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BloodStat - A Website for Blood Donation

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Abstract: Emergencies are untold! During emergencies one should be smart enough to take swift and reliable decisions. There are many cases where unavailability of blood has led to loss of lives. Thus, to make things systematic in such alarming situations, we have developed a website which would display the availability of blood bank to all the users. This will help keep people and various hospitals updated on the availability of the blood.
Keywords: Website, online presence, locality,expand the business.

I. INTRODUCTION

We should always be prepared for any emergency. In case of blood bank, we cannot be sure which hospital stores which type of blood. At alarming situations, people waste time contacting various hospitals checking for the availability of required blood. We have developed a website which constantly updates the users on the availability of blood bank in various hospitals. The online blood bank help us to avoid physical visits to hospital which saves time and money. Online blood banks keep a track of available blood as well as blood group information, thus making it easier for hospitals to match blood with the patients'. Online blood banks are available 24/7, allowing blood donors to donate at any time.

All the hospitals need to login to our website. We as team members can also login to website. The hospitals need to update the website on regular basis, providing information on availability on which type of blood bank. The users will be able to view all the updates on the website. The users have to choose the city , it will display all the hospitals in that particular city along with the location as well as the blood type available. The contact number of the hospital will be provided as well so that the user can contact the hospital for getting the further details. We as the team members can also make changes to the website. This will help to handle emergencies in a smooth and systematic way.

On the page it will also display the time slots and days when people interested in donating blood can visit a particular hospital. The number people donating blood decreases ever year. The main reason being rude behavior of the staff, waiting in queues for their turn and many more. But donation of blood is of vital importance as it can save one's life. This online platform will definitely help increase the number of blood donors as it saves people's time by providing accurate information to all the users on the website itself.

II. LITERATURE REVIEW

1) Author researched websites related to blood banks.
2) In the second phase we referred to research papers that highlighted the problems they faced.
3) After researching, we came to the conclusion ofcreating a website with its necessary features to help patients.

The following are the research papers:-

a) Analyzing Blood bank service quality from Indian donors - Shantanu shah (2016) [11]
b) Characteristics of donors who do not return blood and barriers – H. J wigboldus (2015) [12]
c) Blood donation management system – K.Z. Shrivastava [13]

III. METHODOLOGY

A. Our Website Consists of five Major Domains

1) Home: A brief overview of the website's features can be found on the home page.
2) Hospitals/blood Bank: This page contains a list of all the accessible hospitals and blood banks. Along with the name of the hospital/blood banks, the quantity of each blood group that is available is indicated. Additionally placed in that area of the information is the precise location of the blood bank/hospital.

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3) *About Us:* It informs the user of the fundamental nature and goal of the website. On the webpage, it basically serves as a brief introduction.
4) *Username:* It displays the user's login name.
5) *Add Listing:* If any hospital or blood bank wants their name to be visible on the website, they must register using this option and enter the amount of blood that is currently available.

B. The users

1) Users will be able to view the quantity of blood that is on hand at the hospital or blood bank.
2) For their convenience, the amount of blood from each blood group that is now accessible is displayed.

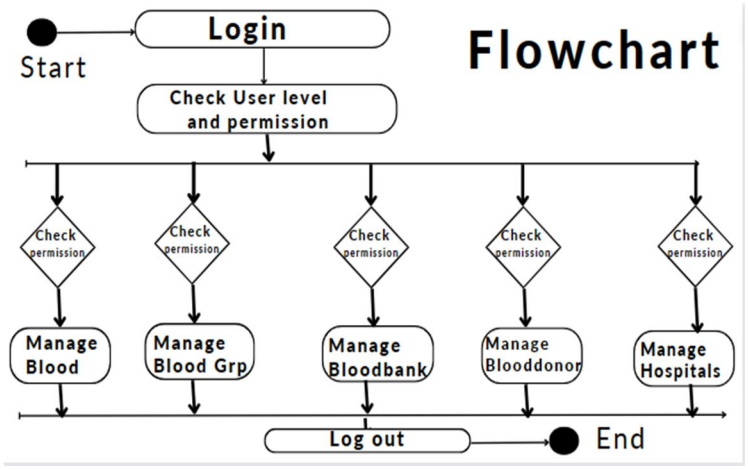
C. Blood banks/Hospitals

1) Hospitals and blood banks are able to create accounts on the website by clicking the "add list" tab and registering in the further page.
2) Then more information on the hospitals and blood bank has to be added.

For e.g.:

a) The hospital's or blood bank's name must be mentioned.
b) The location of the hospital or blood bank must be stated
c) It must be stated how much of each blood type is currently available.

For better understanding of the functions and the working of the website, refer the flowchart provided:



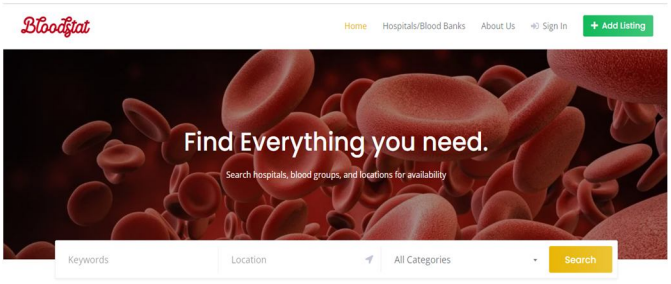
The technology we have used is Web Developmentand we used the following languages for it:

- Structure Query Language (SQL),
- Hypertext Markup Language (HTML)

3) We used HTML for the front end of the website.Advanced HTML5. Hyper Text Markup Languageis the abbreviation for this computer language. It is this system's responsibility to alter both the appearance and the way that web pages appear. Additionally, it is used to show and organize content for the web.
4) Database administration system: Structure QueryLanguage (My SQL). Anything from a small shopping list to a photo gallery to the massiveamount of data on a business network could qualifyas this. A database management system like My SQL Server is required to add, access, and processdata stored in the computer database.

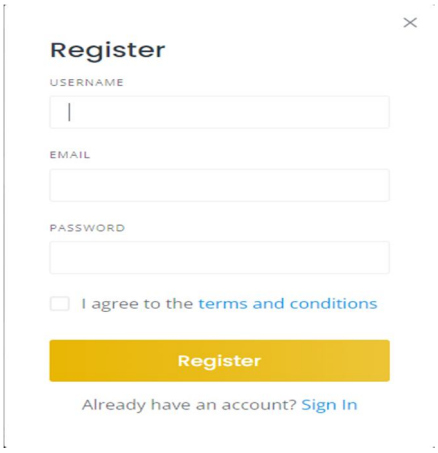
IV. RESULTS AND DISCUSSIONS

Through this website, user can view the various hospitals in the selected city. Along with the contact number, a google map will be displayed through which user can find the exact location of the hospital. It will display a list of various blood units available Such systematic small steps to help the people can result into a vast change.

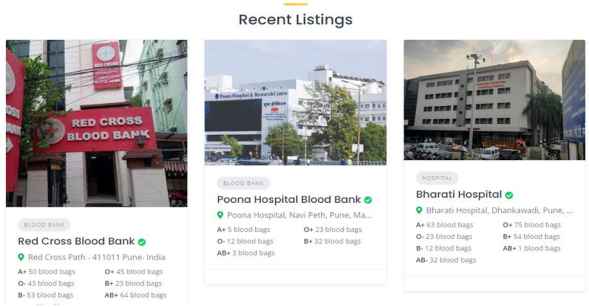


Blood Banks and Hospitals

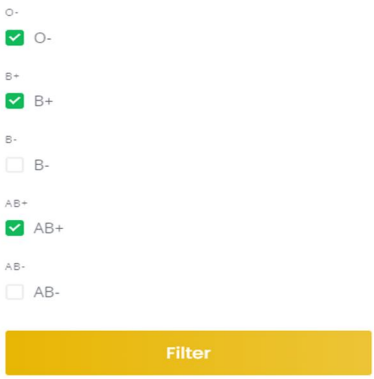
Dashboard



Register page

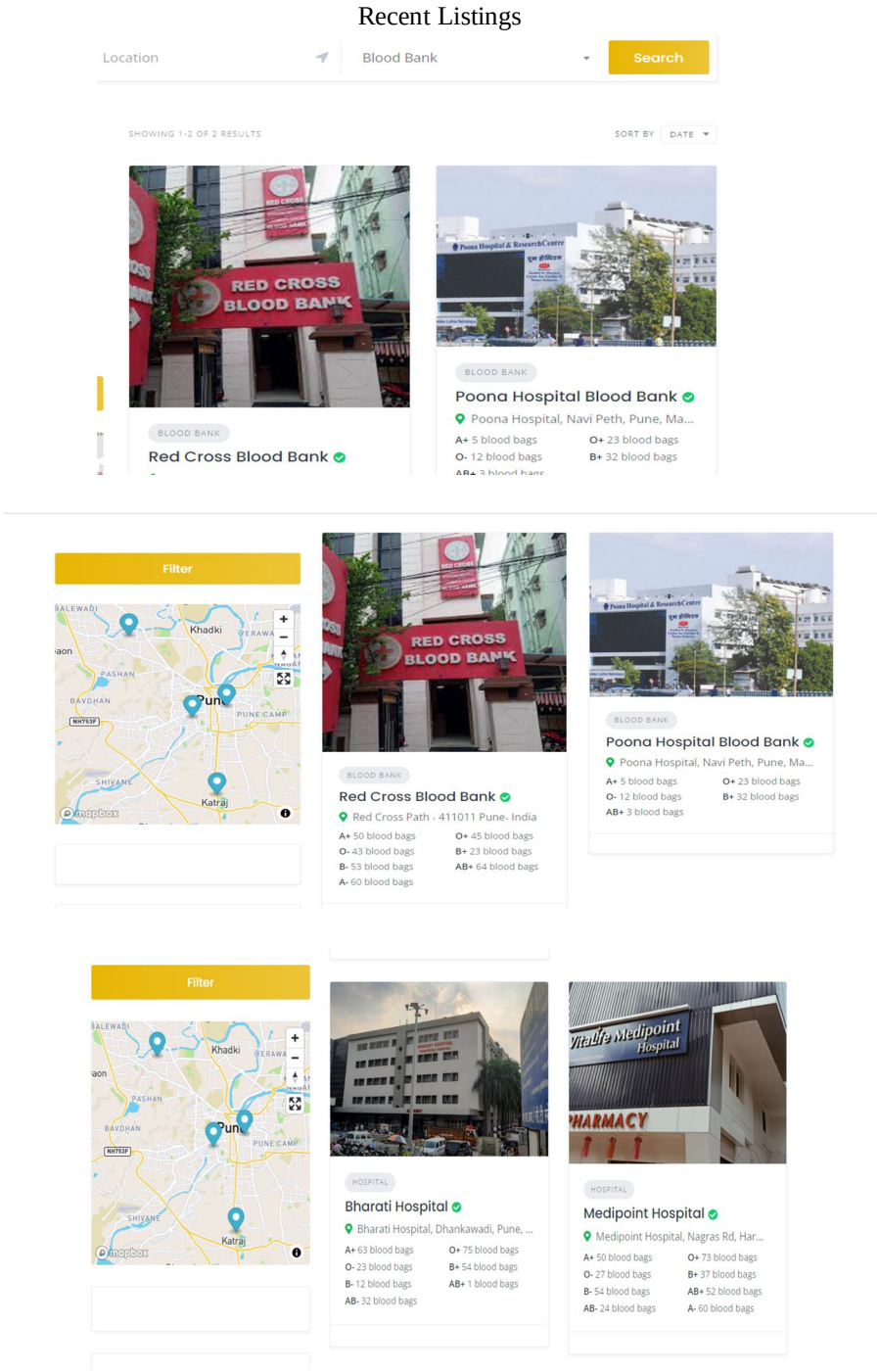


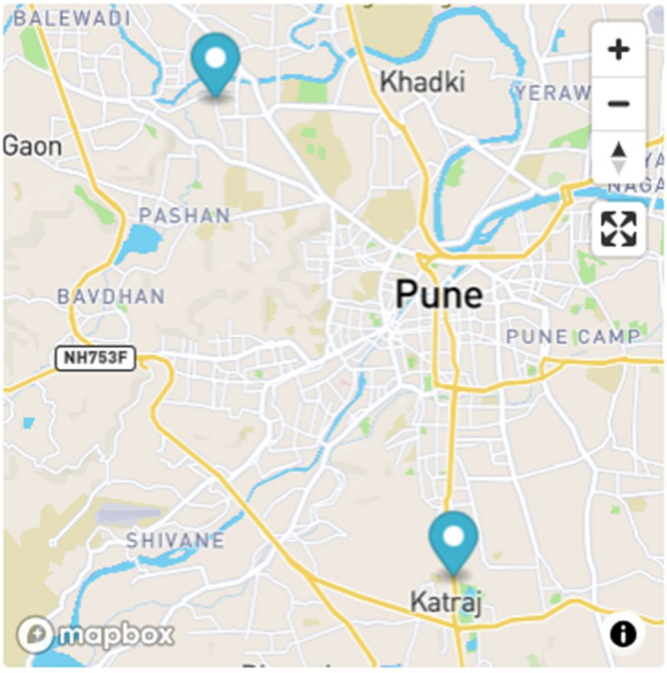
Hospitals/Banks



Filtration page

1) When we open the website, we can view option of choosing blood banks or hospitals.
2) Clicking on blood bank, we will be able to see all the blood banks available in our vicinity and their address and also the blood bags available.
3) Similarly, clicking on hospital, we will be able to see all the hospitals available in our vicinity and their address and also the blood bags available.
4) Admin has to login to the website. The admin can make changes by adding or altering the number of blood bags available in particular blood bank or hospital.
5) We can also track down the hospital using google maps.





Map box

V. CONCLUSION

Thus, this website will basically help pass the blood unit emergencies in a smooth and a systematic manner. This website can also be useful to people who have recently shifted to a new city. It can help them provide information about various hospitals in their locality along with their location. It will surely increase the number blood donors as it is much convenient to get all the information itself.

VI. FUTURE SCOPE

Applications are more accessible and more user- friendly to everybody, so we plan to develop an application going forward. We also plan to invite and add more hospitals and blood banks on board so that it becomes more easy for patients and their families to find the right blood group and in faster process as well. Users could easily access the platform on their smartphones, allowing them to search for donors and receive notifications on potential matches. The app may also provide additional features, such as appointment scheduling, blood donation reminders, and emergency alerts. The website could foster a sense of community by incorporating social features. Users may share their donation experiences, provide feedback on the website's effectiveness, and spread awareness about the importance of blood donation. Building an engaged community could encourage more individuals to become donors and contribute to the cause.

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[13] K.Z. Shrivastava – Blood donation management system for emergency blood donat tion published in lovely university (2021)

Website link –
bloodstat.site

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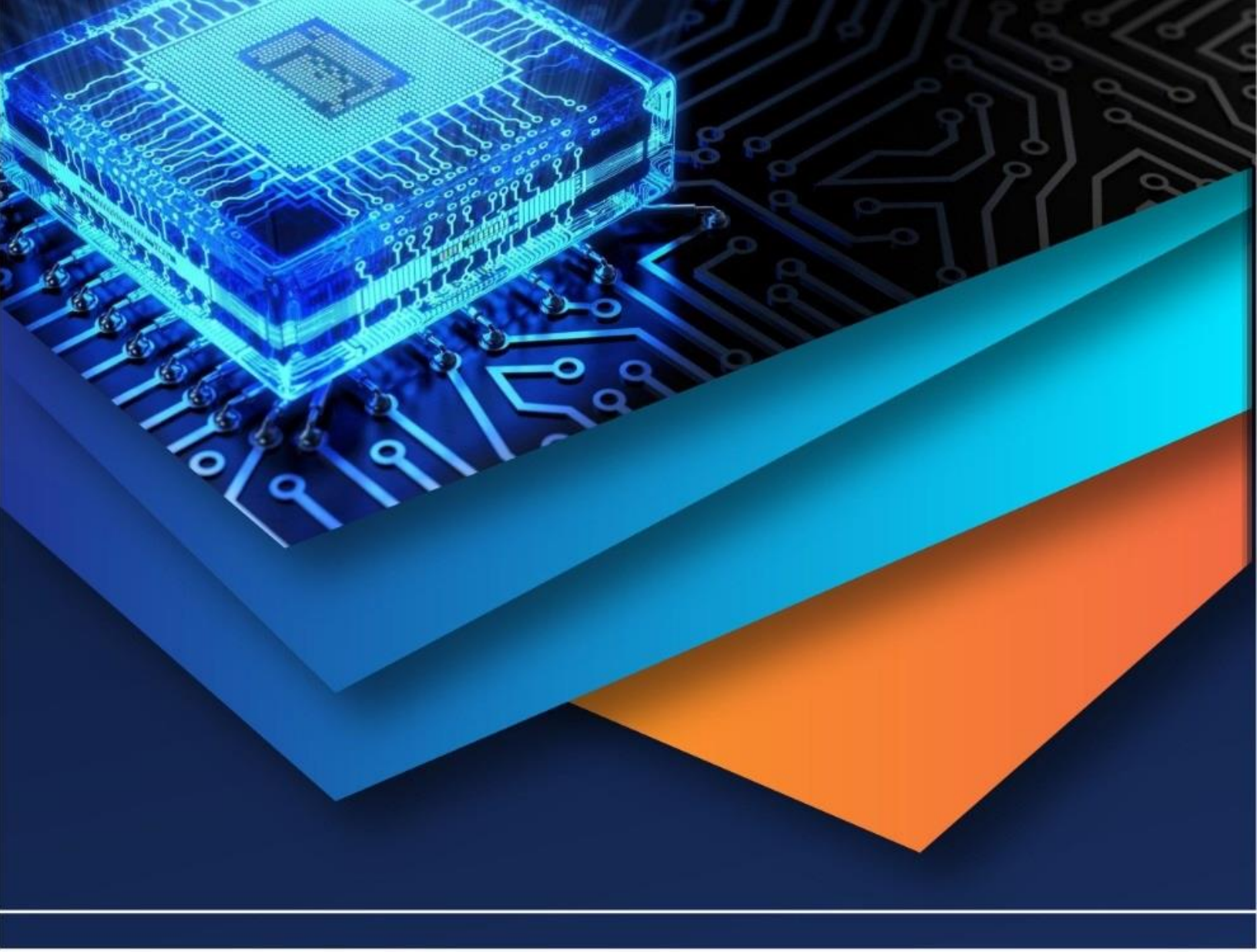

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