PLASMA DONOR APPLICATION USING CLOUD COMPUTING AND INFORMATION GATHERING.

LITERATURE SURVEY

With rapid increase in the usage of social networks sites across the world, there is also a steady increase in plasma donation requests as being noticed in the number of posts on these sites such as Facebook and twitter seeking plasma donors. Finding plasma donor is a challenging issue in almost every country. There are some plasma donor finder applications in the market such as Plasma app by Red Cross and plasma Donor Finder application by Neologix. However, more reliable applications that meet the needs of users are prompted. Application development on Cloud infrastructure allows web and PWA development services to reduce development costs, opens up the possibility to work with remote teams, and reduces project times if used correctly with software development methodologies like Agile.

Cloud allows network-based access to communication tools like emails and calendars. Wats app is also a cloud-based infrastructure as it comes in communication it is also one of the examples of cloud computing. All the messages and information are stored in service providers hardware.

Ease of access, requirements of plasma, and the plasma donation statistics (1,2) are taken into consideration while researching the topic. There is a steady need for plasma and plasma components (red plasma cells, plasma plasma, platelets). Every minute of every day someone is in need for plasma, however as e.g., in Canada (3), only 1 in 60 Canadians gave plasma last year, when almost 1 of every 2 Canadians is eligible to donate. 52% of Canadians say they or a family member have needed plasma or plasma products. The plasma donation rate in high-income countries is 33.1 donations per 1,000 people; 11.7 donations in middle-income countries and 4.6 donations in low-income countries (1). As a result, finding plasma donor is becoming very difficult in almost every country.

There are some plasma donor finder applications such as plasma app by Red Cross which allows the donor to book appointment with plasma banks and also can find local plasma drives and donation centers quickly and easily (4). However, there is no direct communication between the donor and that clinic in need of a specific plasma type. As a result, this app is more beneficial for donors but not for clinics to find needed plasma type directly and promptly. Plasma Donor Finder application by Neologix (5) allows users in need for plasma to find nearest donors. Although this application helps finding donors, but the ease of communication with those donors is not prompt and it requires man power as the requester (patient or clinic) has to contact each donor individually. Also, there is no application that provides a proper communication channel to notify donors about the plasma donation requirements.

REFERENCES.

- 1. Plasma Facts and Statistics, American Red Cross, 2016. Available online: http://www.redcrossplasma.org/learn-about-plasma/plasma-facts-and-statistics
- 2. 5. Plasma Donor Finder, 2016 Google. Available online: https://play.google.com/store/apps/details?id=com.Neologix.PlasmaDonorFinder&hl=en
- 3. public_activity, 2017 GitHub, Inc., available online: https://github.com/chaps-io/public_activity#first-time-setup

4. jquery.timepicker, 2017 GitHub, Inc., available online: https://github.com/cover/jquery-timepicker-rails