iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 8 **Issue:** XII **Month of publication:** December 2020

DOI: https://doi.org/10.22214/ijraset.2020.32602

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

Elite-B

Eswar Srinivas[1], Shree Nandini U[2]
[1]3rd Year Student, Mechanical Engineering, Sri Sairam Engineering college, India

Abstract: ***Social media has become a very populated platform which has everything that name. But it has often failed people to help when they are in need of blood. We all must have seen many posts being shared on all social platforms seeking for blood, but it has never been as efficient as it looks to be. It is not one of the most reliable options for the blood recipients hence it procrastinates the process. Blood banks are out of reach for the needy and often fail to provide an ample amount of the required blood group. Unavailability of blood during exigency, people face difficulties in finding equivalent blood donors. Development of an application ELITE B which will directly connect to the people of the same blood group will shorten the wait and help in receiving the required blood during emergency cases.***

I. INTRODUCTION

Do you know how many deaths occur due to unavailability of blood? 6 lakh litres of blood wasted in five years due to lack of coordination between blood banks and hospitals. In the last five years, over 28 lakh units of blood and its components were discarded by banks across India. India faces, on average, a shortfall of 3 million units of blood annually.Maharashtra, Uttar Pradesh, Karnataka and Tamil Nadu discarded not just whole blood but even red blood cells and plasma as the life-saving components could not be used before their expiry date.

The worrying part is that 50 per cent of the wasted units were of plasma, which has a shelf life of one year. In 2016-17, over 3 lakh units of fresh frozen plasma were discarded, which is surprising given that the product is imported by several pharma companies to produce albumin. Indian Red Cross Society pointed out that a collection of up to 500 units was acceptable and manageable.

We have seen and heard of camps where 1,000 to 3,000 units are collected…. where is the place to store so much blood? Instead of collecting excessive units of blood at a time, why can't it be received when required? Hence a mobile application can be developed through which recipients can receive required blood at minimal time directly from the nearby donors.

II. METHODS

While a person needs blood during critical situations, people around him or his relatives can use this app to receive blood in the same group as the recipient in one touch.

Scenario as follows:

A. In need of blood when a person opens the app and clicks on the required blood group a notification will be sent to all registered users within a 10km radius.
B. List of all donors who have accepted the request with respect to their distance from the hospital will be shared with both the recipients and the accepted donors so that they can contact each other via registered mobile numbers to avoid confusion among the donors.
C. Once the user accepts the request, he will be redirected to the inbuilt map with GPS tracker guiding him to the hospital.
D. After the donation is over the recipient must click on to the received button in the app to finish the donation process.

III. RESULTS

In the first place, in order to avoid chaos and confusions, contact information of each accepted donor is shared with the recipients as well as other accepted donors. In need of blood during emergency situations, this application will be of help as there are no mediators involved which minimises the time taken and reduces the cost of blood fixed by the blood banks. People who have donated blood will be certified and will earn certain points in the application which can be converted into cash rewards after reaching a certain limit. Apart from this it's the recipients choice to reward them with cash or in any other form instead of paying the blood banks.

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

IV. SUMMARY

Development of an application for immediate need of blood. This is a man to man communication system. By just one click the recipient can receive blood from any user from the surroundings. This application will contain an inbuilt gps, exchange of mobile numbers for communication is provided and donors are rewarded with points for each donation as well. Blood will be available, accessible and affordable.

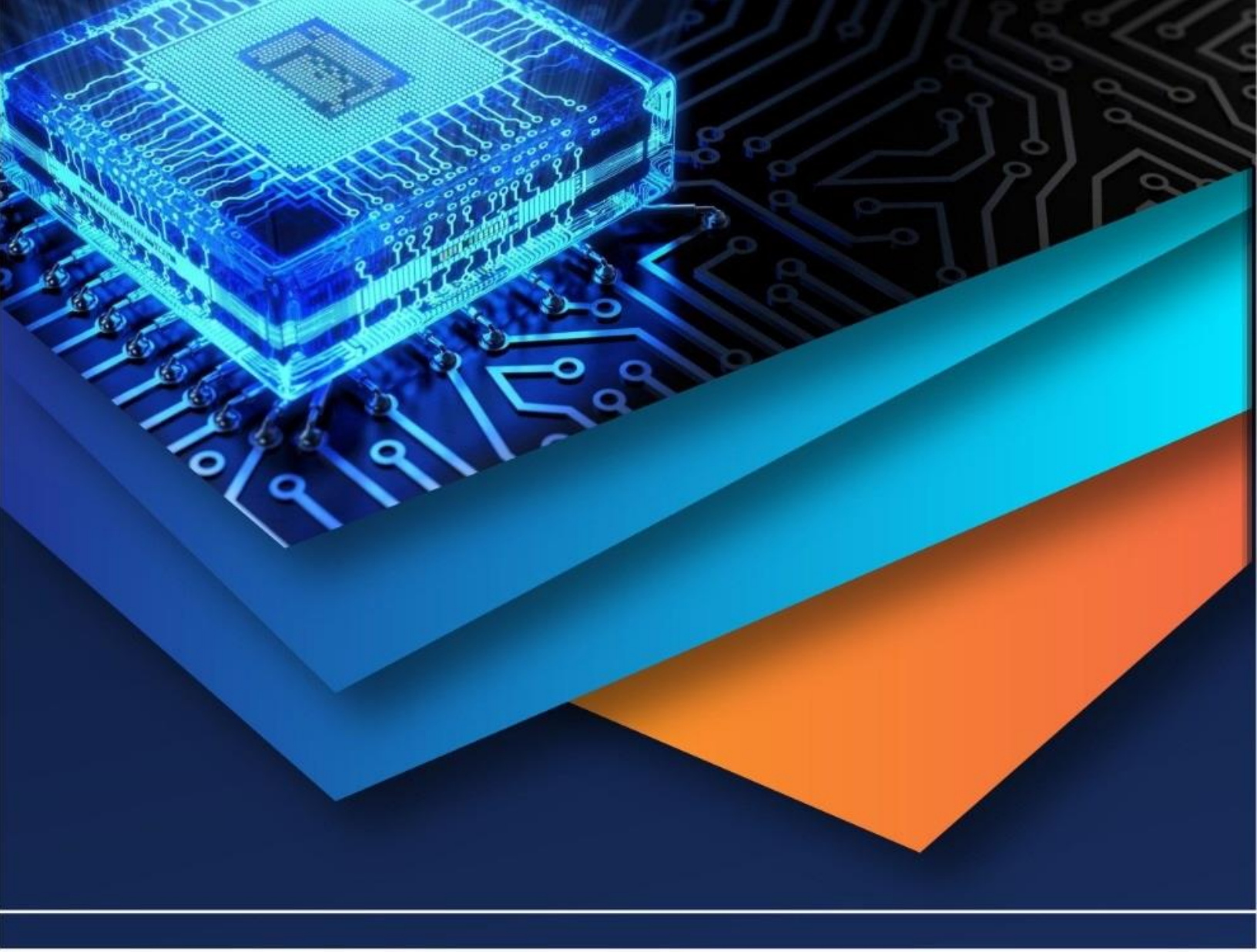
V. ACKNOWLEDGEMENT

The ideas presented here have been developed by reading many articles on lack of blood in blood banks and enormous wastage of blood. Interactions with college professors helped us create this idea.

REFERENCE

[1] https://www.google.com/amp/s/m.economictimes.com/industry/healthcare/biotech/healthcare/6-lakh-litres-of-blood-wasted-in-five-years-due-to-lack-of-coordination-between-blood-banks-and-hospitals/amp_articleshow/58335139.cms
[2] Imagining a world without avoidable deaths due to blood shortag - Health Files by Suryaprabha Sadasivan | ET HealthWorld (indiatimes.com)
[3] blood banking system: 6 lakh litres of blood wasted in five years due to lack of coordination between blood banks and hospitals - the economic times (indiatimes.com)

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)