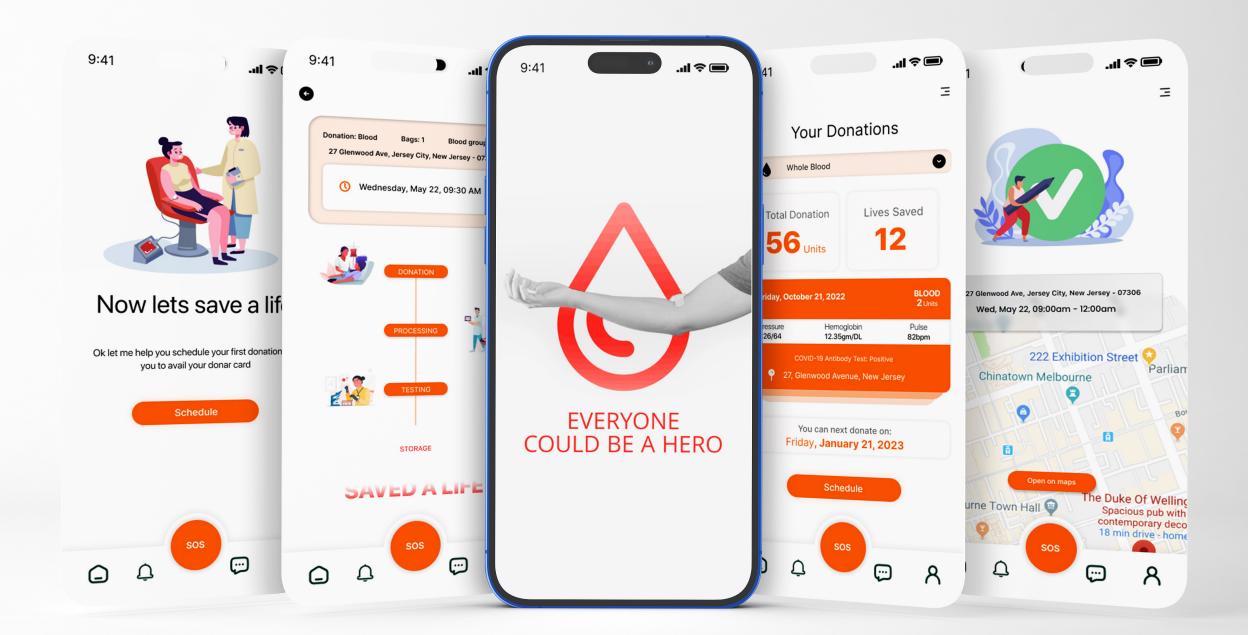


INTRODUCTION:

Blood not only sustains life but it is that red liquid that bonds humans and connect our lives. Blood transcends boundaries and its transfusion can save lives numerous and lives unknown. Transfusion of blood has occupied an important part of modern medicine. Blood is that one component that can neither be purchased from a medical shop nor can be produced in a factory. It is of paramount importance to store blood encompassing all blood groups and at the same time making it accessible for the affected population even in the remotest of villages. Accessibility was a major issue as recent as three decades back. Matching the requirements to the end users was utmost priority. Blood banks were scarce. Physical blood banks sprouted to reduce this gap in availability. With the advent of technology, the world is fast shrinking with every second thing, a click away. Blood bank apps utilize this very technology to match the willing donors with the patients and demand for blood can be matched in no time through apps. Blood bank apps are that life savers which make the taxing experience of transfusion much easier and much hassle free. With the help of Virtual Reality I would like to tell people the importance of blood donation.

PROTOTYPE







Application's User flow

TARGET AUDIENCE:

I have bifurcated my target audience into 4 categories for my interview which are as follows

- Blood Donor
- Blood Bank
- Hospital
- End User (patient or their family)

INTERVIEW METHODOLOGY:

I have bifurcated my target audience into 4 categories for my interview which are as follows

- Blood Donor: Online Survey link & Guerilla testing
- Blood Bank: Ethnographic Interview
- Hospital: Ethnographic Interview
- End User (patient or their family): Online Survey link & Guerilla testing

INTERVIEWS



DONOR:

- 1. Are you a donor?
- 2. How many times do you donate blood?
- 3. How many times do you donate platelets?
- 4. Do you get any notification from the blood bank for your next schedule?
- 5. Have you ever called the blood bank asking for blood? If yes (scale of 1 to 10) how quick was their response?
- 6. Have you received any donor card from the blood bank?
- 7. Are you donating the blood voluntarily or are you being compensated in any way?

OBSERVATION:

I had interviews with 20 donors. They are all willing donors who offer their valuable service to the society. They were all very happy to donate blood. They were of the opinion that their data is not getting updated with either the blood bank or hospitals. Hospitals by and large depend only on blood banks. They were of the opinion that their data can also be stored with the hospitals and hospitals themselves can directly contact them. Few donors were forced to give blood for money which was a shocking and sad, I believe in today's world everyone has the right to do what they want so health apps in common should be made official by govts and any donations should be through app or website.

SURVEY LINK:

https://wss.pollfish.com/link/d1d8a38a-dda5-4805-aad4-61ea6a40e394

END USER:

- 1. Have you received blood from the blood bank / hospital?
- 2. Scale of 1 to 10 how quick was their response? Blood bank Hospital -
- 3. Scale of 1 to 10 were you able to reach them over phone?
- 4. Were you in a situation where the hospital ran out of blood and asked you to arrange for it?
- 5. If yes, how did you arrange for the blood?
- 6. Were you asked to pay for the blood?

OBSERVATION:

There were few end users who said they paid for the blood from the back door of the blood banks which is not acceptable as blood should be given free of cost. Many black market people make use of the emergency situation to their advantage and make money out of blood.

SURVEY LINK: https://wss.pollfish.com/link/edff2958-47dc-433d-a2be-c751bc0209ee

BLOOD BANK:

- 1. How do you contact the donors?
- 2. Do you send any notifications if you have used a donor's blood?
- 3. How often do you refill?
- 4. Do have any emergency alarm notification if a nearby hospital is in need of blood?
- 5. Is the blood bank open 24/7?
- 6. Do you have any official application to connect donors blood bank hospitals & the patient?

OBSERVATION:

I had interviews with 3 blood banks who had their own apps but unfortunately, they were not updated with any new donors and existing donors' data were also not updated like change of address, mobile nos. etc.

HOSPITAL:

- 1. How do you contact blood bank?
- 2. How fast do you receive blood from blood bank?
- 3. What will you do if the hospital is need of blood during emergency situation?
- 4. Will the hospital reveal organ donor's name to the patient?
- 5. Have you ever received wrong blood from blood bank?
- 6. Are donors being compensated in any way or it is purely voluntary?
- 7. Do you have data of donors and contact them directly or do you depend only on blood banks?

OBSERVATION:

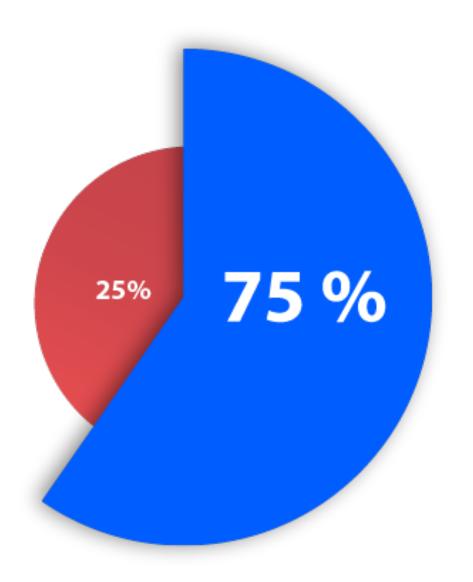
I had interviews with a General Surgeon, an Oncologist, a Cardio Thoracic Surgeon, a Hematologist, a doctor who is an expert in Traumatology, a Vascular Surgeon and a senior nursing staff of a leading hospital. They were all of the opinion that more and more apps should be developed with the data being regularly updated.

DOCTOR'S DETAILS:

Dr G Balamurali *Spine & Neurosurgeon*

Dr P Keerthivasan *Orthopedic & Spine surgeon*

Dr AN Vaidhyswaran *Radiation Oncologist*



PEOPLE WHO ARE NOT AWARE OF THE IMPORTANCE OF BLOOD DONATION

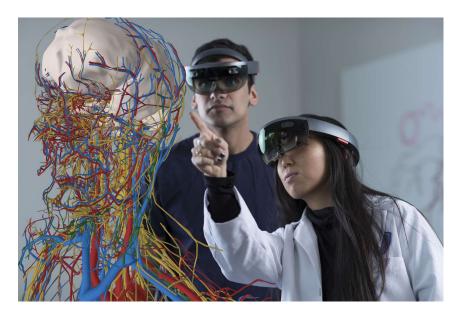
WHAT IS THE IMPACT OF VR IN BLOOD DONATION AWARENESS CAMPAIGN?

Virtual reality enhances learning and ensures that all the users are engaged. The significance of VR is to transform awareness campaign by creating a virtual world. A real and imagined world is created, which helps a user to understand what is being said. It allows learners to see and interact with a virtual world. I will also be using VR to spread the importance of my blood bank mobile app. People will understand faster using AR than reading thousand words.

This VR campaign can be set up in the following places

- Schools to educate students on the importance of blood donation
- Hospitals Patients can use VR during their wait time
- Blood banks It normally takes an hour to donate a unit of blood which can be used of great advantage. The donor can be given a VR during that one hour and educate him about the importance blood donation







VR SESSION
DURING
DONATION

CONCULSION:

Just as there are numerous apps for movies, games, shopping, etc. there requires many apps for blood banks, containing vital details such as the contact of donors and spirited voluntary associations in proximity, etc. In fact, I am of the opinion there should be separate apps for each blood group and for each area in the district. The apps should be comprehensive with details of donors divided into different blood groups, details of blood banks, etc. These apps can be initialized by associations and supervised by the Government to improve faster communication, prevent malicious intent and misuse. Green corridor should be established by the Government and there should be effective logistics so that the blood reaches the needy exactly on time. As the world is fast moving towards AI, I would like to make use of AR in spreading awareness and also to promote my mobile application for Blood Donation. People will be able to understand faster using AR than reading a thousand words.

By Arjun Ganesan