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Shreemit: Advance Blood Care Unit

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I. INTRODUCTION

As we know it's a difficult situation for all of us all over the world. Every year our nation requires about 4 Cr. units of blood, out of which only 5 Lakh units of blood are available. It is not that, people do not want to donate blood. Often, they are unaware of the need and also, they do not have a proper facility to enquire about it. As a result, needy people end up going through a lot of pain. India has many blood banks, all-functioning in a decentralized fashion. In the current system, individual hospitals have their own blood banks and there is no interaction between blood banks. The management is ad-hoc with no semblance of organization or standard operating procedures. Donors cannot access blood from blood banks other than the bank where they have donated blood. In present system all the blood banks are attached to hospitals and there is no stand-alone blood bank. Some hospital has its own systems and limitations. Because of low number of donors and a greater number of blood banks, the efficiency and quality of blood banks are low, resulting in wastage of blood and blood components. We have developed the 'SHREEMIT – Advanced Blood Care Unit' to solve the problem of the people, to save their time and life at earliest and doing all these in a clean, accurate and hassle free form. The report will further contain the background, project implementation, results & discussions, conclusion & future work, references.

II. BACKGROUND

A. Background

1) List of Tools and Technologies used

- a) **HTML5:** HTML5 is a mark-up language that is used for structuring and presenting the content created by the developer on the World Wide Web. HTML-5 is the latest version of HTML that contains many new features that help in building many powerful websites
- b) **CSS:** CSS is a style sheet language. Its full form is "Cascading Style Sheet". It is used for describing the presentation of the HTML project created by the developer on the World Wide Web. CSS 2.1 is the latest version of CSS available at present and used in most of the website development process.
- c) **Bootstrap:** It is a free open-source CSS framework developed to use in mobile-first and front-end Web development. It contains predefined mixed CSS and JavaScript-based designs that can be directly used for forms, buttons, navigation, and other interface components. The latest version of Bootstrap is Bootstrap-5, which has finally officially released.
- d) **MySQL:** It is an open-source relational database management system. Its name is given on the name of co-founder Michael Widenius's daughter "My" and the abbreviation of Structured Query language. So its name became MySQL. The latest version of MySQL is 8.0.12 that is used today.
- e) **PHP:** PHP is a general-purpose scripting language especially for projects of web development. It was originally developed by Danish-Canadian programmer Rasmus Lerdorf in 1994. The latest version of PHP used is 8.0.5.

2) Need of the Above Technologies

The main use and importance of HTML is that it is a browser-side language. Using this language only the developer can put all his ideas in the form of a website and then using CSS it can be designed properly and given a beautiful look. The main designing of websites uses a lot of HTML and CSS codes, so for cutting off the complexity we use Bootstrap. In bootstrap all the main components like nav-bar, buttons, headers and footers are pre-designed and are available fully functional and it can be directly embedded into the code for use. The main use of PHP and Sql is to make the backend responsive and functional.

3) Relevance

The online delivery system is widely used in various countries and regions of the world. However, its daily operation and proper maintenance of the database continue to use the traditional manual administration and hand-written codes. It's very hard to be effectively managed because of the human error percentage. On the basis of the present scenario of pandemic and the parallel low trading economic situations, how to make a proper chain sales network and provide a more convenient way of marketing and management were the key factors affecting the development of this project.

In this project, we have designed in such a way that the user data will directly be uploaded to the server and then it will directly move to the database administrator and will be further carried out. At the same time, on the other hand, the hospitals, blood banks and pharmacists who are connected to this service can easily update with the latest information about their products available in the shop like quantity and types of products left, the present price of the product and discount on them, etc. This creates a simple and open network between the customers and sellers. They can directly contact the seller if it is needed. It also decreases human error because the data is directly fed into the database by online cloud and servers, reducing the human error percentage.

4) *Project undertaken*

A delayed order and broken order or unclear billing system make you and your team more frustrating and annoyed. So, developing a proper chain management system and delivery system is very important. So, we are working on making such a system with different objectives. The objectives of the system are:

- a) To monitor Payment protection and detection.
- b) To monitor the current status of the shops and live update system
- c) To monitor availability of products in respective places.
- d) To monitor order completion by user feedback detection.

B. *Related work*

1) *Architecture of Next-Generation e-commerce Platform*

Yadong Huang, Yueting Chai, Yi Liu, Jianping Shen

E-commerce, driven by computer and internet technology, has experienced a significant growth in almost all fields during the past two decades. E-commerce has significantly changed the rules of business. Numerous research institutions and enterprises have made e-commerce more intelligent and convenient. Here, we propose a novel prototype of a next-generation e-commerce platform with an architecture framework and theoretical models. Each subject, including the individual, enterprise, and administrative department, has his/her personalized portal to complete the subject information synchronization, supply release, demand satisfaction, and social contact. By using the personalized portal, instead of the traditional trading platform, the consumers and suppliers can complete intelligent matching transactions without intermediate traders. Moreover, the overall transaction process can be reviewed, making the transaction safer, more transparent, and more interesting. Moreover, the interconnected personalized portals solve the isolated islands of information, and the counterparts support parallel processing. Thus, this may improve the operating efficiency of the entire society.

2) *Blood bank information system using Android application*

Karan Snotra: Neetu Mittal

Availability of blood during emergencies is highly critical for every single living thing. There are number of electronic blood donation centers for effective communication between them and medical facilities. None of the online blood donation center offers the immediate contact amongst beneficiary and them. This is the real downside of the current framework. The existing frameworks are tedious; require more labor and expensive. This paper presents a correlation between existing blood bank framework and enhanced framework to improve the effectiveness. The new considerations may increase the efficacy of current blood banks and help to upgrade from ordinary desktop framework to portable framework. The proposed work further discusses the components of enhanced framework in numerous perspectives such as the data being stored, data for future applications like kind of blood groups being donated and received by the individuals.

3) *A Survey on Impact of Data Analytics Techniques in E-commerce*

K.Moorthia, Gaurav Dhimanb, P.Arulprakash, C.Suresh, K.Sriharie

Data Analytics plays a vital role in e-commerce. All the e-commerce companies implemented data analytics in their firm. It also helps better stock maintenance, to build a robust supply chain, analyze information to detect fraud, predict what's in store for you, personalize recommendations for your customers, forecast inventory for the next season, measure your marketing and personalize the customer's shopping experience.

Data analytics used to compete between various e-commerce companies. The analysis is done based on the historic and statistical data. From the study, it has been concluded that the characteristics of the data have grown and are changing day by day. Hence, we need new models and algorithms to collect, store, process, analyze, and evaluate the data in the e-commerce field.

4) *Selling Goods on E-commerce platforms: The impact of Scarcity Messages*

Stefan Cremer, Claudia Loebbecke

E-commerce platforms prominently advertise low levels of inventory (“only three units left”) for 'long tail' goods in physical or digital formats. Thus, they wish to trigger consumer perceptions of scarcity and ultimately promote sales. In this paper, we develop a model on how in scarcity messages, the inventory level affects the online sales goods. We test the model against evidence from e-commerce sales data of about 35,000 printed books. We find that for e-commerce sales, lower inventory promotes sales late but inhibits purchases in the early stages of the purchase process. We reflect this counterintuitive finding against propositions grounded in different theoretical bodies. Thereupon, we summarize our research contributions and provide some implications for research and practice. We conclude with identified study limitations and suggestions for future research.

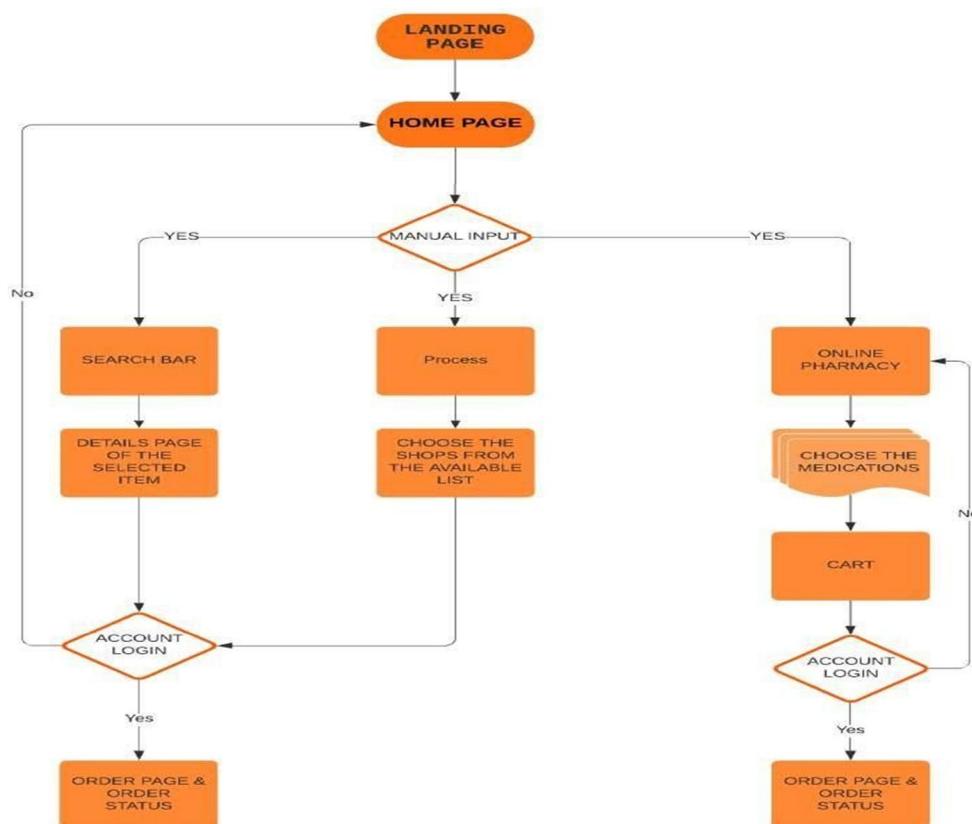
5) *Online Pharmacy: An E-Strategy For Medication*

Ashwani Chaturvedi, Umesh Kumar Singh, Amrish Kumar

The Internet has revolutionized the way in which ordinary people conduct their everyday business. People can bank, pay bills, manage investments, order various products, and obtain information on an infinite number of topics online. It is not surprising that such an innovation would provide a vehicle for the layperson to educate them and guide the direction of their health. Nor is it surprising that the healthcare industry would seize this opportunity to modernize a commonplace function—prescription dispensation. Many internet pharmacies offer overnight shipping, allowing customers to avoid the delay of regular mail. Internet pharmacies can offer privacy that is often lacking in a traditional pharmacy. However, there is a need to critically consider the ethical principles in the use of cyber medicine. The development of online pharmacies has prompted regulatory and monitoring actions at the federal, state, and professional organization levels. The sale of online medications in the international system is potentially dangerous and requires international regulation. Here is an overview of online pharmacies, their potential benefits, the organizations involved in regulating these sites, and the major controversies surrounding online pharmacies.

III. PROJECT ANALYSIS/ PROJECT IMPLEMENTATION

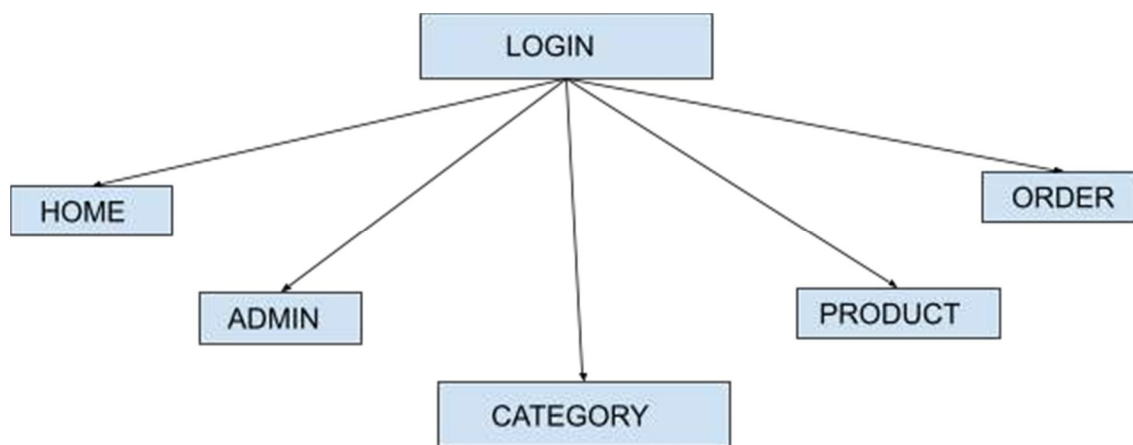
A. Block Diagram (Customer Perspective)



1) *Explanation*

- a) On visiting the website, the user sees a landing page, from where the user can start using the website.
- b) After the landing page, the user is going to be landing on the homepage where the user can search the items, he/she wants to buy or can select from the given list of items. On searching, the user will be forwarded over to the list of shops/hospitals from where the user can buy the selected item. The listed shops/hospitals will have their respected rating, which will be based on the customer's feedback.
- c) Once the shop/hospital and the items are selected, the user will be forwarded to the order page, where the user has to log in (if not did before) to place the order. While logging in the user will go through the email verification process. Once the verification is done the order will get placed and the order status will be shown to the user.

B. *Block Diagram (admin perspective):(Both Main & Pharmacy)*



1) *Explanation*

- a) First, the admin has to log in, once the login is done. The admin will be having 6 options which are Home, Admin, Category, Product, Order, and Logout respectively.
- b) On the Home Page, the total income will be shown to the admin. Total income will be calculated based on the total successful deliveries only.
- c) On the admin page, a list of all the admins with their respective details will be provided where the admin can update his/her details or can add a new admin.
- d) On the category page, the admin can see the list of all the collaborated shops/hospitals which will be shown to the customer. Here the admin can add a new shop/hospital or can remove the existing one.
- e) In the product section, we will be having all the items that the individual's shops/hospitals are ready to deliver. This list will get updated every week by the admin, and the update will be based on the information gained from the respective shops.
- f) The Order section will contain all the orders, pending and delivered, once the order is delivered successfully the admin can change the status to delivered and the total income on the Homepage will be automatically updated, and lastly, we have the logout section.

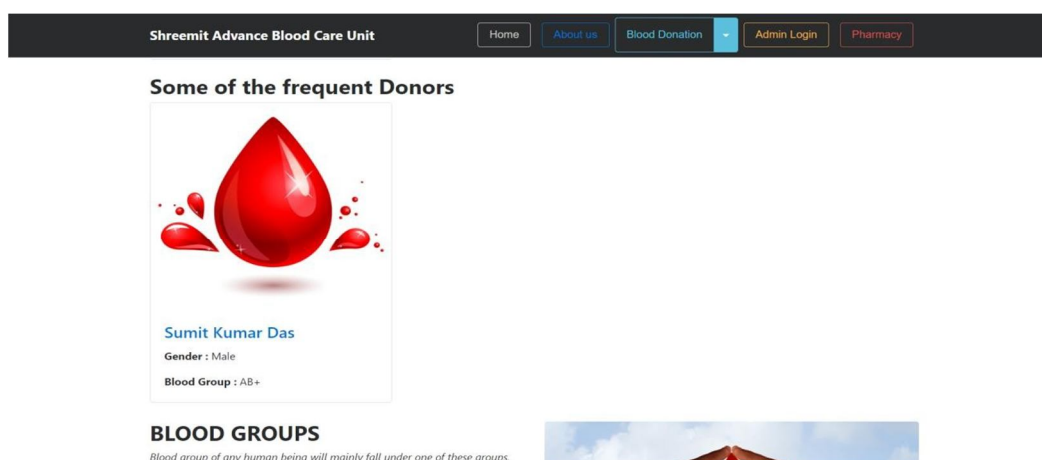
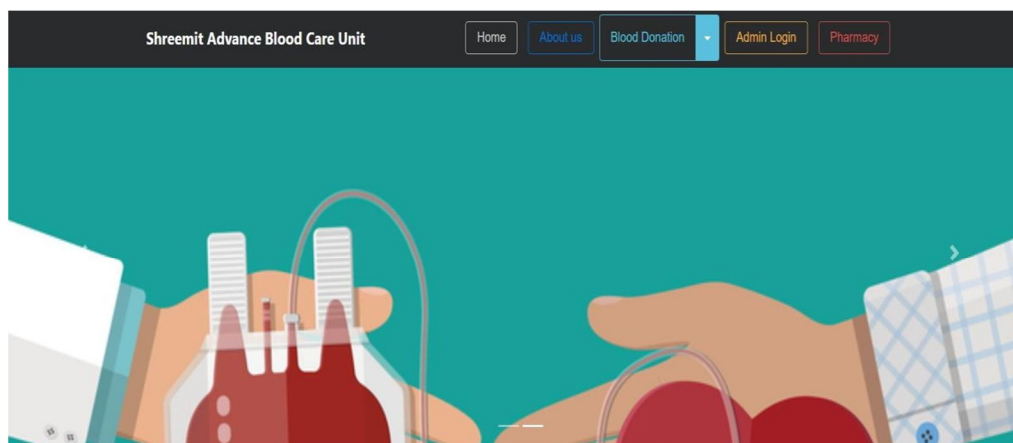
IV. RESULTS & DISCUSSIONS

After a series of hours of discussions, one of the members of the group came up with the idea of an online multi usability blood management and pharmacy app where one can buy various different medicines or can place order for blood units. After a guarded vision on the idea and the tools we will need, we came up with what is called "SHREEMIT- Advance Blood Care Unit".

The first and foremost motivation behind giving the idea a real look was the problem faced by common public in case of emergency need of blood and medicines, at times cannot go out to buy them or search here and there. They can use our website and can get these all in a single platform.

A. Screenshots

- 1) Landing page
- 2) Images of the Blood Bank Store



Shreemit Advance Blood Care Unit
Home
About us
Blood Donation
Admin Login
Pharmacy

Become a Donor

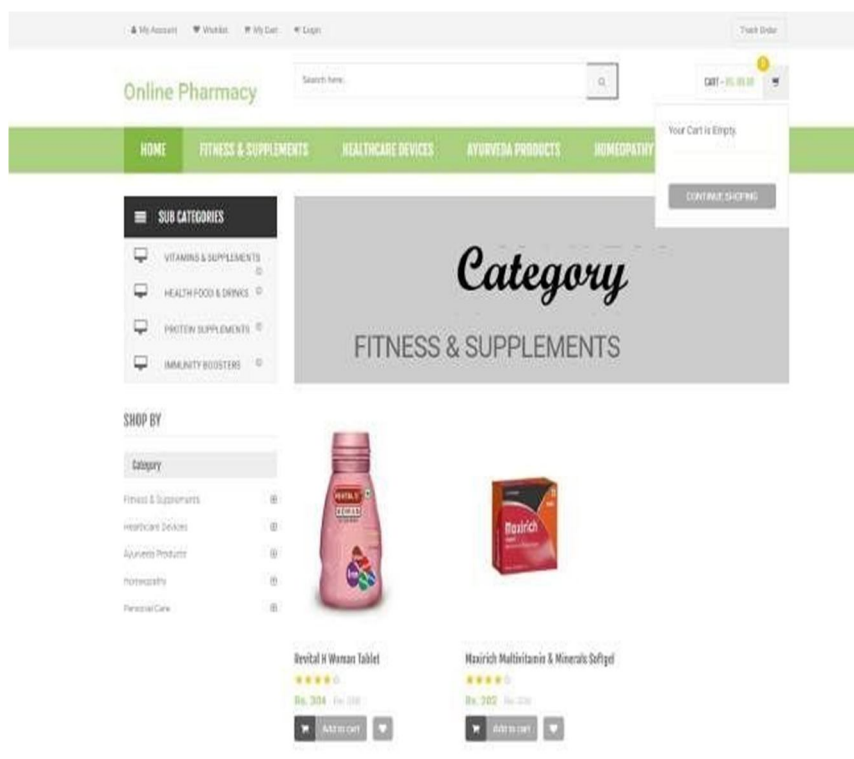
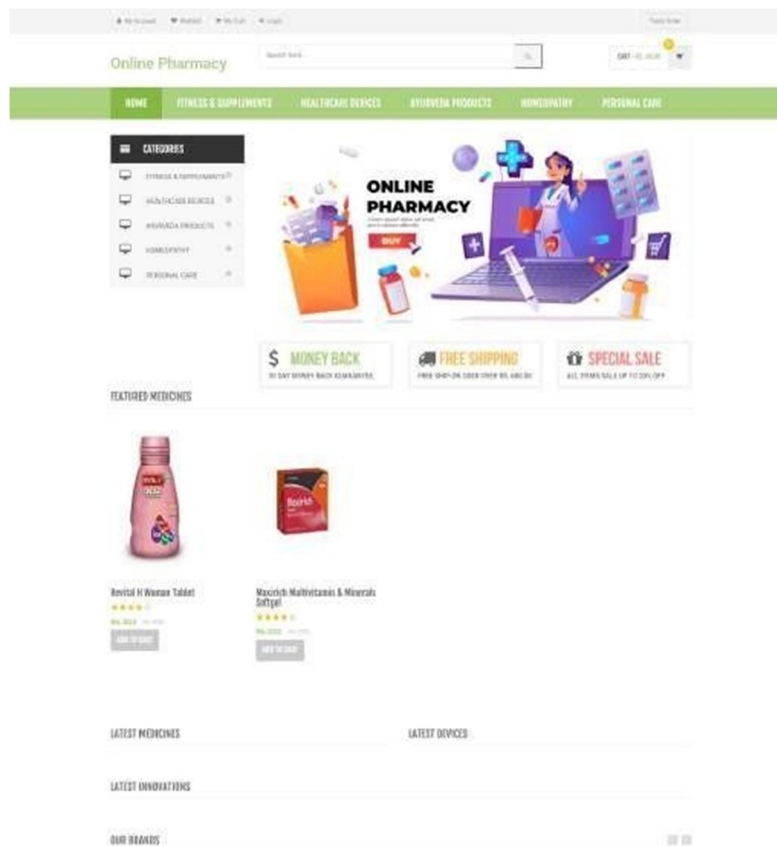
Home / Become a Donor

Full Name*	Mobile Number*	Email Id
<input type="text"/>	<input type="text"/>	<input type="text"/>
Age*	Gender*	Blood Group*
<input type="text"/>	Select	A-
Address	Message*	
<input type="text"/>	<input type="text"/>	

submit

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3) Images of the pharmacy store:



V. CONCLUSION, FUTURE SCOPE, AND PLANNING

A. Conclusion

This project is all about providing the customer a better online bloodbank and pharmacy experience for their needs in this ongoing pandemic. Currently, it's in the prototyping stage.

We've used basic HTML, CSS, and Bootstrap for the frontend and PHP, MySQL for the backend work.

B. Future Scope

This project has tremendous future possibilities as it can be implemented as a start-up plan.

- 1) It will increase the economy of the nearby pharmacy stores, giving them a great bump-up in their business, contributing to the country's economic growth and saving lives.
- 2) It will create a free flow between the customers and the sellers.
- 3) In such pandemic and emergency situations this service can be used for the benefit and safety of the human world.
- 4) In upcoming years, the project may start expanding its products and services throughout the state and then throughout the country.
- 5) In the upcoming development period, the UI will be more improved with more technologies and features giving it a perfect user-interface.

C. Project Planning and Management

Table: Showing details about project planning and management

Activity	Starting week	Number of weeks
Requirements Gathering	1 st week of January, 22	2
UI Design	3 rd week of January, 22	3
Coding & Integration	2 nd week of February, 22	3
Debugging	1 st week of March, 22	2
Preparation of project report	3 rd week of March, 22	1

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