FULL STACK PROJECT REPORT FILE ON

'VEIN'



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Institute of Engineering & Technology

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(201500314)

DECLARATION

We hereby declare that the work which is being presented in the Bachelor of technology's project 'Product Comparator System', in partial fulfilment of the requirements for the award of the Bachelor of Technology in Computer Science and Engineering and submitted to the Department of Computer Engineering and Applications of GLA University, Mathura, is an authentic record of our own work carried under the Mentorship of Mr. Akash Kumar Choudhary, Technical Trainer, Dept. of CEA, GLA University.

The contents of this synopsis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree.

Name of candidates:

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ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the project report of the B. Tech Full stack Project undertaken during B. Tech III Year. This project is going to be an acknowledgment of the inspiration, drive, and technical assistance that will be contributed to it by many individuals. I owe a special debt of gratitude to Mr. Akash Kumar Choudhary, Technical Trainer, for providing us with an encouraging platform to develop this project, which thus helped me in shaping my abilities towards a constructive goal, and for his constant support and guidance to my work.

His sincerity, thoroughness, and perseverance have been a constant source of inspiration for me. I believe that he will shower me with all his extensively experienced ideas and insightful comments at different stages of the project & also will teach us about the latest industry-oriented technologies. We would like to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation.

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CERTIFICATE

This is to certify that the project entitled 'VEIN', carried out in Full Stack Project, is a Bonafide work by (Aryan Tewatia, Arpit Tyagi, Aryan Gupta and Sandeep) is to be submitted in partial fulfilment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).

Mentor: -

Mr. Akash Kumar Choudhary

(Technical Trainer)

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INTRODUCTION

'VEIN 'is a website that serves as a one-stop platform for blood donors, blood banks, hospitals, and patients in need of blood. The website aims to bridge the gap between blood donors and patients, making it easier for patients to find blood donors and for donors to donate blood.

On 'VEIN,' blood donors can create profiles, indicating their blood group and availability to donate blood. Blood banks can also create profiles, indicating their blood stock levels and requirements. Patients in need of blood can search for donors in their area and contact them directly through the website.

VEIN also offers a range of resources, including information on blood donation, blood transfusion, and blood-related diseases. The website is designed to be user-friendly, with a simple and intuitive interface that makes it easy for users to navigate and find the information they need.

Overall, VEIN is a valuable resource for anyone looking to donate blood or in need of blood. Its user-friendly platform and comprehensive resources make it a must-visit site for anyone interested in blood donation and transfusion.

Title of the Project

VEIN:

In the context of blood, the word "vein" typically refers to the blood vessels that are accessed during the donation process. During a blood donation, a needle is inserted into a vein in the donor's arm, and blood is drawn from that vein into a collection bag or container.

Therefore, in the context of blood, the title "vein" could suggest a focus on the importance of finding and accessing suitable veins for blood requirement. This could include topics such as the anatomy and physiology of veins, the techniques used to locate and access veins for blood, the challenges and considerations involved in finding veins, and the impact of factors such as age, health, and medical history on the suitability of veins for blood.

Overall, the title "vein" in a project related to blood donation suggests a focus on the veins that are accessed during the donation process, and the importance of understanding their anatomy and physiology in order to ensure safe and effective blood.

Objective of the project

The objective of a VEIN website is to provide an easy-to-use online platform where users can search for blood banks in their local area or beyond. The website aims to connect blood donors with the nearest blood bank locations and provide users with the necessary information to donate blood or receive blood transfusions.

Some of the key objectives of a VEIN website may include:

- 1. Helping to address the shortage of blood donations by making it easier for donors to find nearby blood banks.
- 2. Providing information on the eligibility requirements for donating blood and the donation process to encourage more people to donate.
- 3. Providing information on the different blood types and their compatibility to ensure that patients receive the appropriate blood transfusion.
- 4. Encouraging community involvement in blood donation by providing information on volunteering at blood banks or organizing blood drives.

Why This Project?

The "why this project?" for a project on finding blood banks could be to address the pressing need for a reliable and efficient system that connects blood donors with patients in need. The project can help bridge the gap between blood donors and recipients, by providing a centralized platform that streamlines the process of finding and donating blood. Additionally, this project could potentially help save countless lives by ensuring that blood is available to those who require it, when they require it.

Features of The Project

- User-friendly interface: Product Comparator System will offer a user-friendly interface that enables seamless navigation and content discovery.
- Product Database: The system includes a database of products with details such as brand, model, features, and pricing
- Side-by-side comparison: The system should allow users to compare selected products side-by-side, displaying features, pricing, and other relevant information in a clear and easy-to-read format.
- Ratings and reviews: The system should allow users to rate and review products, providing valuable feedback to other users.
- User accounts: The system should allow users to create accounts, save their preferences and search history, and receive personalized recommendations and alerts.
- Shop on the related website

SYSTEM REQUIREMENTS

Hardware Requirements: -

The Website will smoothly run or operate on any system with –

- Processors above or equal to Intel core i3.
- Any system with Ram (4GB or higher).
- System with any operating system.
- A web browser is needed.
- Active Internet Connection (at leas120kbps)

Software Requirements: -

Front End: -

HTML - HTML stands for Hyper Text terminology HTML is that the standard terminology for creating sites HTML describes the structure of an internet page HTML consists of a series of elements HTML elements tell the browser the way to display the content.

CSS - CSS stands for Cascading Style Sheets CSS describes how HTML elements are to be displayed on screen, paper, or in other media CSS saves tons of labor. It can control the layout of multiple sites all directly External stylesheets are stored in CSS files.

JAVA SCRIPT:

JavaScript is a programming language that is primarily used for creating interactive and dynamic web pages. It was first developed by Brendan Eich at Netscape in 1995 and has since become one of the most popular programming languages in the world. JavaScript is a client-side language, meaning that it runs on the user's computer rather than on the server. It is often used to add interactivity to websites, such as drop-down menus, pop-up windows, and form validation. JavaScript is also commonly used for creating web-based applications, such as games and social networking sites. Additionally, JavaScript can be used in conjunction with other web technologies, such as HTML and CSS, to create visually appealing and interactive web pages.

Back End: -

React is a JavaScript library for building user interfaces. It was developed by Facebook and was first released in 2013. React is often used for developing single-page applications (SPAs) and mobile applications, and it is based on the concept of building reusable UI components.

One of the key features of React is its ability to efficiently update the UI in response to changes in data. This is achieved using a virtual DOM, which allows React to minimize the number of updates that are made to the actual DOM. This can result in faster and more responsive applications.

React also has a large and active community, which has developed many third-party libraries and tools for working with React. These include state management libraries like Redux, testing libraries like Jest, and development tools like React DevTools.

Overall, React is a powerful tool for building complex and responsive user interfaces, and its popularity continues to grow as more developers adopt it for their projects.

Mongoose - Mongoose is an Object Data Modelling (ODM) library for MongoDB and Node.js and it manages relationships between data, provides schema validation, and is employed to translate between objects in code and therefore the representation of these objects in MongoDB.

Database: -

MongoDB - MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON-like documents with discretionary schemas. MongoDB is originally developed by MongoDB Inc. and licensed under the Server-Side Public License.

Theoretical Aspects of Web Development Project

Web development refers to building website and deploying on the web. Web development requires use of scripting languages both at the server end as well as at client end.

Before developing a web site once should keep several aspects in mind like:

- What to put on the web site?
- Who will host it?
- How to make it interactive?
- How to code it?
- How to create search engine friendly web site?

Web Development Process:

Web development process includes all the steps that are good to take to build an attractive, effective, and responsive website.

Web development tools:

Web development tools helps the developer to test and debug the web sites. Now a days the web development tool come with the web browsers as add-ons. All web browsers have built in tools for this purpose.

These tools allow the web developer to use HTML, CSS, and JavaScript etc. These are accessed by hovering over an item on a web page and selecting the "Inspect Element" from the context menu.

Scope of the Project

The scope of a project to find blood banks would depend on the specific objectives and goals of the project.

Geographic scope: Will the project focus on finding blood banks in a specific city, region, country, or globally? The larger the geographic scope, the more challenging the project may be.

Data collection: What data sources will be used to identify blood banks? Will the project rely on publicly available data, such as government databases or online directories, or will it involve contacting blood banks directly to obtain information.

Data analysis: What types of information will be collected about each blood bank, and how will this information be analysed? Possible data points could include location, hours of operation, types of blood products offered, contact information, and whether the blood bank accepts donations from the public.

Impact evaluation: How will the success of the project be evaluated? Possible metrics could include the number of blood banks identified, the quality and completeness of data collected, the usefulness of the project to its intended users, or the number of people who become blood donors as a result of the project.

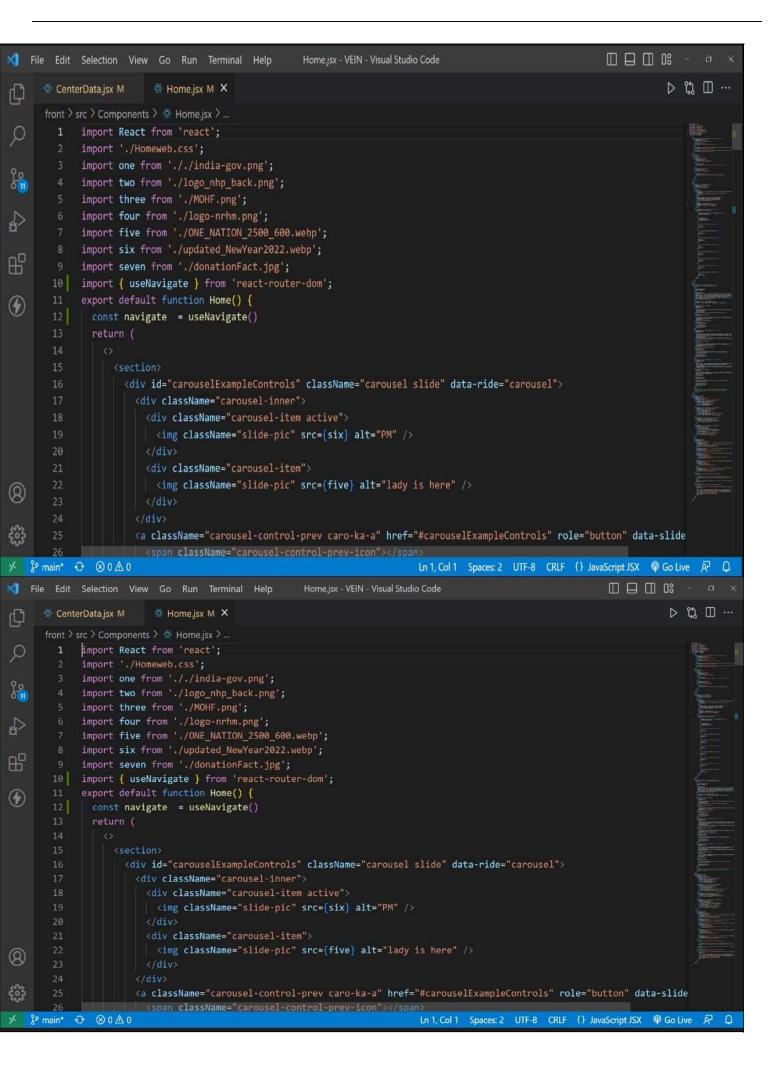
Overall, a project to find blood banks could have a significant impact on public health by improving access to life-saving blood products. However, the scope and complexity of such a project will depend on a variety of factors, including the resources available.

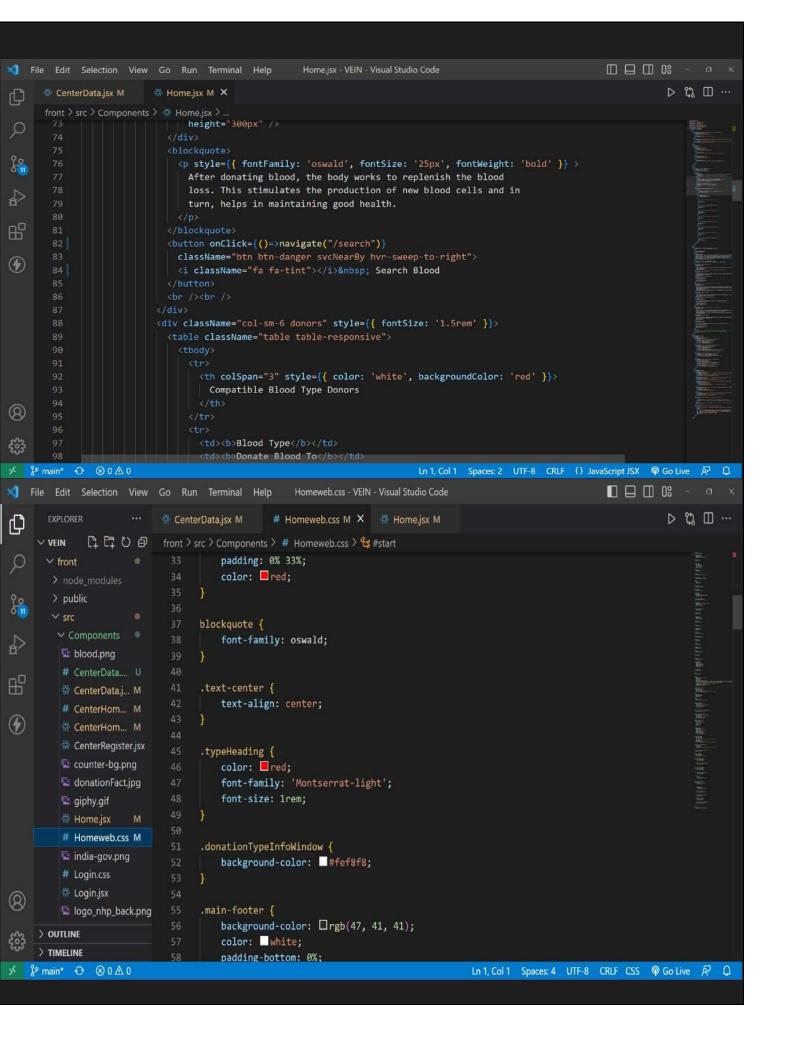
Implementation

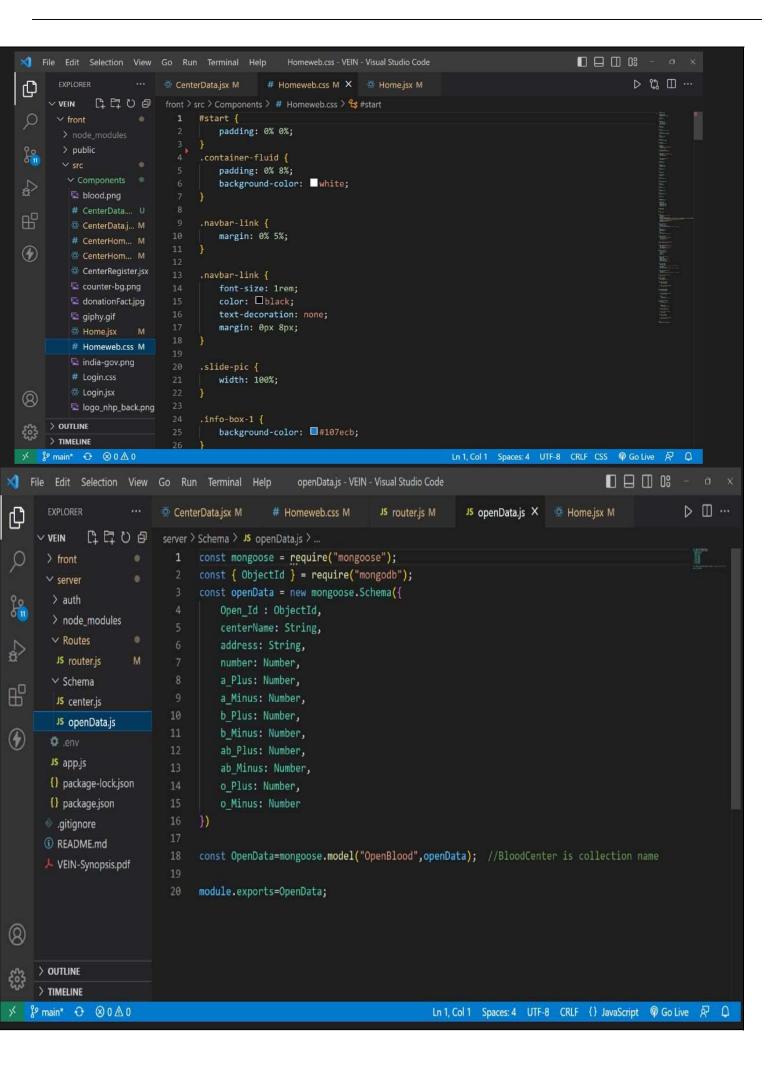
Implementation is the stage in the project where the theoretical design is turned into the working system and is giving confidence to the new system for the users that is will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of method to achieve the changeover, an evaluation, of change over methods. A part from planning major task of preparing the implementation is education of users. The more complex system is implemented, the more involved will be the system analysis and design effort required just for implementation. An implementation coordinating committee based on policies of individual organization has been appointed. The implementation process begins with preparing a plan for the implementation for the system. According to this plan, the activities are to be carried out, discussions may regarding the equipment has to be acquired to implement the new system Implementation is the final and important phase. The most critical stage is in achieving a successful new system and in giving the users confidence that the new system will work and be effective. The system can be implemented only after thorough testing is done and if it found to working according to the specification. This method also offers the greatest security since the old system can take over if the errors are found or inability to handle certain types of transaction while using the new system.

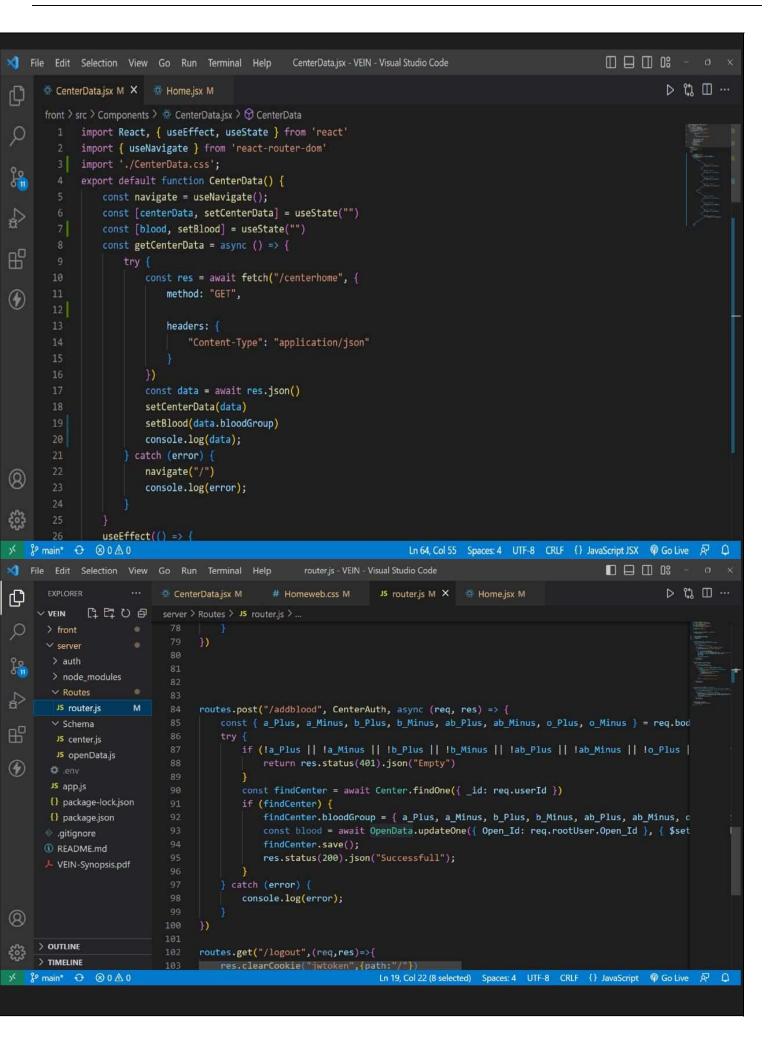
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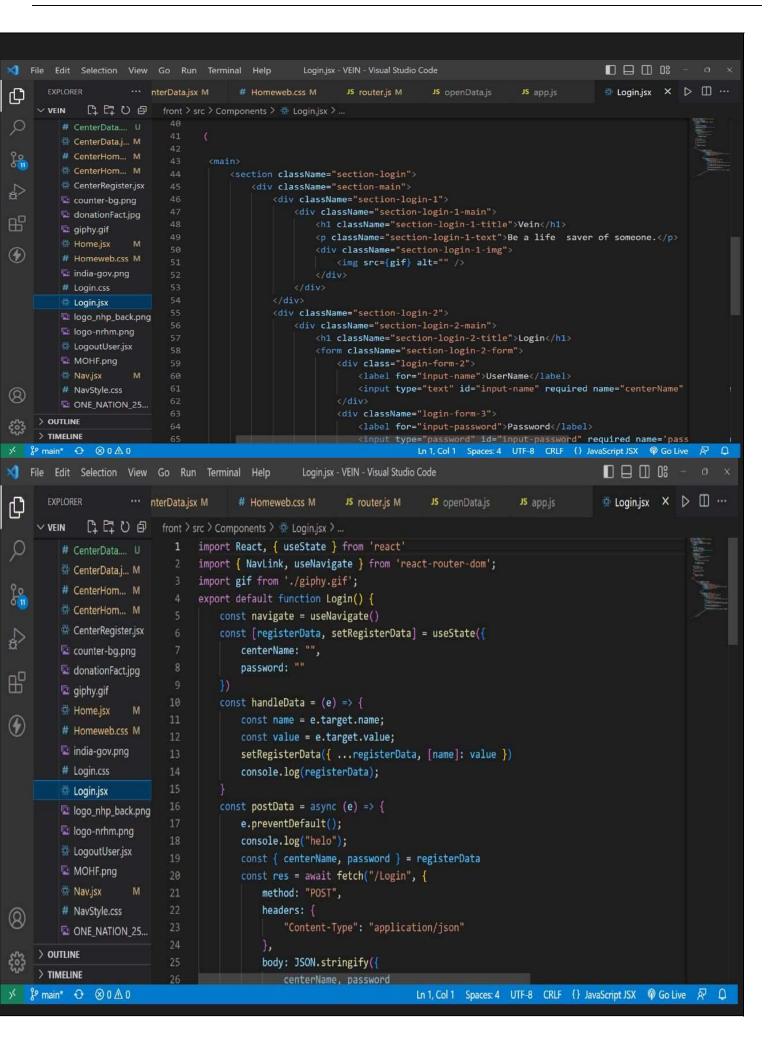
HOME PAGE AND LOGIN PAGE:

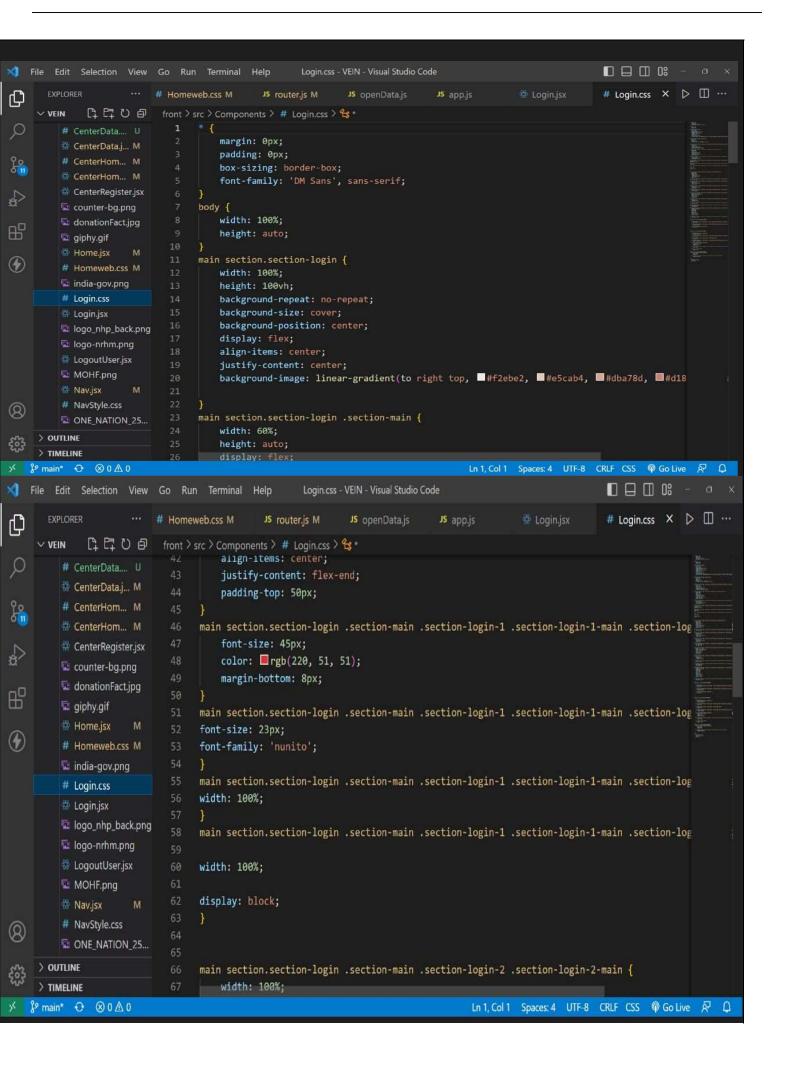






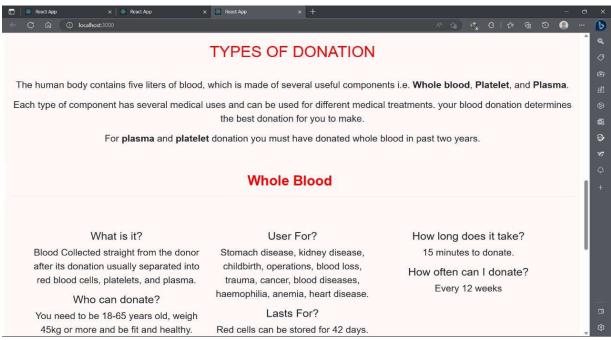


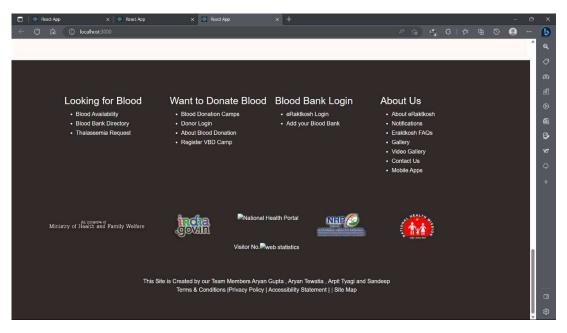




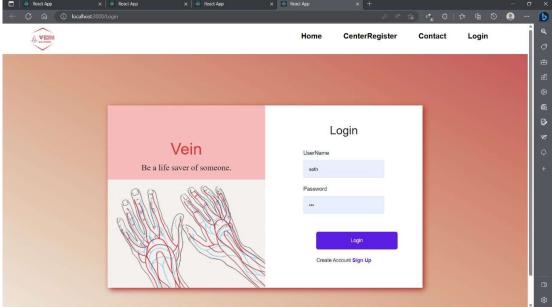
SNAPSHOTS

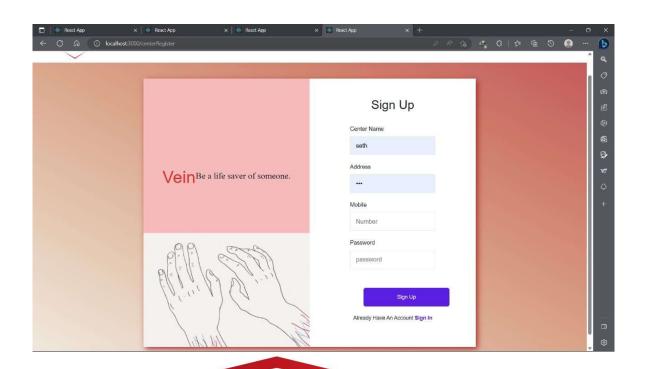






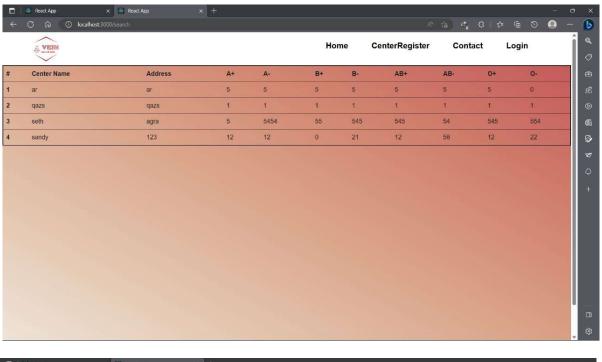


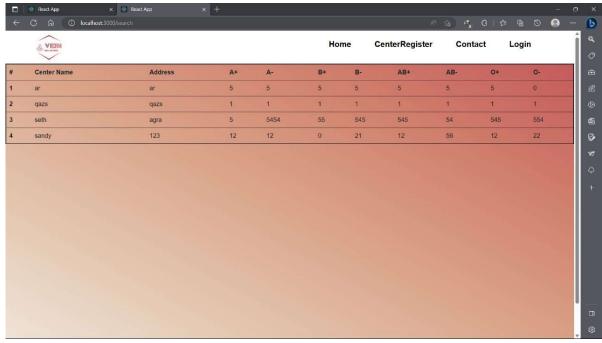












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Conclusion

▶ A VEIN website is an essential tool for individuals who require blood transfusions or those who wish to donate blood. This website can provide a user-friendly interface that allows users to easily find the nearest blood banks or blood donation centers. Additionally, the website can provide information on the availability of different blood types, operating hours, and contact information for blood banks. Overall, a blood bank finder website can be a valuable resource for both blood donors and recipients, helping to ensure that lifesaving blood transfusions are readily available when needed.