donors to increase the facilities provided to them and to increase the awareness about the importance of blood donation. Our system helps the donation process in our country.

### IV. PROPOSED SYSTEM

The main aim of developing this Android Application is to provide blood to the people who require blood and organs. The numbers of persons who need blood are increasing in massive amounts day by day. Using this system user can search blood groups available in the city, and he can also get the contact number of the donor who has the same blood group he needs. To help people who need blood, this Android Application is used effectively for getting the details of available blood groups, and also to get the contact number of the donors with the same blood group and within the city. So if the blood group is Unavailable in the blood bank user can request the donor to donate the blood to him/her and save someone's life. Using this Blood and Organ bank management system Application people can register himself or herself who want to donate blood. To log in the Application, they have to enter their contact information like address mobile number, etc.

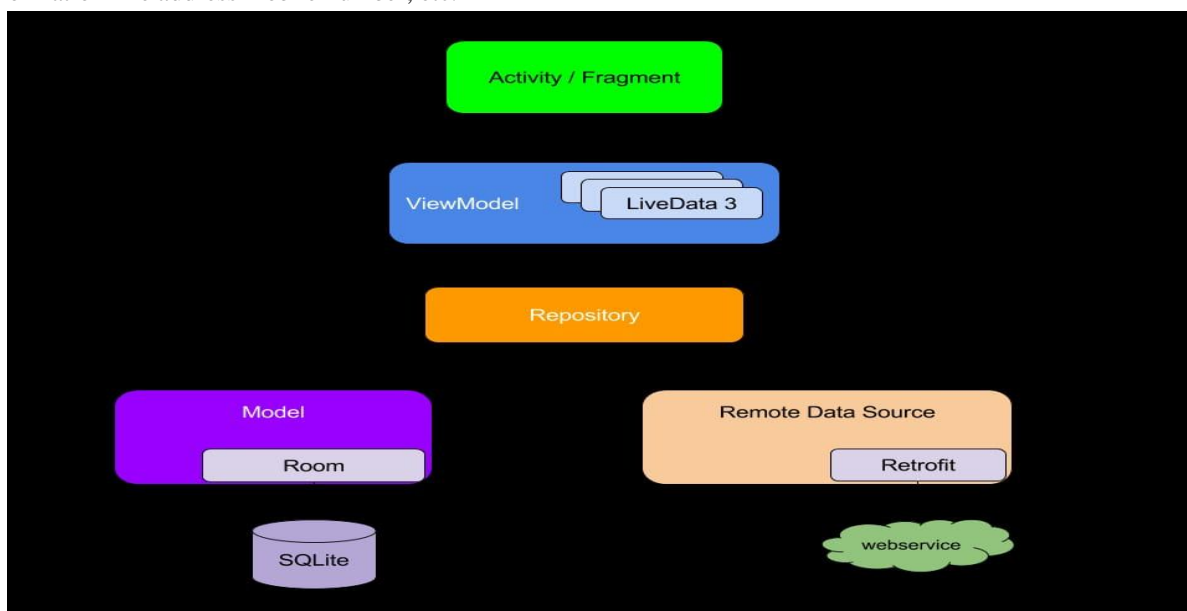


Fig. System Architecture

## V. TECHNOLOGY NECESSITY

Problems existing in the current marketing system are as follows:

Organ donation is a process where a person allows an organ of their own to be transplanted to another Person, legally, while the donor is alive or dead with the permission of the next of kin. Donation may be 21 for research or, for more commonly, healthy Transplantable organs and tissues may be donated to be transplanted to another Human. Common Transplantations include bones, bone marrow, skin, and corneas, Kidneys, heart, liver, pancreas, intestines, and lungs. Some tissues and organs can be donated by donors, such as a kidney, part of the liver, part of the pancreas, part of the lungs or part of the intestines, but most donations occur after the donor has died.

To help people who need blood, this Android Application is used effectively for getting the details of available blood groups, and also to get the contact number of the donors with the same blood group and within the city. So if the blood group is Unavailable in the blood bank user can request the donor to donate the blood to him/her and save someone's life. Using this Blood and Organ bank management system Application people can register himself or herself who want to donate blood. To log in the Application, they have to enter their contact information like address mobile number, etc.

## VI. CONCLUSION

Online Blood Bank and Organ Transplant will be a website. The purpose of the system is to simplify and automate the process of searching the blood in case of emergency and maintaining the records of blood donors, recipients, blood donation programs and blood stocks in the bank. Using this website blood seeker can search for blood donors and can call or message the donors through this app on android. This website can also be used by organ donor and seeker where person can register for organ donation. Proposed system will contain a Directory which includes details of all Blood Bank across India. User can search Blood Bank using PIN code and typing name of State or city.

## REFERENCES

- [1] Mackersie RC, Bronsther OL, Shackford SR. Organ procurement in patients with fatal head injuries. *Annals of Surgery* 1991;213:143–50.
- [2] Nygaard CE, Townsend RN, Diamond DL. Organ donor management and organ outcome: A 6-year review from a level 1 trauma center. *Journal of Trauma* 1990;30:728–32.
- [3] Rosengard BR, Feng S, Alfrey EJ, Zaroff JG, Emond JC, Henry ML, et al. Report of the Crystal City meeting to maximize the use of organs recovered from the cadaver donor. *American Journal of Transplantation* 2002;2:701–11.
- [4] Zaroff JG, Rosengard BR, Armstrong WF, Babcock WD, D'Alessandro A, Dec GW, et al. Consensus conference report: Maximizing use of organs recovered from the cadaver donor: Cardiac recommendations. *Circulation* 2002;106:836–41.
- [5] Emond JC, Freeman RB Jr, Renz JF, Yersiz H, Rogiers X, Busuttil RW. Optimizing the use of donated cadaver livers: Analysis and policy development to increase the application of split-liver transplantation. *Liver Transplantation* 2002;8:863–72.
- [6] Orens JB, Bohler A, de Perrot M, Estenne M, Glanville AR, Keshavjee S, et al. A review of lung transplant donor acceptability criteria. *Journal of Heart and Lung Transplantation* 2003;22:1183–200.
- [7] Terasaki PI, Cecka JM, Gjertson DW, Takemoto S. High survival rates of kidney transplants from spousal and living unrelated donors. *New England Journal of Medicine* 1995;333:333–6.
- [8] Van Bakel AB. The cardiac transplant donor: Identification, assessment, and management. *American Journal of Medical Science* 1997;314: (3)152–63.
- [9] Novitzky D. Detrimental effects of brain death on the potential organ donor. *Transplantation Proceedings* 1997;29:3770–2.





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