**Donor Me APPLICATION**

TMP-22-311

Project Proposal Report

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Sri Lanka

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**Creates a successful correspondence between the Organ Donor and the Donee**

TMP-22-311

Project Proposal Report

B.Sc. (Hons) Degree in Information Technology Specializing in

Information Technology

Department of Information Technology

Sri Lanka

January 2022

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We declare that this is our own work, and this proposal does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or Institute of higher learning and to the best of our knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The supervisor/s should certify the proposal report with the following declaration.

The above candidates are carrying out research for the undergraduate Dissertation under my supervision.

Name of supervisor: **Ms.**

Name of co-supervisor: **Ms.**

Signature of the supervisor: Date:

Signature of the co-supervisor: Date:

# Abstract

For some patients, organ transplant is their only hope to live on.Organ transplantation is the only treatment for end-stage organ failure. In the world, there are very few populations are Organ Donation Register. This application’s main purpose is to increase the population of Organ Donation.

This application Creates a successful correspondence between the organ donors and the donees**.** Organ donors who register through this application will be added to a queue. When an organ donee needs an organ a confirmation message will be sent to the organ donor who is at the top of the queue. if the donor confirms it, the donor and the donee will be added to a separate chat room and the donor will be removed from the queue, if not, the confirmation message will be sent to the next donor. Through this application, we will link the social media platform to share the post. To share the post, donee should respond to the pop-up message that he agrees to share the details.

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# Introduction

**1.1 Background**

Organ donation can occur When a person willingly agrees to donate an organ. There can be two types of organ donation. one is when he/she is alive, they can donate some organs such as the eye and kidney. And another one after the brain death. As shown in Figure 1.2 many people likes to donate organ after death.Becoming a living organ donor or making the personal but complex decision to donate one’s organs. According to statistics, a single organ donor can save the lives of up to nine additional people.

Organ donation is the selfless act of donating one or more organs (or portions of organs) to be transplanted into the body of someone else. Because of the various concerns surrounding organ donation, most countries have legal safeguards. What is more, living donors are usually able to donate a part of the pancreas, lung, liver, intestine, or kidney. As shown in Figure 1.1 Many people like donate eyes and kidneys.

The World Health Organization (WHO) claims that the majority of transplanted organs originate from living donors around the world. People of any age are usually able to donate their organs as long as they are free of certain medical conditions. Active malignancy, systemic infection, HIV-positive status, sickle cell anemia, or a history of intravenous drug usage, are only a few concerns in an organ donation. A parent or guardian's permission is required for anyone under the age of 18. For organ donation after death, a medical assessment will be done to determine what organs can be donated. Certain conditions, such as having HIV, actively spreading cancer, or severe infection would exclude organ donation.

Today’s Mobile applications have become an integral part of our daily lives. Many elements were introduced to the field because of the revolution in mobile computing. The main purpose of this component is to build a successful correspondence between the donors and the donees.First, the organ donors and donees should register for the application. A confirmation message will be sent to a donor and after the donor accepts it the donor and the donee will be added to a separate chatbot. This app has a connection between social media platforms, therefore donees can share details to social media. As shown in Figures 1.3 and 1.4 many people like to donate organs. So, this app will be motivated to donate organs. And when comparing figures 1.4 and 1.5 more people like to donate organs than people who need organs.

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Figure 1.1- Summary of responses for what kind of organ do you likes to donate

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Figure 1.2- Summary of responses for how would you like to donate organ(s)?

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Figure 1.3- Summary of responses would you like to donate organ(s)?

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Figure 1.4- Summary of responses Do you know a person like to donate organ(s)?

**Chart, pie chart

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Figure 1.5- Summary of responses Do you know a person who needs organ(s)?

### Literature Review

There are various android applications and websites which are international but not for are local. Here are international but not for are local. Here we give you the information on related android applications and researches. Various researches have been done on blood donation .Some of them are help to find organ donors. In Some researches they send OTP( to verify whether the donor ready to donate),track donors(check near organ donor using GPS),Send message by using the application(to let the public to know what the organ donation is), collaborated with Facebook(to share their need for a live donor through social media)

## Research Gap

Some researchers have been done various types of research about organ donation. By referring to those researchers I took below mentioned variables for my research.

• Store Donors in a queue in order of registration​

• Send confirmation message to the donor​

• Chatbot and real-time Message​

• Share the post to social media​

According to the research paper[2], they are developed for Blood Donation by storing the donors in a queue. In this research when a donor accepts the request then a one-time password (OTP) will be sent to the donor to verify. So referring to this research[1] I apply this method for Organ donation and instead of the one-time password (OTP), a confirmation message will be sent to the donor for the verification part.

According to the research paper[1], they have connected their application to the social media platform for sharing the post to find organ donors. I apply this concept to my component. here in addition to this, a popup message will be sent to donee to confirm that the donee likes to do it.

There are no products that would provide suggestions to create a separate chatbot for the donors and the donees. In the Proposed System is designed by using All the variables.

Table . : Research Gap with Research Paper

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Research | Store Donors in a queue | Send confirmation message | Chatbot and real-time message | Share post to social media |
| Research [1] | Yes | No | No | No |
| Research [2] | No | No | No | Yes |
| Research [3] | No | No | No | No |
| Proposed System | Yes | Yes | Yes | Yes |

## Research Problem

In Sri Lanka, the major causes of organ shortages are ignorance and lack of awareness. People are under-informed on the advantages of organ donation. Today, social media and a variety of other platforms may be used to promote the benefits of organ donation and how more individuals registering for organ donation can save more lives. There isn’t any significant system to connectOrgan donors with the donees. Therefore, lack of correspondence in between donors and the donees is a major problem in the research .

Organ donation has become the treatment of choice for many diseases, yet there is still a global scarcity of donor organs. Despite worldwide research-based applications indicating that connects blood donators, but there isn’t any research-based application in Sri Lanka which builds connection between two Organ donators. This research aids to build the interaction between organ donors and the donees.

# Research Objectives

## Main Objective

Organ donation is the selfless act of donating one or more organs (or portions of organs) to be transplanted into the body of someone else. People are under-informed on the advantages of organ donation. Today, social media and a variety of other platforms may be used to promote the benefits of organ donation and how more individuals registering for organ donation can save more lives. There isn’t any significant system to connectOrgan donors with the donees. Therefore, Create a successful correspondence between the donors and the donees is the main objective

.



## Specific Objectives

* **Send confirmation message to the donor** ​

When there is a need of an organ for a donor, A confirmation message will be sent to the donors to verify whether the donor ready to donate .

* **Chatbot and real-time Message**

After a donor accept to donate the donor and the donee will be added to a separate chatbot .In here, donee can directly and securely connect with the donor .

* **Create and Share the post on social media**​

This app is connected with the social media .So, donees share post to social media through this application

1. **System Flow Chart**

Diagram

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# 4 System Diagram

Diagram

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# Methodology

The proposed method is to create an android application to create a connection between organ donors and donees. The donors who are all register in this application are stored in a queue . When there is a need of organ, first a confirmation message will be sent to the first donor of the queue. Here all the donors will be stored the order of they registered. If the first donor didn’t respond to it the confirmation message will be send to the second donor of the queue . After a donor responds to it the donor and the donee who need organ will be added to a separate chatbot . And the donor will be remove from that queue.

**System Functionalities**

* The system will create a chatbot
* The system will keep record all the donees and donors details to find a correct organ donor for donees.
* Connection between app and the social media to share post

This application collaborate with social media. So, enables waitlisted candidates can share their needs for a live organ donor to social media through this application. After register as donee, this application sent a popup message . After the donee accept it donee can share the needs for a live organ donor through social media. This component mainly contain organ donor , organ done and database .

The organ donation system is created by referring link-list algorithm and queue .The characteristics and capabilities of them are the reasons for choosing them.

# WORK BREAKDOWN STRUCTURE

Diagram

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# Gannt Chart

Chart

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# Budget

|  |  |  |
| --- | --- | --- |
| Resource Type​ | Amount (LKR)​ | Amount (USD)​ |
| Electricity​ | 8000.00​ | $36.91​ |
| Stationary​ | 4000.00​ | $16.96​ |
| Internet​ | 4000.00​ | $16.96​ |
| Communication​ | 4000.00​  ​ | $16.96​  ​ |
| Software Purchasing​ | 4000.00​  ​ | $16.96​  ​ |
| Total​ | 24000.00​ | $104.75​ |

# Reference List

[1] “A Smartphone App for Increasing Live Organ Donation” research done by K. Kumar, E. A. King1, A. D. Muzaale, J. M. Konel, K. A. Bramstedt, A. B. Massie, D. L. Segev, and A. M. Cameron​

[2] “Blood donation and life saver-blood donation app” research was done by M.R. Anish Hamlin and​ J. Albert Mayan​

[3] “Organ donation in the United States” research was done by Howard M. Nathan,Suzanne L. Conrad,Philip J. Held,Keith P. McCullough,Richard E. Pietroski,Laura A. Siminoff,Akinlolu O. Ojo​

[4] “Social media and organ donation: Ethically navigating the next frontier” M. L. Henderson,K. A. Clayville,J. S. Fisher,K. K. Kuntz,H. Mysel,T. S. Purnell,R. L. Schaffer,L. A. Sherman,E. P. Willock,E. J. Gordon https://doi.org/10.1111/ajt.14444

[5] “Social Media and Organ Donation: The Facebook Effect” Andrew M. Cameron https://doi.org/10.1080/01947648.2015.1049916

[6] “LIFE SAVER: ANDROID APPLICATION FOR BLOOD DONATION “ Kshipra B. Panaskar1, Akansha N. Nakate2, Siddhi R. Mhatre3, Prof. Sachin Chavan4 https://www.academia.edu/download/69248567/IRJET\_V8I4690.pdf

## Appendix

The following questionnaire is based on a survey to get some details on organ donation.

Graphical user interface, text, application, email

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Graphical user interface, application, Teams

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