EMERGENCY MEDICAL HELP

A PROJECT REPORT

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Declaration by the Student

We hereby declare that the work reported in the B. Tech. project entitled as "**EMERGENCY MEDICAL HELP**", in partial fulfillment for the award of degree of Bachelor of Technology in Computer Science & Engineering submitted at Jaypee University of Engineering and Technology, Guna, as per best of my knowledge and belief there is no infringement of intellectual property right and copyright. In case of any violation I will solely be responsible.

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CERTIFICATE

This is to certify that the work titled "**EMERGENCY MEDICAL HELP**" submitted by "Sudhanshu Yadav , Utkarsh Raghuvanshi , Utkarsh Singh"in partial fulfillment for the award of degree of Bachelor of Technology in Computer Science & Engineering of Jaypee University of Engineering & Technology, Guna has been carried out under my supervision. As per best of my knowledge and belief there is no infringement of intellectual property right and copyright. Also, this work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma. In case of any violation concern student will solely be responsible.

Signature of Supervisor
Dr. Ratnesh Litoriya Designation
Date

ABSTRACT

In web based medical help support which is mainly used for providing immediate online medical help which includes requesting and appointment with a doctor, maintaining the record of available blood donors, shopping of basic first-aid equipment, get information for Yoga, Ayurveda, Cardio etc which categories in good habits. Emergency Medical Help (E.M.H) is used for maintaining record of blood along with other facilities provided by E.M.H. As we know Blood Bank is more dependent on manual work which is time consuming, if a person requires a particular type of blood and if that type of blood is not available in that blood bank then it is time consuming to arrange blood from the other blood bank it may affect the patient health because time is more important in accidental cases. So in a web based blood system is best for checking whether particular type of blood is available or not and also it give location whether that available.

ACKNOWLEDGEMENT

We are highly indebted to Jaypee University of Engineering & Technology , Guna for their guidance and constant supervision as well as for providing necessary information regarding the minor project & also for their support in completing the project.

Therefore, we consider ourself as a very fortunate team as we were provided with an opportunity to be a part of it. We are also grateful for having a chance to meet our project supervisor and other faculty members who led us through this minor project phase.

Bearing in mind previous I am using this opportunity to express my deepest gratitude and special thanks to the our project supervisor Assistant Professor Dr. Ratnesh Litoriya Dept. of Computer Science & Engineering JUET, GUNA who in spite of being busy with his duties and research, took time out to hear, guide and keep me on the correct path and allowing me to carry out my project at the esteemed organization and extending during the project completion phase.

I perceive this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future.

Sincerely,

SUDHANSHU YADAV (161B239)

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Date:

EXECUTIVE SUMMARY

In web based medical help support which is mainly used for providing immediate online medical help which includes requesting and appointment with a doctor, maintaining the record of available blood donors, shopping of basic first-aid equipment, get information for Yoga, Ayurveda, Cardio etc which categories in good habits. Emergency Medical Help (E.M.H) is used for maintaining record of blood along with other facilities provided by E.M.H. As we know Blood Bank is more dependent on manual work which is time consuming, if a person requires a particular type of blood and if that type of blood is not available in that blood bank then it is time consuming to arrange blood from the other blood bank it may affect the patient health because time is more important in accidental cases. So in a web based blood system is best for checking whether particular type of blood is available or not and also it give location whether that available.

List of Figures PageNo.

ABBREVIATIONS

EMH-Emergency Medical Help

HTML-Hyper Text Markup Language

CSS-Cascading Style Sheets

SQL-Structured Query Language

PHP-Hypertext Preprocessor

IOT-Internet of Things

Table of Contents

1. INTRODUCTION

1.1 Problem Definition

The following problem arises when using a typical blood bank's existing system and appointment with doctor:

• Only the administrator of the blood bank had the access to the donor's information. If some detail from donor side went wrong then he needed to contact the hospital authority by calling, faxing, e-mailing, but not by themselves. This is a waste of time just for updating a piece of information and it may be troublesome for some donors.

• The only full proof of donor's recent blood donation was donor's ID, which can bring donor in problem if gets lost.

• The hospitals and Blood banks are required to maintain account of blood bags in the inventory. This increases with each blood donation recorded in our system, and decreases as they are checked out upon hospital requests. Our system will need to keep the information up-to-date to ensure correctness of the inventory.

• Blood banks will only mail donors when the donated blood is disqualified, however, this mail is sent through the postal system to the donor's given address. If the donor's address is recorded incorrectly, the mail will be sent to the wrong address and the donor will never be notified that their blood is rejected and given the reason for that.

• Patients needed to go to the hospital for making an appointment which is very time consuming process.

• People needed to search about medical help at different places.

1.2 Project Overview/Specifications

Web based medical help support which has functionalities like blood donation system which is based on a centralized database record storing system and requesting appointment and other activities which brings ease in finding or searching relevant blood group and medical services available which will save time and cost efficiently.

This project provides an elegant management of blood, list of hospitals, blood banks and donors online. The main purpose of this project is to interconnect all the blood banks, hospitals, donors into a single network, validation, store various data and information of blood and health of each individual. This system is used to store data over a centralized server which consist of database where the individuals' information cannot be accessed by a third party.

The main aim of this project is to save lives of people by providing blood. Our project Online Blood Bank system is developed so that users can view the information of nearby hospitals, blood banks. This project is developed by three perspective i.e. hospital, blood bank and patient/donor. We have provided security for authenticated user as new user have to register according to their type of perspective and existing user have to login. This project requires internet connection. This application we are developing helps to select the nearby hospital online instantly by tracing its location using GPS. We are also proving a alert system for severe accidents as using that function an ambulance will be sent to your destination without any wastage of time. This application reduces the time to a greater extent that is searching for the required blood through blood banks and hospitals. Thus this application provides the required information in less time and also helps in quicker decision making.

1.3 Hardware Specification

Web development broadly refers to the tasks associated with developing websites for hosting via intranet or internet. The web development process includes web design, web content development, client-side/server-side scripting and network

security configuration, among other tasks. Web development is also known as website development.

Web development is the coding or programming that enables website functionality, per the owner's requirements. It mainly deals with the non-design aspect of building websites, which includes coding and writing markup.

Web development ranges from creating plain text pages to complex web-based applications, social network applications and electronic business applications.

The web development hierarchy is as follows:

- Client-side coding
- Server-side coding
- Database technology

1.4 Software Specification

A front-end dev takes care of layout, design and interactivity using HTML, CSS and JavaScript. They take an idea from the drawing board and turn it into reality. What you see and what you use, such as the visual aspect of the website, the drop down menus and the text, are all brought together by the front-end dev, who writes a series of programmes to bind and structure the elements, make them look good and add interactivity. These programmes are run through a browser.

The backend developer engineers what is going on behind the scenes. This is where the data is stored, and without this data, there would be no frontend. The backend of the web consists of the server that hosts the website, an application for running it and a database to contain the data. The backend dev uses computer programmes to ensure that the server, the application and the database run smoothly together. They need to analyse what a company’s needs are and provide efficient programming solutions. To do all this amazing stuff they use a variety of server-side languages, like PHP, Ruby, Python and Java.

If you are undecided, you could consider becoming a full-stack dev. Full-stackers take care of both the frontend and the backend, and need to know how the web works on all levels, in order to determine how the client- and server-sides will relate. Naturally working up to this level of expertise will take longer, as there is more to learn.

2. LITERATURE SURVEY

2.1 Existing System

There are two types of process in the existing system: the blood donation process by donors, and the blood request process by hospitals. In both processes, an administrator is in charge of managing the blood inventory in the blood bank.

2.1.1 Blood Donation Process by Donors

When a new donor comes to donate blood, they are required to fill out their personal information during the registration process before making a donation. After the donation, the donor is given a donor identification card with their name, blood type and a barcode to be used as a reference for future donations. The barcode is used to retrieve the donor's record containing their personal information, medical history and donation information, including blood results. Only blood bank administrators have the authority to access the donor's records, since the system is only available for their use within the organization. This makes it difficult for donors to make changes to their personal information within the system. That is, for donors to update their personal information, such as their phone number, mailing address, or e-mail, they cannot update the information by themselves, but have to contact the blood bank center to update their information. 14 At the back the card is a table that contains number of donations, date, location, and the blood collector's signature. Existing donors can submit their donor ID cards to retrieve their personal information and donation records and start the blood donation process, and they will be given a new card after they have donated blood for a total of eight times. Having a donor ID card may be a tangible reminder to people that they are helping lives as a blood donor; however, possessing a physical card comes with drawbacks such as loss or damage. To ensure donors can still identify themselves with the system, other credentials, such as username and password, can be used as a safeguard if their donor ID card is lost or damaged. If the donated blood is disqualified, the donor will be notified through postal mail that their blood component is reactive to viruses , meaning that there is a positive result of the blood

being infected, and the organization will also inform the donor to perform another blood test at the blood bank to confirm the result of blood. If the blood is qualified, the administrator then will deposit the blood into the inventory for future requests.

2.1.2 Blood Request Process by Hospitals

Hospitals can request for blood by calling in or e-mailing the blood bank the type of blood and the quantity that is in need. The administrator is responsible in 15 checking the availability of the blood type according to the request. If the requested blood type is available, the administrator will withdraw the blood from the inventory and transfer it to the hospital. However, if the requested blood is unavailable, the administrator will send an e-mail to inform the hospital.

2.2 Proposed System

The system we present here is adequate for searching blood donors for available blood and thereby saving valuable time and money. This application provides necessary options to serve people on their emergency need making them free from worrying for blood by providing lot of donors at a single click. The options that are provided by this application are:

- Donor registration and blood collection
- Blood requisition/issue.
- User access control.
- Detailed donor database.
- Maintain and update unique donor identification
- Search facilities by donor, patient, doctor, blood bag, and other recognizing factors.
- Correlation and cross referencing between files.
- Powerful search for donors by blood group, sex, location, telephone number.
- Sends various auto-SMS for alerting donor and reminding location and time.
- Adequate security to protect users' potential information.

Besides these, there are ample scopes to improve this application. Some more features can be added to establish this application for a social networking application. Blood Donation Management System is a web enabled and mobile-based application to maintain day to day transactions in a blood bank. This application is to create an e-Information about the donor and organization that are related to donating the blood. This software help to register all the donors, Blood collection details, blood issued details etc . When registration is completed, a user becomes a donor who will be able to open an account providing fundamental information with email ID and Password . They can modify their account information by updating username, Facebook ID, mobile number . If donors are eager to donate blood they can confirm the system . They can remove their account from the system if they wish for. In this application, Admin is the main authority who can add, delete, and modify information if required. A user is able to search donor from the home page. This application provides search facilities by donor, patient, doctor, blood bag, and other recognizable factors. A dynamic search will show donor information by nearest place and blood donation expire date. It will make easier to find and contact with donors when needed. There is add on facility of printing available as an option . Interface with grouping and testing machine provides user friendly communication. This application sends various auto E-MAIL for alerting donor and reminding location and time. Donor can send or receive message within this system. This system will automatically alert a donor before 24 hours of donating blood reminding the location and time by sending message when he/she is again eligible for donating blood after his/her previous donating. Donor can used this application through android based mobile phone. Donors login into the system with their e-mail Id and password. It allows donor to search others by location, blood group. They can get other donors details information. If they want to contact with donor, they can directly call to available donors. We can say in short that EMERGENCY MEDICAL HELP is an online centralized web portal which helps blood banks, hospitals and any other users to look for donors in their nearby area who will be available in quick time. This system helps the admin to check the database when he wants and it is very flexible for the hospital management, blood banks and any users to retrieve the data when they want and they can have the data

according to the query given by the user from one particular date to another by the query given by admin.

2.3 Feasibility Study

Technical Feasibility: The feasibility study is performed to determine whether the proposed system is viable considering the Technical, Operational an Economical factors. After going through feasibility study we can have a clear-cut view of the system's benefits and drawbacks.

This project is developed using front-end technologies like HTML, CSS, BOOTSRAP, PHOTOSHOP and back-end technologies like SQL AND PHP.

Operational Feasibility: The proposed system is operationally feasible because of the following reasons:

• The user is benefited more as most of his time is saved. The user is serviced at his place respectively.

•The cost of the proposed system is almost negligible when compared to the benefits gained.

Economical Feasibility: The analysis through collection of data plays the wider role in the analysis of the system. So the data at different levels of management to keep track of full information of the system.

3. SYSTEM ANALYSIS & DESIGN

3.1 Requirement Specification

User Requirements: There are two internal users involved in this system. The user requirements are considered as follows: Donor 1. To be able to view their donation records, including where and when they made donations, and the blood results for each, to learn of their donated blood quality and schedule their next donations. To be able to view and update their personal information, including name, contact address, and phone number, to keep their donor's information record upto-date with the blood bank. To be notified of the blood results of their previous donation by e-mail, to know the success of their donation.

Administrator: To be able to create, update, delete, and query donor's records in order to manage donor information. To be able to create, update, delete, and retrieve donation records to manage information about donations made. To be able to deposit donated blood into inventory when donations are made. To be able to withdraw blood from the inventory and keep a record of blood stocks to always keep count of the blood bags. To be able to create, update, delete, and retrieve request records from hospitals to manage hospital requests for blood. To be able to create, update, delete, and query hospital's records in order to manage hospital information. To be able to send e-mails to donors for their user account and blood results through the system. To be able to send e-mail responding to hospitals for their blood requests through the system.

3.2 Flow Diagram

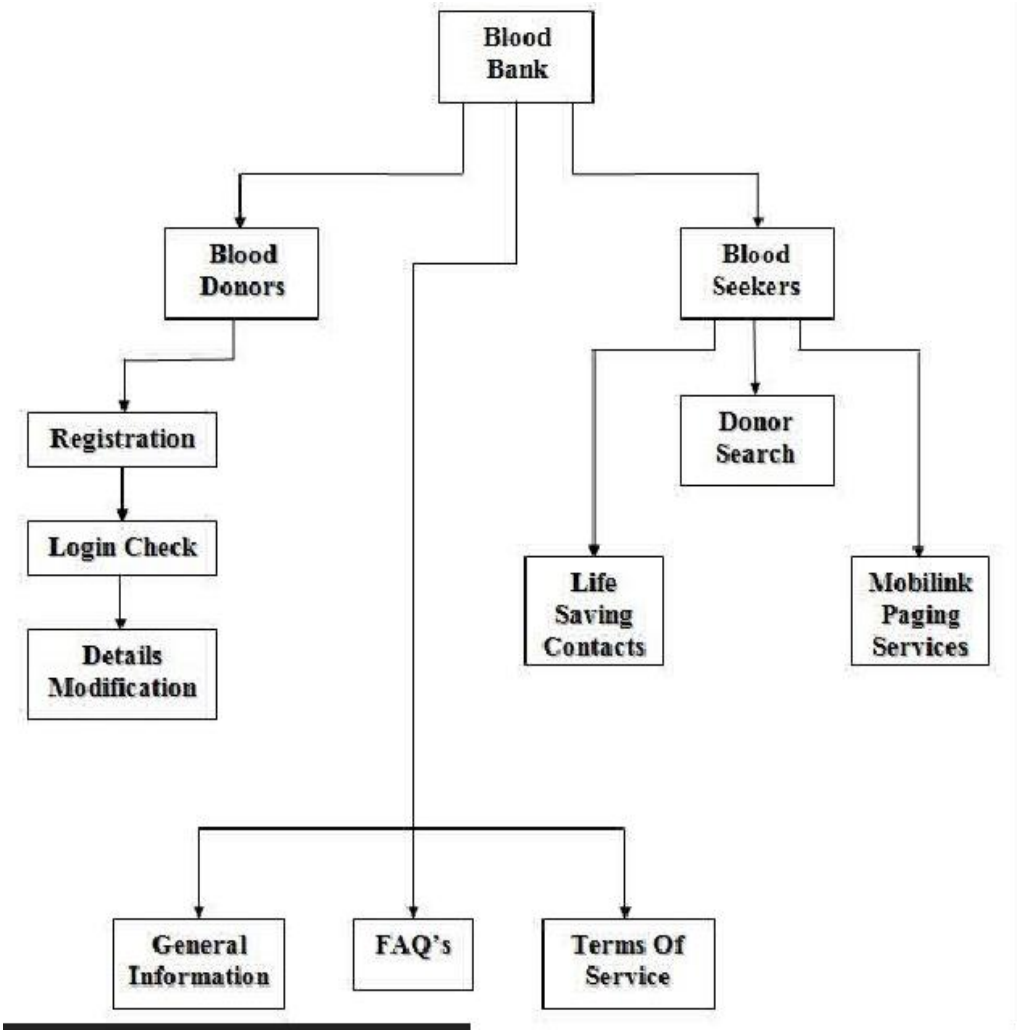

Figure 3.2.1: Flow Diagram for EMH

3.3 Flowcharts / DFDs

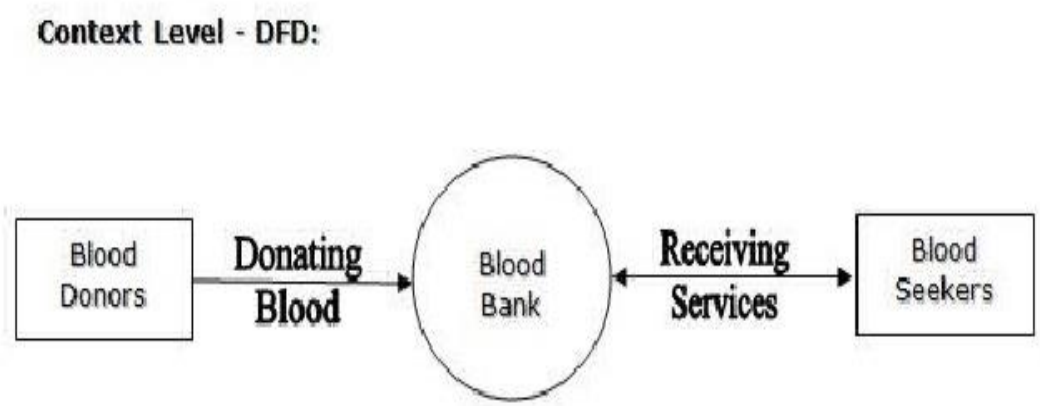

Figure3.3.1: Level 0 DFD for EMH

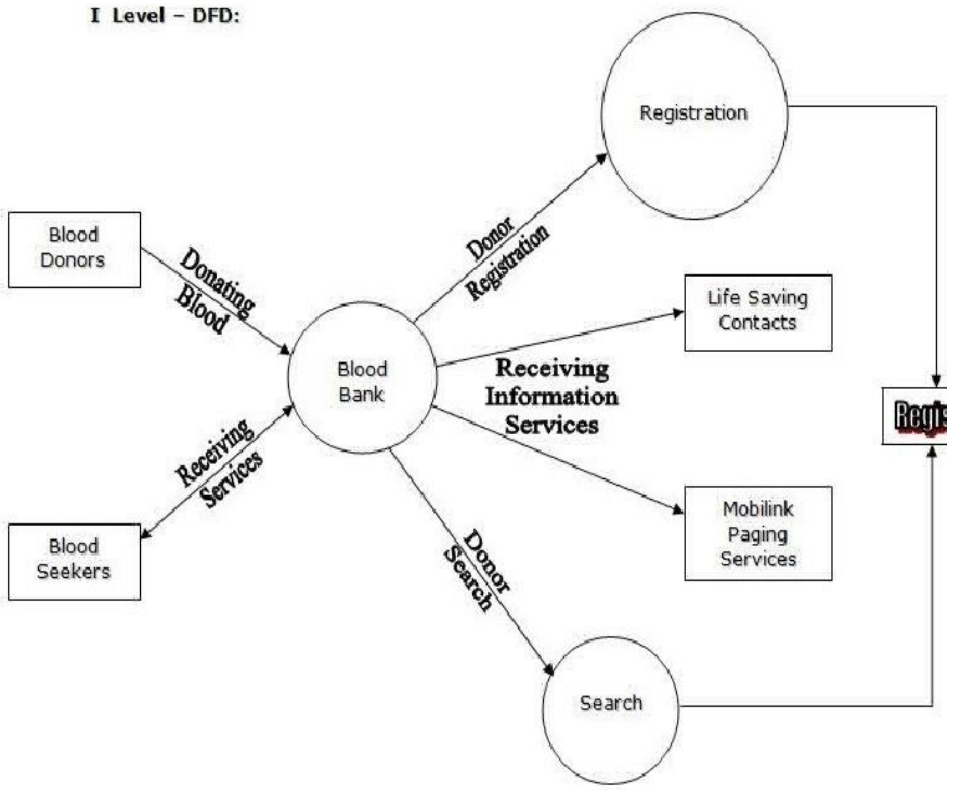

Figure 3.3.2: Level 1 DFD for EMH

3.4 USE CASE DIAGRAM

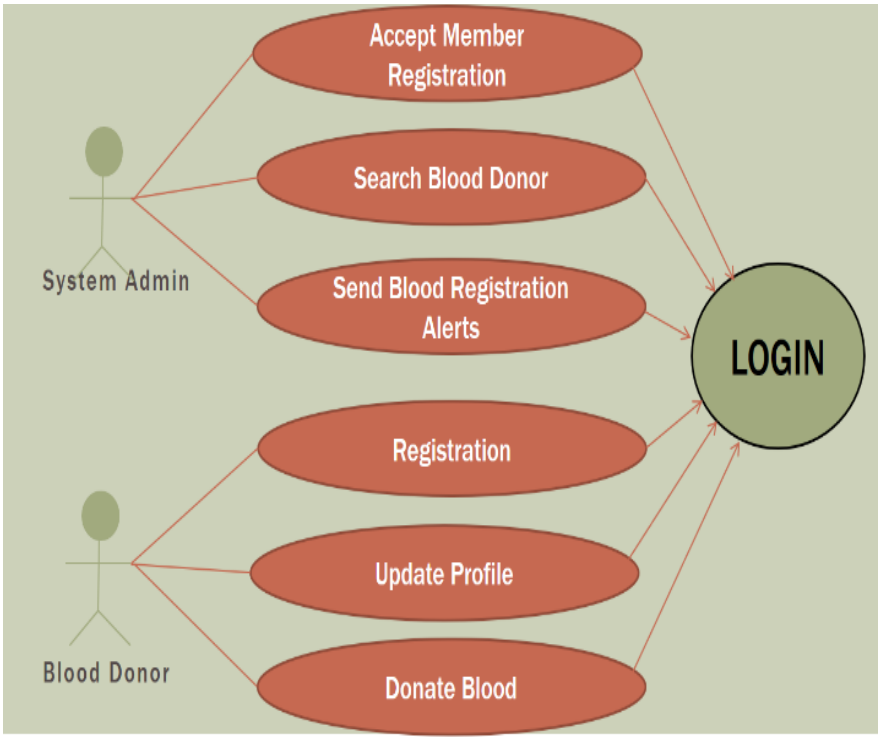

Figure 3.4.1: Use case diagram for EMH (Admin and Donor)

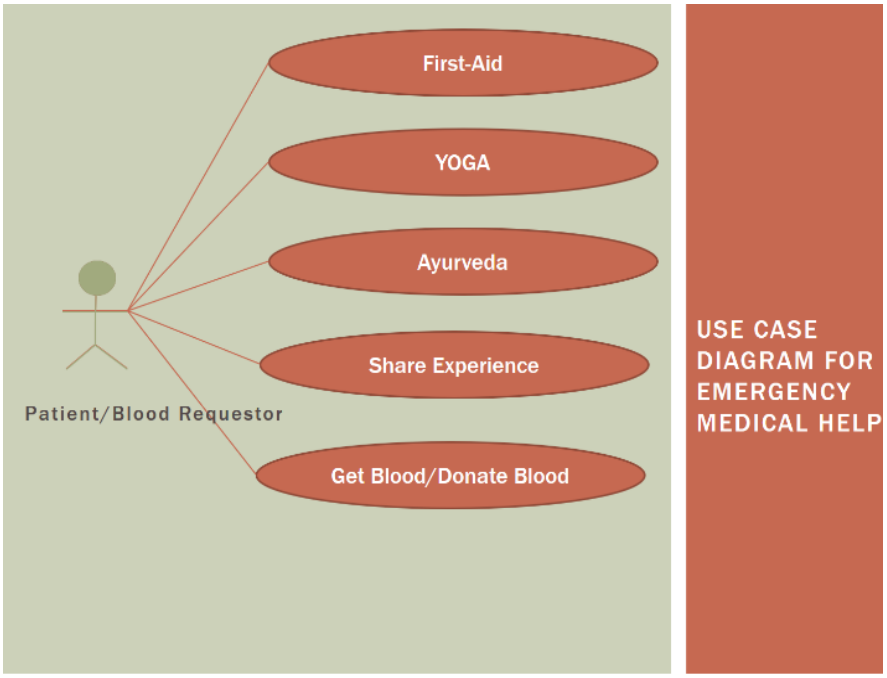

Figure 3.4.2 : Use case diagram for EMH (Patient/Blood Request)

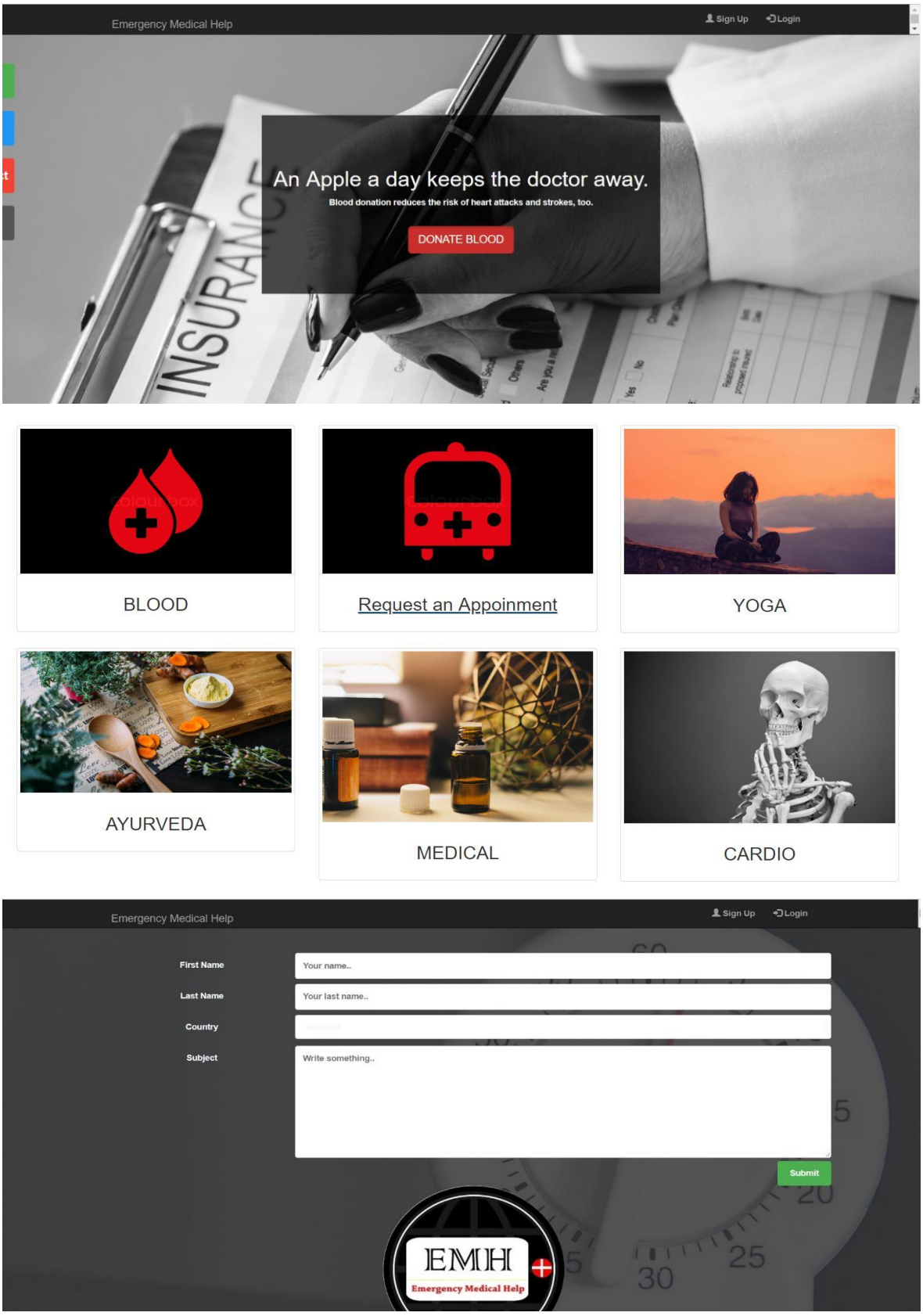

Figure 3.4.3: Home page of EMH.

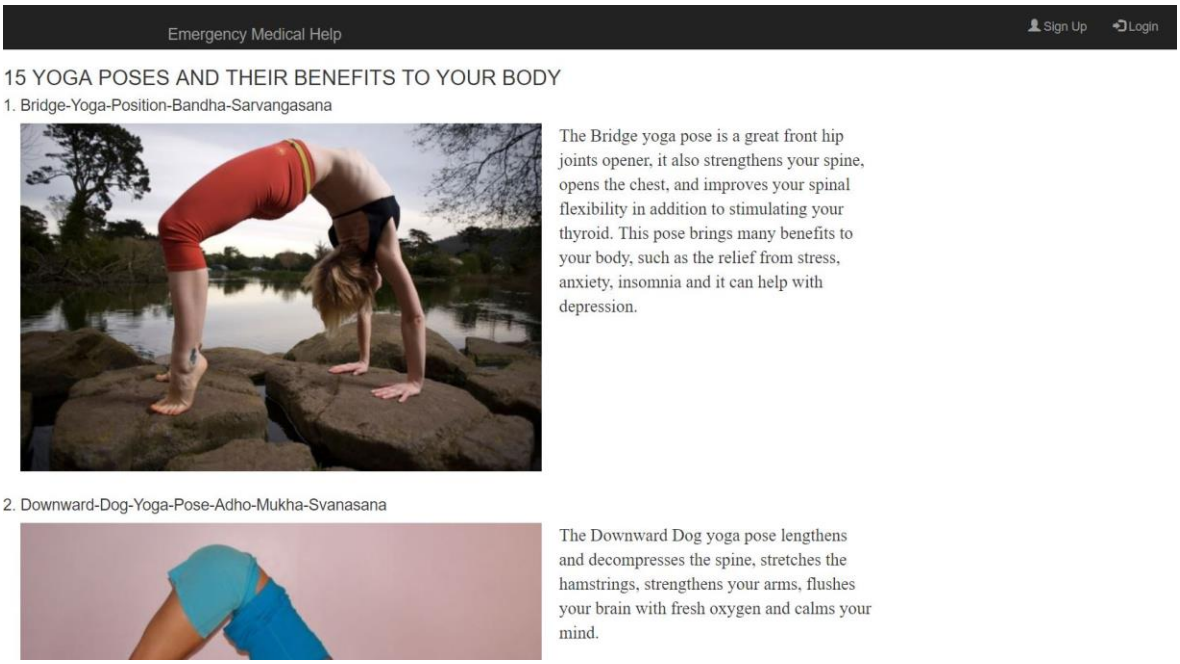

Figure 3.4.4: Yoga Page

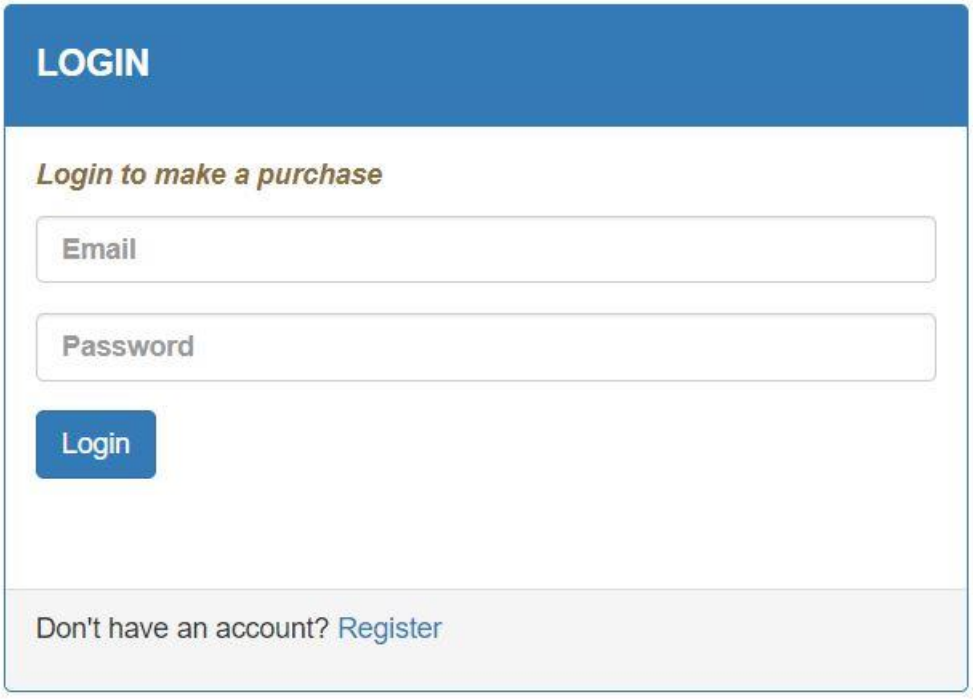

Figure 3.4.5: Login Form

4. DESCRIPTION

4.1 Internet of Things for Health Care

Things interact with employing sensors, transceivers and microcontrollers for empowering communication and is built with suitable protocol stacks which help them interacting with everyone and communicating with the users the illustration of Internet of Things, thus becoming the constitutive part of the Internet. Nowadays, Internet is impacting the several aspects of the potential user's everyday life. By keeping these things in view, several applications are developed
based on IoT in which every physical object is connected to the Internet by employing sensor devices. The dependency of healthcare on IoT is increasing day by day to enhance the access to care, strengthen the quality of care and finally reduce the cost of care.

Depending on an individual's unique biological, behavioural and cultural characteristics, the combined practice of wellbeing, healthcare and patient support is defined as personalised healthcare. This empowers each and every individual by following the basic healthcare principle of "the suitable care for the right person at the right time", which leads to more desirable results and improvement in healthcare systems, many health problems have been getting undetected in conventional healthcare systems. But pervasive, non-invasive, powerful IoT based systems have been helpful in monitoring and analysing the patient data easily. In IoT based healthcare, various distributed devices gather, analyse and pass real time medical information to the cloud, thus making it possible to collect, store and analyse the big data streams in several new forms and activate context dependent alarms. This innovative data acquisition paradigm allows continuous and ubiquitous medical device access from any connected device over the Internet.

A rising interest of body wearable sensors has recently emerged as powerful tools for healthcare applications and different devices are currently available commercially for different purposes including personal healthcare, activity awareness and fitness.

Researchers also have proposed new clinical applications of such technologies for systems of remote health monitoring which include functionalities for long term status recording, and medical access to physiological information of the patient [4]. Most remote health monitoring proposed frameworks has architecture of a three tier: body sensor network tier which includes a wearable sensors works as units for data acquisition such as blood pressure, heart status and body temperature, the second tier include communication and networking and the service which collects data from sensors and forwarded it [5, 6]. The third tier includes the processing and analyzing nodes. Figure 1 shows the architecture of healthcare system [7, 8] which include three phases environment monitoring to acquire data, this data is then gathered and transfer for the third phase for data analysis and investigation.

Figure 4.1.1: Healthcare monitoring system architecture[5]

4.2 About Ayurveda

AYURVEDA is a system of medicine with historical roots in the Indian subcontinent. Globalized and modernized practices derived from Ayurveda traditions are a type of alternative medicine. In countries beyond India, Ayurveda therapies and practices have been integrated in general wellness applications and in some cases in medical use.

The main classical Ayurveda texts begin with accounts of the transmission of medical knowledge from the Gods to sages, and then to human physicians. In Sushruta Samhita (Sushruta's Compendium), Sushruta wrote that Dhanvantari, Hindu god of Ayurveda, incarnated himself as a king of Varanasi and taught medicine to a group of physicians, including Sushruta Ayurveda therapies have varied and evolved over more than two millennia. Therapies are

typically based on complex herbal compounds, minerals and metal substances (perhaps under the influence of early Indian alchemy or rasa shastra). Ancient Ayurveda texts also taught surgical techniques, including rhinoplasty, kidney stone extractions, sutures, and the extraction of foreign objects.

The word "ayurveda" is Sanskrit: आयुर्वेद, Āyurveda, meaning knowledge of life and longevity.

The central theoretical ideas of Ayurveda developed in the mid-first millennium BCE, and show parallels with Sāṅkhya and Vaiśeṣika philosophies, as well as with Buddhism and Jainism. Balance is emphasized, and suppressing natural urges is considered unhealthy and claimed to lead to illness. For example, to suppress sneezing is said to potentially give rise to shoulder pain. However, people are also cautioned to stay within the limits of reasonable balance and measure when following nature's urges. For example, emphasis is placed on moderation of food intake, sleep, and sexual intercourse.

Ayurveda also names three elemental bodily humors, the doshas (called Vata, Pitta and Kapha), and states that a balance of the doshas results in health, while imbalance results in disease. One Ayurvedic view is that the doshas are balanced when they are equal to each other, while another view is that each human possesses a unique combination of the doshas which define this person's temperament and characteristics. In either case, it says that each person should modulate their behavior or environment to increase or decrease the doshas and maintain their natural state.

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Ayurveda has eight ways to diagnose illness, called Nadi (pulse), Mootra (urine), Mala (stool), Jihva (tongue), Shabda (speech), Sparsha (touch), Druk (vision), and Aakruti (appearance). Ayurvedic practitioners approach diagnosis by using the five senses. For example, hearing is used to observe the condition of breathing and speech. The study of the lethal points or marman marma is of special importance.

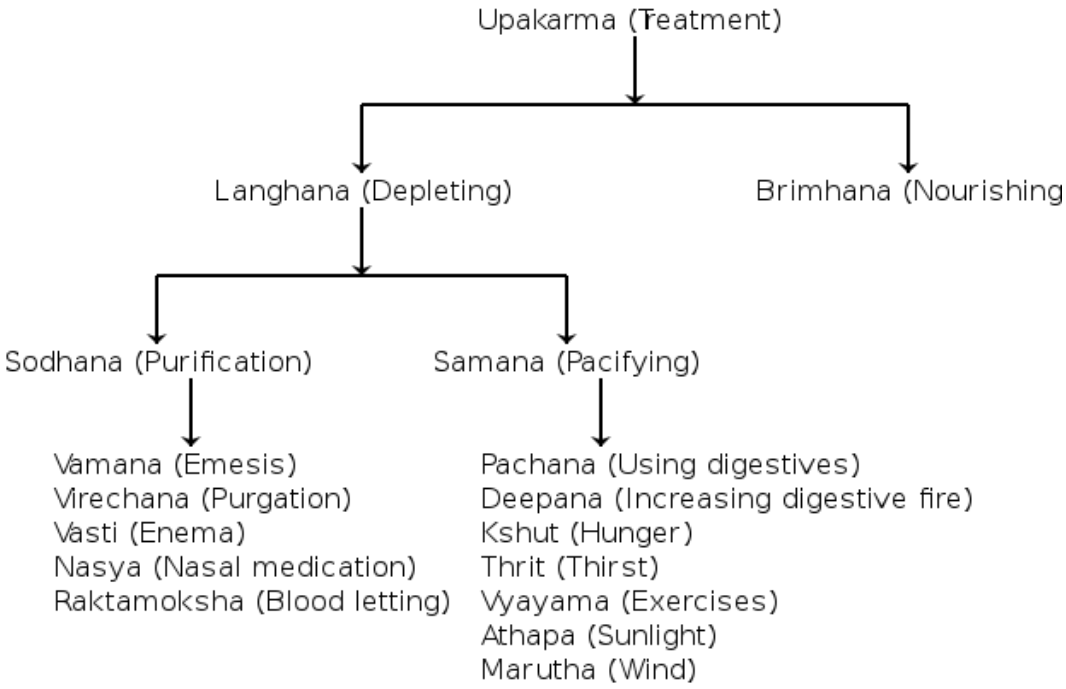

Figure 4.2.1: Stages of treatment in Ayurveda [1]

Two of the eight branches of classical Ayurveda deal with surgery (Śalya-cikitsā and Śālākya-tantra), but contemporary Ayurveda tends to stress attaining vitality by building a healthy metabolic system and maintaining good digestion and excretion. Ayurveda also focuses on exercise, yoga, and meditation. One type of prescription is a Sattvic diet. Ayurveda follows the concept of Dinacharya, which says that natural cycles (waking, sleeping, working, meditation etc.) are important for health. Hygiene, including regular bathing, cleaning of teeth, tongue scraping, skin care, and eye washing, is also a central practice.

Plant-based treatments in Ayurveda may be derived from roots, leaves, fruits, bark, or seeds such as cardamom and cinnamon. In the 19th century, William Dymock and co-authors summarized hundreds of plant-derived medicines along with the uses, microscopic structure, chemical composition, toxicology, prevalent myths and stories, and relation to commerce in British India. Animal products used in Ayurveda include milk, bones, and gallstones. In addition, fats are prescribed both for consumption and for external use. Consumption of minerals, including sulphur, arsenic, lead, copper sulfate and gold, are also prescribed The addition of minerals to herbal medicine is called rasa shastra.

Ayurveda uses alcoholic beverages called Madya, which are said to adjust the doshas by increasing Pitta and reducing Vatta and Kapha. Madya are classified by the raw material and fermentation process, and the categories include: sugar-based, fruit-based, cereal-based, cereal-based with herbs, fermentated with vinegar, and tonic wines. The intended outcomes can include causing purgation, improving digestion or taste, creating dryness, or loosening joints. Ayurvedic texts describe Madya as non-viscid and fast-acting, and say that it enters and cleans minute pores in the body.

4.3 About Cardiology

Cardiology is a medical specialty and a branch of internal medicine concerned with disorders of the heart. It deals with the diagnosis and treatment of such conditions as congenital heart defects, coronary artery disease, electrophysiology, heart failure and valvular heart disease. Subspecialties of the cardiology field include cardiac electrophysiology, echocardiography, interventional cardiology and nuclear cardiology.

The basic functioning of the cardiovascular system includes the way the heart processes oxygen and nutrients in the blood, which is called coronary circulation. The circulation system consists of coronary arteries and coronary veins.

There are a range of disorders of the cardiovascular system that are treated and studied under the field of cardiology. Among them are acute coronary syndrome, which encompasses the broad range of myocardial infarction symptoms. Angina pectoris, atherosclerosis, coronary heart disease and restenosis are other common

disorders. Broader categories of disorders in the field of cardiology include cardiac arrest; disorders of the myocardium, or the muscle of the heart, which include varieties of cardiomyopathy; disorders of the pericardium, or the outer lining of the heart, which include types of pericarditis; disorders of the heart valves, including the aortic valve, the mitral valve, the pulmonary valve and the tricuspid valve; congenital heart defects, which range from atrial septal defect to ventricular septal defect; diseases of the blood vessels, or vascular diseases, which includes aneurysm, deep vein thrombosis, varicose veins, vasculitis and diseases of other blood vessels.

Several devices are used in cardiology, including various types of balloons and defibrillators, a pacemaker, and a stethoscope. Artificial hearts also are used and studied in the field of cardiology.

4.4 About Yoga

Yoga is a group of physical, mental, and spiritual practices or disciplines which originated in ancient India. Yoga is one of the six orthodox schools of Hindu philosophical traditions. There is a broad variety of yoga schools, practices, and goals in Hinduism, Buddhism, and Jainism. The term "yoga" in the Western world often denotes Hatha yoga, a physical practice of postures called asanas.

“Y” reminds us that the word “yoga” comes from the Sanskrit word *“*yogah*,”* which means “to yoke or to unite.” Indeed, the goal of yoga is to uncouple oneself from the material world and to unite oneself with the God of Hinduism, commonly understood to be Brahman, the impersonal cosmic consciousness of the universe. Put another way, yoga is the means by which the user’s mind is merged into the universal mind.

“O” represents the Hindu mantra *“*Om*”*—a sacred Sanskrit syllable cherished by Hindu yogis as the spoken quintessence of the universe. Repeating such mantras as Om over and over is a principal means by which yoga practitioners work their way into altered states of consciousness. The objective of achieving an altered state

of consciousness is always the same: to dull the critical thinking process because the mind is seen to be the obstacle to enlightenment. As noted by the late Indian guru Bhagwan Shree Rajneesh, "the goal is to create a new man, one who is happily mindless." Shockingly, what was once relegated to the kingdom of the cults is now being replicated in churches. In the ashrams of the cults there is no pretense. Despite such dangers as possession or insanity, Hindu gurus openly encourage trance states through which devotees tap into realms of the demonic and discover their "higher selves." Whether experiencing involuntary movements or encountering illusory monsters, all is written off as progress on the road to enlightenment.

"G" is reminiscent of the gurus who developed and disseminated yoga for the express purpose of achieving oneness with the impersonal God of Hinduism. Most noteworthy among the Guru's is Patanjali—the Hindu sage who founded Yoga around the second century B.C. Of particular significance in the West is the aforementioned guru, Swami Vivekananda, a disciple of the self-proclaimed "god-man" Sri Ramakrishna. In 1893 Vivekananda used the Parliament of World Religions to skillfully sow the seeds for a new global spirituality. Second only to Vivekananda in the Westernization of yoga was Yogananda—proudly hailed as "Father of Yoga in the West." In 1920 he founded the L.A. based Self-Realization Fellowship, a principal means of disseminating Yoga to multiplied millions of Americans. Finally, of special note is Swami Muktananda, popularizer of kundalini yoga, a method by which divine energy thought to reside as a coiled serpent at the base of the spine is aroused; ascends through six chakras; and aims for union with the Hindu deity Shiva in a seventh center allegedly located in the crown of the head. Such Hindu gurus have been so successful in exporting yoga to the West that today it is common fare in classrooms, corporations, and evenchurches.

Finally, the "A" in Y-O-G-A will serve to remind you of the Hindu word asana. As repetition of the word *"Om"* is used to work devotees into altered states of consciousness, so too a regiment of asanas—or body postures—are used to achieve a feeling of oneness with the cosmic energy flow of the universe. Coupled with breathing exercises and meditation practices, asana positions are the pathway to

serenity and spirituality. According to Yoga Journal, "asanas are their own type of meditation; to perform difficult postures you have to focus on your body and breath and relax into the pose." While multitudes are being seduced into believing that asanas are spiritually neutral, nothing could be farther from the truth. Indeed, as pointed out by Swami Param of the Dharma Yoga Ashram in New Jersey, to think of asanas as mere body positions or stretching exercises is analogous to believing "baptism is just an underwater exercise."

5. Results

5.1 Death due to lack of Blood

India has shortage of 35 tanker-trucks of blood required for medical procedures. On the other hand, in some states, excess of blood is leading to wastage, according to an India Spend analysis of the government data. The shortage was estimated at 1.1 million units as blood is measured with a unit being either 350 ml or 450 ml – in 2015-16, Minister for Health and Family Welfare JP Nadda told the Lok Sabha in July 2016.

The data is converted into tankers, assuming a standard tanker-truck of 11,000 litres and blood being 350 ml unit .India is 9 per cent short of its blood requirement in 2015-16 as oppose to 17 per cent shortage in 2013-2014.Bihar is 84 per cent short of its blood requirements, more than any other state, followed by Chhattisgarh (66 per cent) and Arunachal Pradesh (64 per cent).Chandigarh had almost nine times the blood it needed, Delhi three times, Dadra and Nagar Haveli, Mizoram, and Pondicherry twice, according to government data.

India has 2,708 blood banks, but 81 districts still lack one, according to government data. Chhattisgarh has the most districts without a blood bank (11), followed by Assam and Arunachal Pradesh (9).Blood donations are largely from and for the same community, said Zarin Bharucha, pathologist and Chairperson of Federation of Bombay Blood Banks. Rural areas find blood supplies harder to access. “India has a huge rural population, almost 70 per cent, and we need to be able to provide blood in the most remote areas also,” Bharucha said Shortages may also be due to the fact that there is no central collection agency, leaving the logistics of collecting blood to single blood banks and local governments. Some areas may collect too much blood at the same time, instead of doing it at a constant run. “This leads to two issues,” said Bharucha. “First, that area is likely to experience a shortage of donations in the future. In a country without a donation culture, if everyone donates at the same time, they won’t show up for a while. Second, you might have so much blood that you won’t need it. So, a part of it will be wasted.”

Between January 2011 and December 2015, 63 blood banks across Mumbai wasted 1,30,000 litres of blood, according to a media report that quotes a reply that Right to Information activist Chetan Kothari received from the Mumbai District AIDS Control Society, which revealed that the blood was discarded because it was stored for too long.

World Health Organisation guidelines on blood donations require all blood to come through voluntary donations from low-risk populations. The National Aids Control Organisation, a division of the Ministry of Health and Family Welfare, running HIV/AIDS control programmes, reported that blood donated voluntarily increased from 54 per cent in 2006 to 84 per cent in 2013-2014. Activists said this figure is misleading. They argue that NACO started counting family donations as voluntary, a practice that goes against WHO's definition of voluntary donation. Paid "donations" were banned by a Supreme Court ruling in 1996, but the practice continues. Hospitals that are short of blood often ask a patient's family to find what are called "replacement donors". "Not everyone has a donor available, so they might land up getting a paid donor, someone masked as a family member who already knows the question they will be asked," said Bharucha. Getting paid donors may not be safe as donors might either not be tested or provide a false medical history just in order to get paid, increasing the chances for the blood-receiver of getting a transfusion-transmitted infection such as HIV, hepatitis A and B and malaria. Shortages of blood also leads to a black market. In 2008, 17 people were kidnapped for two-and-half years and forced to donate blood so that the kidnappers could sell it to blood banks and hospitals, some of which were accused of being complicit, according to a media report in January 2015. They were forced to donate blood three times a week. The Red Cross says blood should be donated no more than once in 8-12 weeks. "Since the need for blood is increasing because the surgery field is improving and medical tourism is expanding, we need to spread awareness through the communities," said Bharucha. "We need to create a culture of regular donations, giving blood every three months will increase blood supply as well as blood safety," Bharucha added.

5.2 Death due to lack of Other Medical Reasons

Nearly 27% of the total deaths in India happen with no medical attention at the time of death, according to the 2013 civil registration data released by the Census directorate. Data based on 27 states and Union territories also indicated that only 43% of the total deaths happen in institutions and only 3.9% of the rest under the care of a qualified allopathic doctor. As against the number of deaths, 71% of the total births happen in institutions and other births get care from physicians, nurses, mid-wives etc. Experts say a large percentage of deaths happen without medical care due to high cost and inaccessibility to medical care in rural and hilly areas. According to experts, many people die due to lack of minor surgeries (Bell weather surgeries) and globally too in 2010, an estimated 16.9 million people died (32% of all deaths worldwide) due to lack of access to surgery and anaesthesia. A Lancet commission report says the above figure surpasses the number of deaths due to AIDS (1.46 million), tuberculosis (1.2million) and malaria (1.17million). "The government is still obsessed with communicable diseases and there are separate departments for such diseases in the health ministry, but surgical treatment is treated as an orphan without any representation," founder of Narayana Hrudayalaya, Dr Devi Shetty told TOI.

6. How can EMH Help ?

There are lot of medical websites in the world but in India there is no such website for medical aid which provides many services at common platform. The focus of this website is to help common people and make the medical facility easily available for them. As we have read in 1.1 and 1.2 that lot of people die due to lack of medical facility and medical help so, the main focus of the EMH is to reduce these happenings.

EMH will help donor to donate blood for social cause and the people can easily get blood by contacting them through website. EMH will also help people to book an appointment with doctor, it also has static pages of Cardio, Yoga , Ayurveda, Blood etc. EMH is plans in future to join with hundreds of insurance companies, hospitals. In most cases appointments are prioritized on the basis of medical need, and the team members who will care for you or your family have the expertise and skills to provide the best care possible.

7. METHODOLOGY

7.1Concept:

A Genuine person from the Administrator side will collect information about the blood donor like contact and address details for registration. After filtering the invalid data, the Blood donor will be uploaded in Online Blood Bank System site for general users. Before uploading their details, the Administrator will give unique username and password to each donor. The Administrator can also add new donor who registered through site and allows him to create his own account. The administrator searches various donors details based on normal or map based search. The administrator can view the account information and can also view the suggestion (feedbacks) given by different users of this site. The administrator can view total report of the site. Every donor will have their own e-mail address and password with which they will login to this site. After they logged on, he can search for other donors, view his own profile, and send message to other donors in the system. He can change and retrieve his password. General users are those who are new users in this site. They can view general information about the Blood Donation System details. They can give their suggestion about this site. They can register themselves and become a donor for the Online Blood Bank system. If a general user is registered as donor, he will be given user name and password with which he can maintain his own account. General user can act as recipient to blood if he requests for blood, he can search required donor based on location using Google Map and blood group. We have used MY SQL Server as database server.

7.2 Method:

This paper is aimed to develop online blood donation information. The entire work has been developed keeping in view of the distributed client server computing technology, in mind. The system is to create an eInformation about the donor and organization that are related to donating the blood. Through this application any person who is interested in donating blood can register himself as a donor. Moreover if any general consumer wants to make request blood online, he can also take the help of this site. The work has been planned to be having the view of

distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of SQL Server, The database connectivity is planned using the “SQL Connection” methodology . The standards of security and data protective mechanism have been given a big choice for proper usage. The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff. The system has been developed keeping in view of the distributed client server computing technology, in mind. The specification has been normalized up to 3NF to eliminate all the anomalies that may arise due to the database transaction that are executed by the general users and the organizational administration . The user interfaces are browser specific to give distributed accessibility for the overall system. The internal database has been selected as MY SQL . The basic constructs of table spaces, clusters and indexes have been exploited to provide higher consistency and reliability for the data storage. The MY SQL server was a choice as it provides the constructs of high-level reliability and security . At all proper levels high care was taken to check that the system manages the data consistency with proper business rules or validations. The database connectivity was planned using the latest “ MY SQL ” technology . The authentication and authorization was crosschecked at all the relevant stages.

8. Future Work

In India , there are many websites mend for medical purpose but there is no common platform/website which gives easy and fast access for all the medical facilities at the same place. This website will provide access to most of the facilities related to health and first-aid purpose. This website will provide facilities like: Donate Blood/Find a Donor, take appointment etc. The system provides immediate details of blood available in the donor. The system is very effective during emergency conditions. It saves their time and efforts.

- In future, we plan to improve the facilities.
- We will try to give ambulance and other medical services.
- Check with an assistant for tips (personal touch).
- For fast accessibility we will build an app for EMH.
- Track your blood (more details).

9. CONCLUSIONS

This website is mend for public welfare. This website is made keeping in mind that every person in need should get proper medical support and assistance in form of Emergency Medical Help. Hence, we have prepared this website for helping the people in need and to provide proper facility and support in certain circumstances. In recent days, it is noticed the increase in blood request posts on social media such as Facebook, Twitter, and Instagram. Interestingly there are many people across the world interested in donating blood when there is a need, but those donors don't have an access to know about the blood donation requests in their local area. This is because that there is no platform to connect local blood donors with patients. . It is a useful tool to find compatible blood donors who can receive blood request posts in their local area.Consequently, users can login and sign up using various social networks. This would increase number of donors and enhances the process of blood donation.The EMH is a 24×7 system which is essential for different kinds of people like blood donation system personnel, doctors, donors, recipients and other general users. Here any person who has undergone blood test can be registered in any authorized blood bank as donor. That person can get facilities like information about blood donation system, donors and recipients. This paper facilitates services like direct access to the site to get donor's information if there is an emergency. The goal of the paper is to present an online edge for bringing mutually giving blood donors and patients (blood requesters) who need blood. The primary objective of the paper is to create an interactive blood donors, blood requesters and blood bank clinics. This web application is to be conceived in its current form as a dynamic site requiring constant updates both from the blood donors as well as the blood requesters and is to enable blood donors (volunteer) to place their profile and blood requesters (patients) to publish their requests. In future, we will develop the mobile application which will provide the users (with multimedia cell phones) the service of finding a blood donor with map interface. Here the application will consist of a map which will highlight the various blood donors' locations and also it will give information about particular blood donors.

REFERENCES

[1] http://en.wepidia.org/wiki/Blood_donation.

[2] Web Based Blood Donation System [by Aware Sachin B , Arshad Rashid , Ansari aadil, Bombale R.R]

[3] World Blood Donor Day".World Health Organization. Retrieve 2008-06-01.

[4] https://clevelandclinic.org

[5] The search for online medical help [-by Susannah Fox and Lee Rainie]

[6] A Survey Paper on E-Blood Bank and an Idea to use on Smartphone by Tushar Pandit, A.S. Shinde Volume 113 – No. 6, March 2015.

[7] The Optimization of Blood Donor Information and Management System by Technopedia by P. Priya, V. Saranya, S. Shabana, Kavitha Subramani Volume 3, Special Issue 1, and February 2014.

[8] Blood Bank Management Information System in India, by Vikas Kulshreshtha Research Scholar, Dr.Sharad Maheshwari Associate Professor Government Engineering College Jhalawar.Vikas Kulshreshtha, and Dr.Sharad Maheshwari.

[9] Blood Donation Management System K M Akkas Ali1, Israt Jahan2, Md. Ariful Islam3, Md. Shafa-at Parvez4

[10] A New Concept of Blood Bank Management System using Cloud Computing for Rural Area (INDIA) Javed Akhtar Khan and M.R. Alony (Corresponding author: Javed AkhtarKhan) (Received 04 December, 2014 Accepted 14 February, 2015) (Published by Research Trend, Website).

[11] Development of a Blood Bank Management System Sumazly Sulaimana, Abdul Aziz K.Abdul Hamida, Nurul Ain Najihah Yusria Social and Behavioral Sciences 195 (2015) 2008 – 2013.

[12] Android Blood Donor Life Saving Application in Cloud Computing by T.Hilda Jenipha, R.Backiyalakshmi Volume-03, Issue-02, pp-105-108, 2014.

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