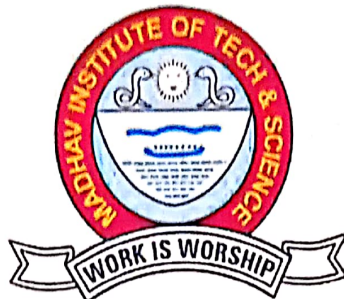


# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE**

Deemed to be University

(Declared under Distinct Category by Ministry of Education, Govt. of India)

NAAC Accredited A++ with Grade



## **Project Report**

on

### **Development of Blood Bank (Admin Module)**

A project report submitted in partial fulfilment of the requirement for the degree of

**MASTER IN COMPUTER APPLICATION**

in

**COMPUTER SCIENCE AND ENGINEERING**

**Submitted By:**

Akrati Jain

0901CA221007

**Industry Mentor:**

Mrs. Sweety Gupta (Praedico Global Research Pvt. Ltd.)

**Faculty Mentor:**

Dr. R. S. Jadon, Professor

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE**

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Date: 22-April-2024

*To whom so ever it may concern*

This is to certify that Mr./Mrs./Miss, AKRATI JAIN (0901CA221007) student of MCA at MITS, Gwalior, has completed Project Training/Internship program as an online/offline trainee at our organization PRAEDICO GLOBAL RESEARCH PVT. LTD. If/In/Her training details are:

Period - 01 JAN 2024 to 22 APR 2024

Technology - MERN Full Stack

Project Title - BLOOD BANK SYSTEM (ADMIN MODULE)

All of us at Praedico Global Research Pvt. Ltd. are pleased to have him/her in our team. This Project Training/Internship program includes training, orientation and focuses primarily on learning and developing new skills and gaining a deeper understanding of concepts through hands on application of the knowledge he/she learned.

We take this opportunity to wish him/her a long, happy and successful career.

  
For 

Authorized Signatory

Praedico Global Research Pvt. Ltd.

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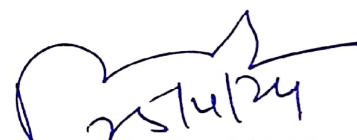
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## CERTIFICATE

This is certified that **Akrati Jain** (0901CA221007) has submitted the project report titled **Development of Blood Bank (Admin Module)** under the mentorship of **Mrs. Sweety Gupta** (Praedico Global Research Pvt. Ltd.) in partial fulfilment of the requirement for the award of degree of **Master in Computer Application** in Computer Science and Engineering from **Madhav Institute of Technology and Science, Gwalior.**

  
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## DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of degree of Master in Computer Application in Computer Science and Engineering at **Madhav Institute of Technology & Science, Gwalior** is an authenticated and original record of my work under the mentorship of **Mrs. Sweety Gupta** (Praedico Global Research Pvt. Ltd).

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

*Akrati Jain*  
**Akrati Jain**

0901CA221007

2022-2024

Master of Computer Application,  
Computer Science and Engineering



# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE**

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## **ACKNOWLEDGEMENT**

The full semester project has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary project. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

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I am sincerely thankful to my faculty coordinator. I am grateful to the guidance of **Dr. R. S. Jadon** (Professor), Computer Science and Engineering, for her continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department.

  
**Akraft Jain**

0901CA221007

2022-2024

Master of Computer Application,  
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## ABSTRACT

Blood bank is a web-based application that offers scalability and accessibility, allowing users to access blood bank services from anywhere with an internet connection. This project's primary goal is to supply blood to those in need. The number of the people who are in the need of the blood is increasing day by day. Administrators play a vital role in managing the overall operation of the blood bank. They have access to functionalities such as managing donor, blood camps, blood requests and user records.

This project builds a strong and user-friendly platform using the MERN stack, which consists of MongoDB, Express.js, React.js and Node.js. We chose to use this technology because it is good for building websites that are easy to use. This implies that users of the blood bank website, including donors, people who work at the blood bank can use the website without any problems. They can access it from anywhere which makes it really convenient.

Overall, our objective is to assist more individuals and improve the efficiency of blood banks. We can create a user-friendly and effective website, which will ultimately result in the saving of more lives and a significant improvement in healthcare. Blood bank is a great platform to find and provide blood which helps people to save life.

## सार

ब्लड बैंक एक वेब-आधारित एप्लिकेशन है जो स्केलेबिलिटी और पहुंच प्रदान करता है, जिससे उपयोगकर्ता इंटरनेट कनेक्शन के साथ कहीं से भी ब्लड बैंक सेवाओं का उपयोग कर सकते हैं। इस परियोजना का मुख्य उद्देश्य रक्त उपलब्ध कराना है जिन्हें इसकी आवश्यकता है। रक्त की आवश्यकता वाले लोगों की संख्या दिन-प्रतिदिन बढ़ती जा रही है। ब्लड बैंक के समग्र संचालन के प्रबंधन में प्रशासक महत्वपूर्ण भूमिका निभाते हैं। उनके पास दाता, रक्त शिविर, उपयोगकर्ता रिकॉर्ड के प्रबंधन जैसी कार्यात्मकताओं तक पहुंच है।

यह परियोजना MERN स्टैक का उपयोग करके एक मजबूत और उपयोगकर्ता के अनुकूल मंच बनाती है, जिसमें MongoDB, Express.js, React.js और Node.js शामिल हैं। हमने इस तकनीक का उपयोग करना चुना क्योंकि यह उन वेबसाइटों के निर्माण के लिए अच्छा है जो उपयोग में आसान हैं। इसका तात्पर्य यह है कि ब्लड बैंक की वेबसाइट के उपयोगकर्ता, जिनमें दाता भी शामिल हैं, ब्लड बैंक में काम करने वाले लोग बिना किसी समस्या के वेबसाइट का उपयोग कर सकते हैं। वे इसे कहीं से भी एक्सेस कर सकते हैं जो इसे वास्तव में सुविधाजनक बनाता है।

कुल मिलाकर, हमारा उद्देश्य अधिक व्यक्तियों की सहायता करना और ब्लड बैंकों की दक्षता में सुधार करना है। हम एक उपयोगकर्ता के अनुकूल और प्रभावी वेबसाइट बना सकते हैं, जिसके परिणामस्वरूप अंततः अधिक जीवन की बचत होगी और स्वास्थ्य सेवा में महत्वपूर्ण सुधार होगा। ब्लड बैंक रक्त खोजने और प्रदान करने का एक बेहतरीन मंच है जो लोगों को जीवन बचाने में मदद करता है।



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## CHAPTER 1: INTRODUCTION

Blood banks are essential to the medical field because they give patients in need transfusions of blood that can save their lives. Donor blood is kept in storage at blood banks until it is required for medical procedures. When someone need blood such as surgery or in any other case, the blood bank provide the right type of blood. This helps save lives because it ensures that there is always enough blood available for people who require it immediately. The blood bank is a source of hope, a centre of kindness and a meeting place for relationships that may change lives. Blood banks are essential to the healthcare system because they save lives and advance community well-being via the selfless act of blood donation.

The web-based Blood Bank system is designed to handle, store, retrieve, and analyse data pertaining to blood. The project's goals are to preserve all the information about blood donors and the many blood types that are available at this blood bank, as well as to help them manage more efficiently.

Blood bank is the website which gathered the details about the users, donors and camps. Blood bank stored the personal details of donors and blood seekers. It helps the blood seekers to search for blood of their blood group when they need. It also contains the details of the donors and blood seekers. Donors can search the camps to donate the blood. Camps are organised for awareness to donate blood.

The main goal of the Blood Bank Project is to make it easier for people to donate blood and for hospitals to manage their blood supplies. The project also aims to ensure that there's always enough blood available by organizing events to encourage donations.

### 1.1 Problem identification

Blood banks often struggle to efficiently match blood supply with demand, leading to shortages or wastage. Making sure donated blood is safe and of good quality is vital. If there are any mistakes in checking the blood or storing it, it could be dangerous for the people who need it. And when there's an emergency or disaster, the blood bank needs to be ready to handle a sudden increase in demand. Data accuracy and integrity are compromised by data entry errors and inconsistent formats, potentially leading to inaccuracies in patient records. Security vulnerabilities, including inadequate access controls and weak authentication mechanisms, expose the module to the possibility of illegal access and data breaches.

## **1.2 About Organisation**

The architecture of a neuron in the human brain served as the model for neural networks, or neural nets, and Praedico Global Research Pvt. Ltd. is the company that created these financial neurons for the stock market intelligence domain. We are the first finance neuron developers in India, and we use our custom-built neural networks to predict stock market performance globally with high accuracy. We are a contemporary Fintech firm that is committed to using artificial intelligence to its full potential in order to find new financial research products. We think that everyone in India should have free access to the highest calibre, most accurate research available. With a prediction accuracy of over 80%, our solutions promise to accurately forecast the Indian stock market and financial products. Advisory and research fees cost Indian investors, on average of 40k-50k. Praedico plans to reduce these costs to zero in the next years.

The first "integrated global research cum training" company in India, Praedico Global Research Pvt. Ltd., will develop its own research model specifically for Indian and international stock exchanges and work toward promoting "financial literacy" globally. Praedico Global Research Pvt. Ltd. thrives on creating its own unique investment methods and educating others on how to apply them. Praedico Global Research Pvt. Ltd. offers training on a wide range of financial products and holds financial workshops all over the world.

**Our Vision** - To be the leaders in the global effort to eradicate financial inequality by giving those without the resources to get expensive financial goods access to the financial system.

**Our Mission** - To be the global leader in the creation of financial products. When compared to other financial products on the market, items of this kind ought to offer the best performance and the lowest expenses.

## **1.3 Hardware & Software Specifications:**

### **1.3.1 Hardware Requirements:**

- **CPU:** Intel core i3 or higher or equivalent.
- **Network:** 1 Gbps Ethernet or higher.
- **Processor:** 64-bit processor with at least 1.4GHz or higher.
- **RAM:** 4 GB or more.
- **Hard Drive Space:** A minimum of 1 GB available to use.

### **1.3.2 Software Requirement:**

- **Frontend: ReactJS**

For frontend design we have decided to use ReactJS because: -

- i. A free and open-source frontend JavaScript library called ReactJS is used to create user interface using UI component.
- ii. Reacts Virtual DOM improves the user experience and speed up developer work.
- iii. Permit to reduce React Component significantly save times.
- iv. One-way data flow in ReactJS ensures consistent code.
- v. A community accessible and continuously evolving open-source Facebook library.
- vi. Redux: a helpful state container.
- vii. React Hooks: an enhanced method of state management.

- **Backend: NodeJS**

For Backend design we have decided to use NodeJS because: -

- i. NodeJS is an open source, cross-platform backend runtime environment for JavaScript that does not require a web browser to function. It operates on the V8 engine.
- ii. Node.js provides simple Scalability.
- iii. Simple to understand.
- iv. The single programming language utilized is Node.js.
- v. The advantages of Full stack JS.
- vi. Recognized for providing High Performance.
- vii. The support of big and engaged Community.



- **Database: MongoDB**

Using documents that resemble JSON and optional schemas, MongoDB is a type of NoSQL database application that is cross-platform and document-oriented.

- i. Adaptable Database.
- ii. Quick Speed.
- iii. Excellent Availability.
- iv. Scalability.
- v. Easy configuration of environment.
- vi. Entire technical support.

- **Framework: ExpressJS**

A NodeJS backend web application framework, ExpressJS is made available as free and open-source software under the MIT license. It is made for APIs and web applications. It is known as the NodeJS standard server framework for faults. Also: -

- i. Rapid expand our application.
- ii. It is simple to learn JavaScript.
- iii. The frontend can be coded in the same language.
- iv. Lower maintenance code for developer.
- v. Google V8 engine SUPPORT.
- vi. Public assistance.
- vii. Approved Caching.

## **CHAPTER 2: SYSTEM ANALYSIS**

### **2.1 Problem Analysis**

Blood banks are vital resources that provide a consistent flow of blood for medical procedures, emergencies, and surgeries. For blood banks, keeping a sufficient supply of blood is a major challenge. They must balance the demand for various blood types with limited donations, often resulting in shortages. Additionally, managing the shelf life of blood products poses a challenge, as expired units lead to wastage and inefficiency. Consider the various stakeholders involved, including donors, recipients, healthcare providers, blood bank staff, and regulatory authorities. Each group may have different needs and perspectives. Based on the analysis, propose actionable recommendations to improve the blood bank's operations. The organization's objectives and mission should be in line with these suggestions, which should also be realistic and affordable, in keeping with the objectives and mission of the company. They may involve initiatives to raise public awareness about blood donation, streamline internal processes, or collaborate with other healthcare institutions to optimize resource utilization.

### **2.2 Feasibility Study:**

The preliminary investigation evaluates whether the project is feasible and if the system will be beneficial for the organization. The purpose of this feasibility study is to assess the viability of an administrative module for a blood bank. This module will provide real-time data on blood availability, donor records, and other essential metrics for blood bank administrators. The module aims to empower administrators to make informed decisions and enhance overall blood bank, ensuring efficient blood distribution and meeting the needs of patients. This study will evaluate the technical, economic, and operational feasibility of implementing the administrative module for the blood bank.

#### **2.2.1 Economical Feasibility Study:**

The economic feasibility study of the blood bank project has been evaluated. We can develop the software at a very minimal cost because the majority of the resources on the current platform are free. The ongoing costs of the project include maintenance and upgrades to the hardware and software, as well as ongoing staffing costs. The project's benefits include improved efficiency and security, reduced costs associated with manual processes, and reduced risk of security breaches. Based on the analysis of the costs and benefits, it has been determined that the project is financially sustainable over the long term.



### **2.2.2 Technical Feasibility Study:**

The technical feasibility study of the blood bank project has been assessed. The project involves building a custom digital platform using the MERN stack (MongoDB, Express.js, React.js, Node.js) to manage data, and automate workflows. The necessary hardware and software components have been evaluated, and it has been concluded that the project is technically feasible.

### **2.2.3 Behavioural Feasibility Study:**

The organizational management staff needs were carefully studied, and it was determined that the system would satisfy their requirements. The system's interface was intentionally crafted to be intuitive and user-friendly, making it easy for users to navigate. Throughout the development phase, users were actively involved to ensure their expectations were met. Additionally, specialized training programs were created to ensure users could effectively utilize the system. These steps highlight the behavioural feasibility of the project, indicating that user behaviour and engagement were considered integral aspects in the system's design and implementation.

### **2.2.4 Operational Feasibility Study:**

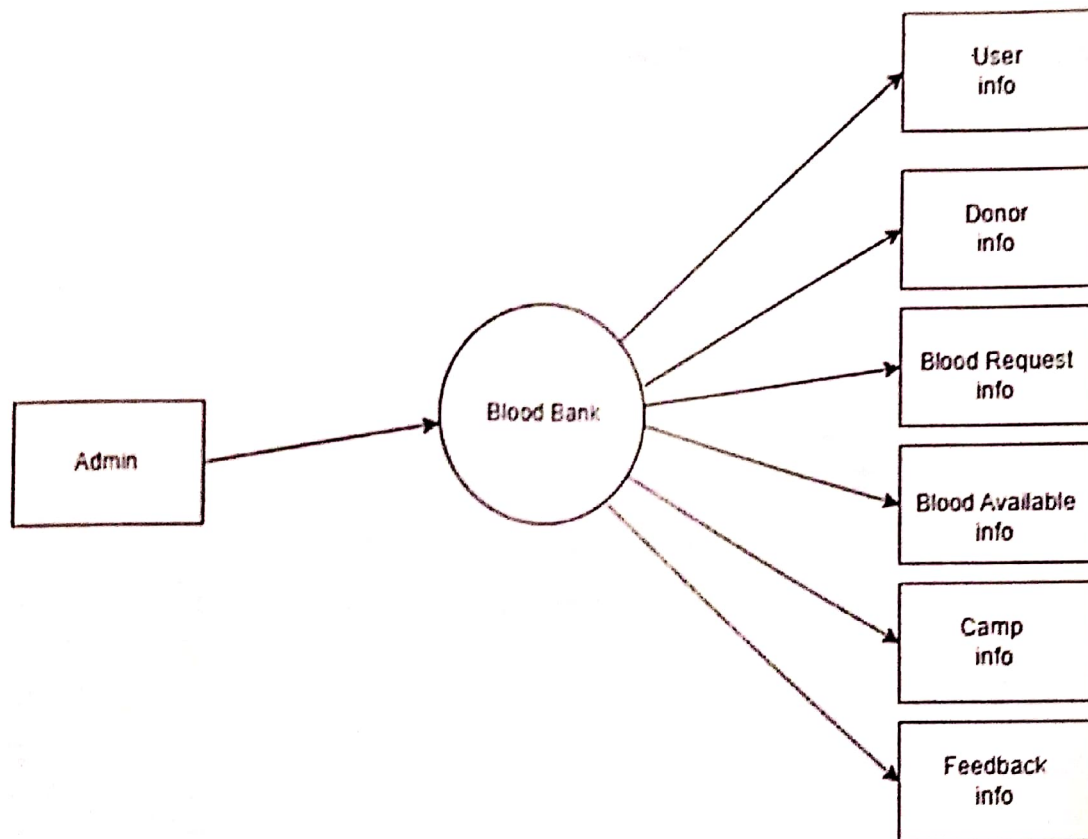
The operational feasibility study for the blood bank project assesses its practicality for implementation. It examines existing processes, resources, and potential risks. Staff training needs and role adjustments are identified. The study concludes that the project is feasible for implementation.



## 2.3 Data Flow Diagram (DFD):

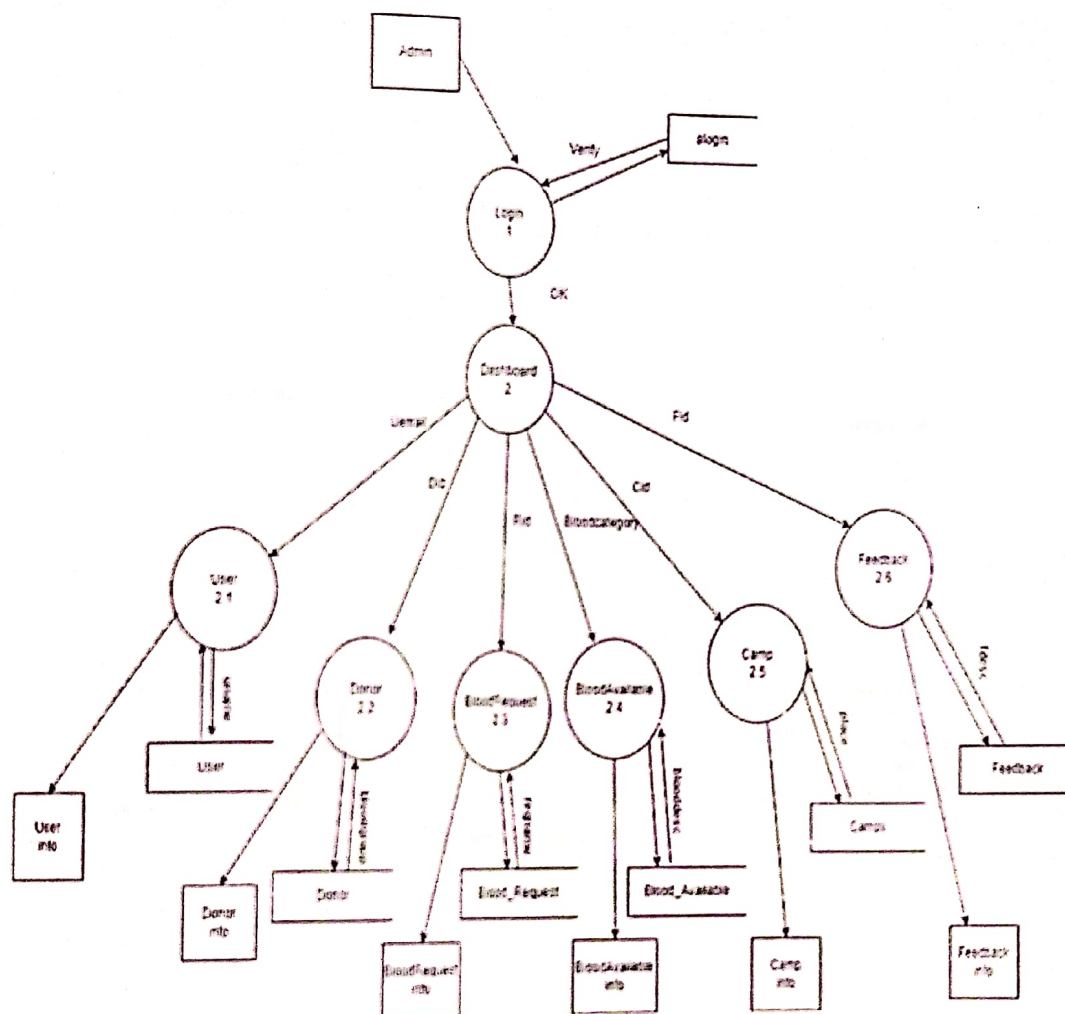
### 2.3.1 Level-0

Figure 1



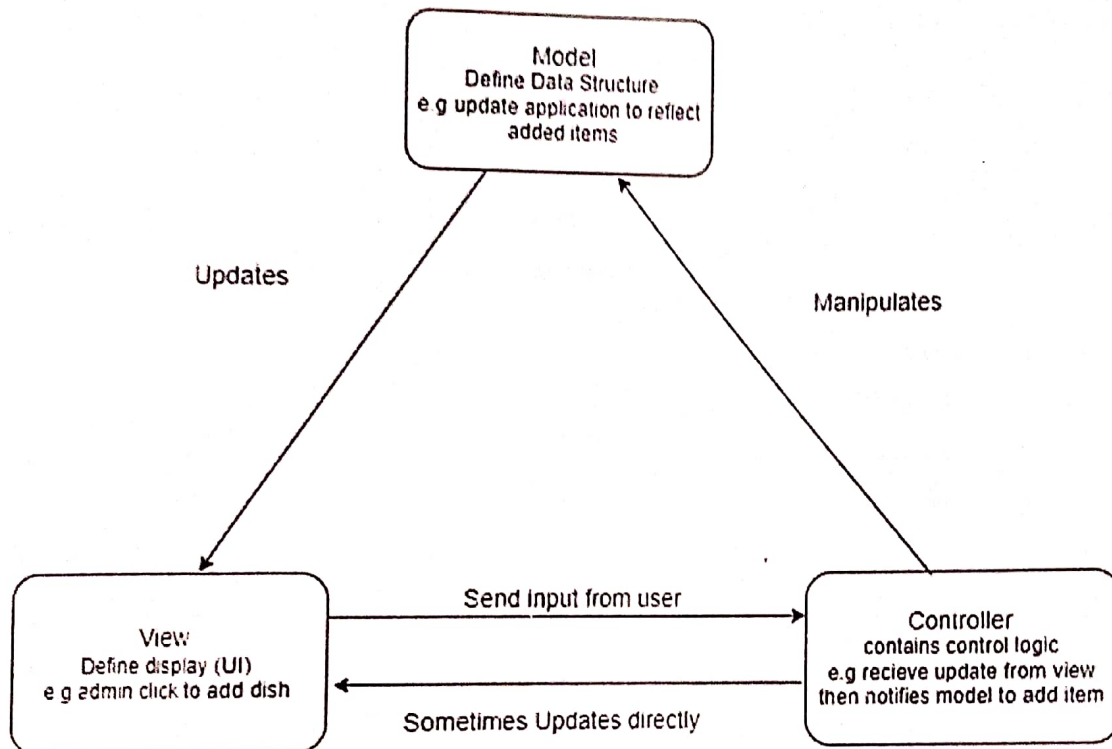
### 2.3.2 Level-1(Admin)

Figure 2



## 2.4 Model View Controller (MVC)

Figure 3

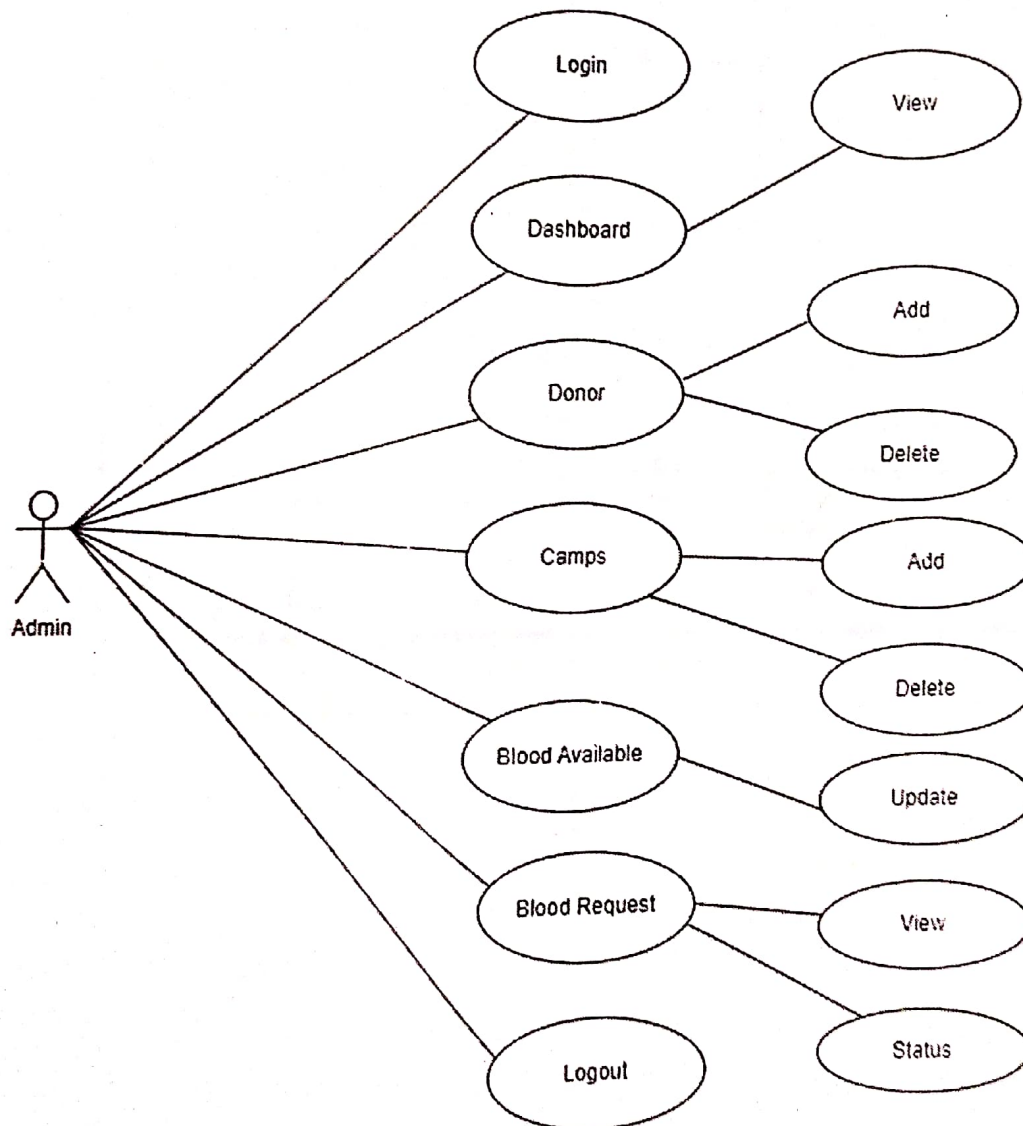




## CHAPTER 3: SYSTEM DESIGN

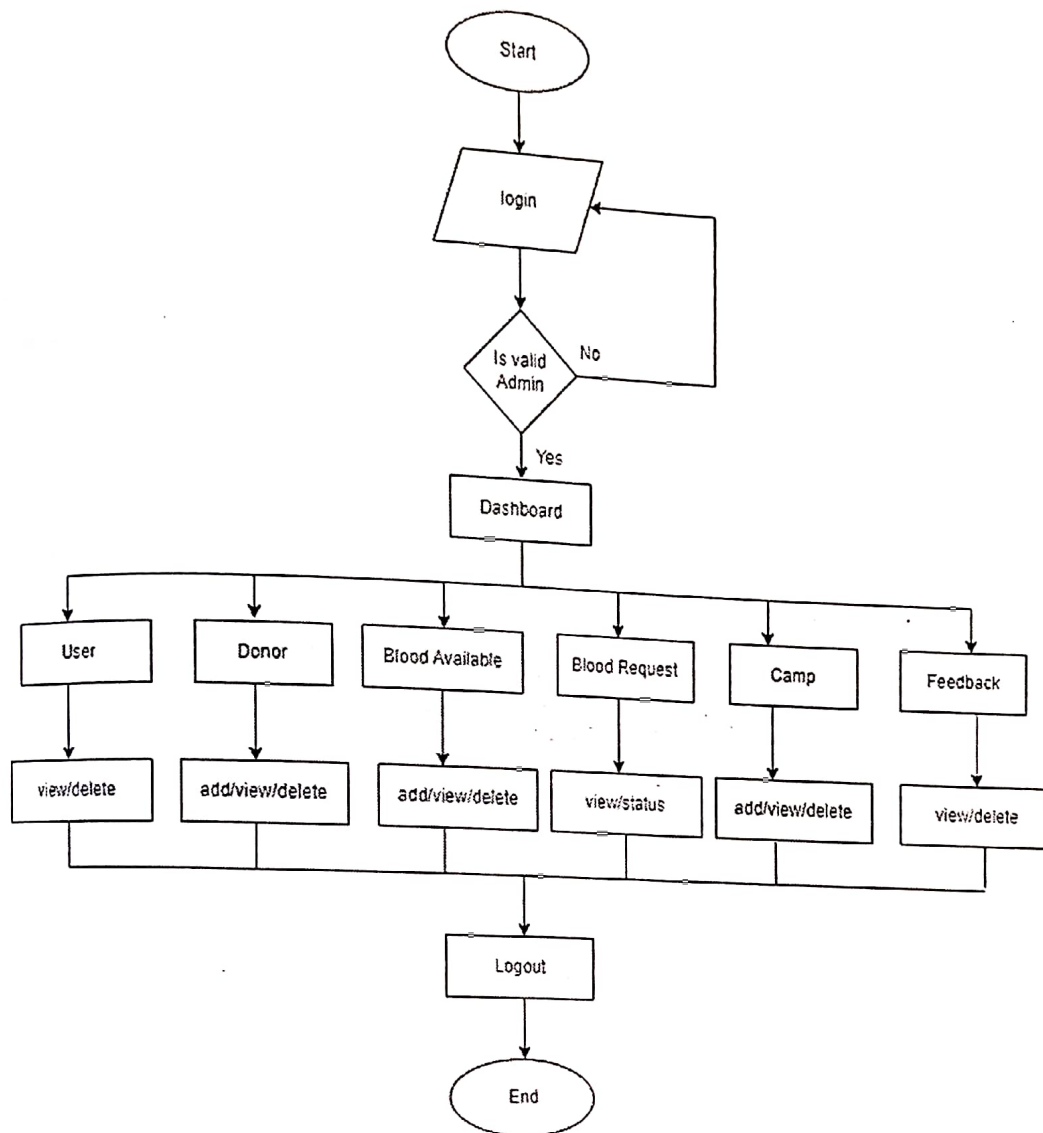
### 3.1 Use Case Diagram

Figure 4



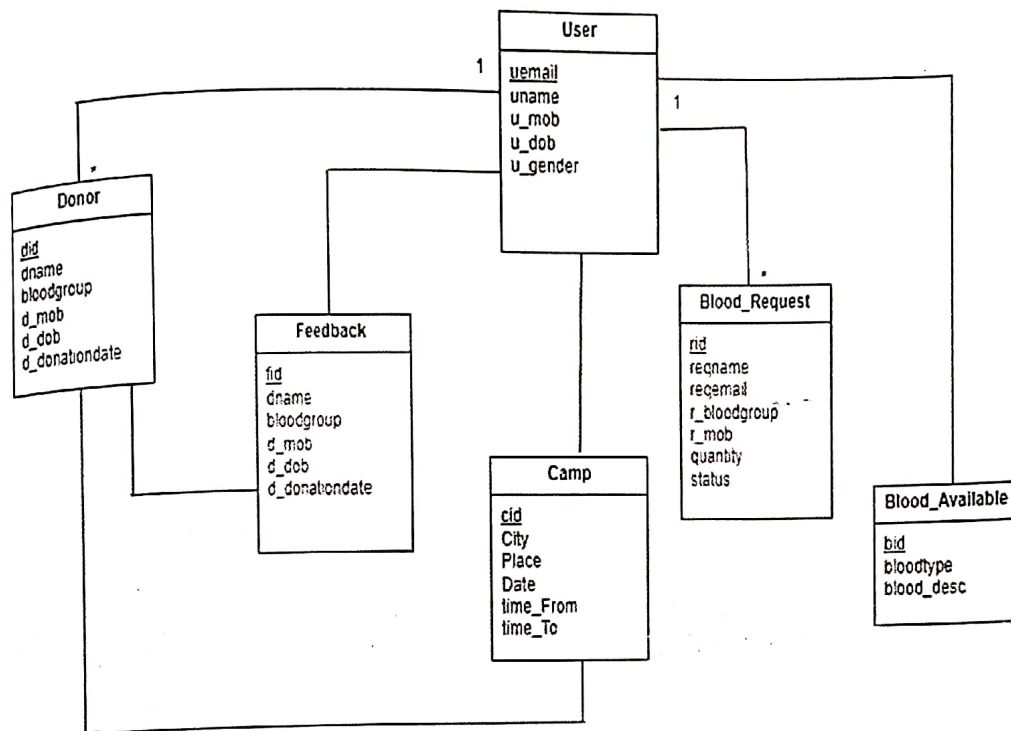
### 3.2 System Flow Chart

Figure 5



### 3.3 Structure Chart

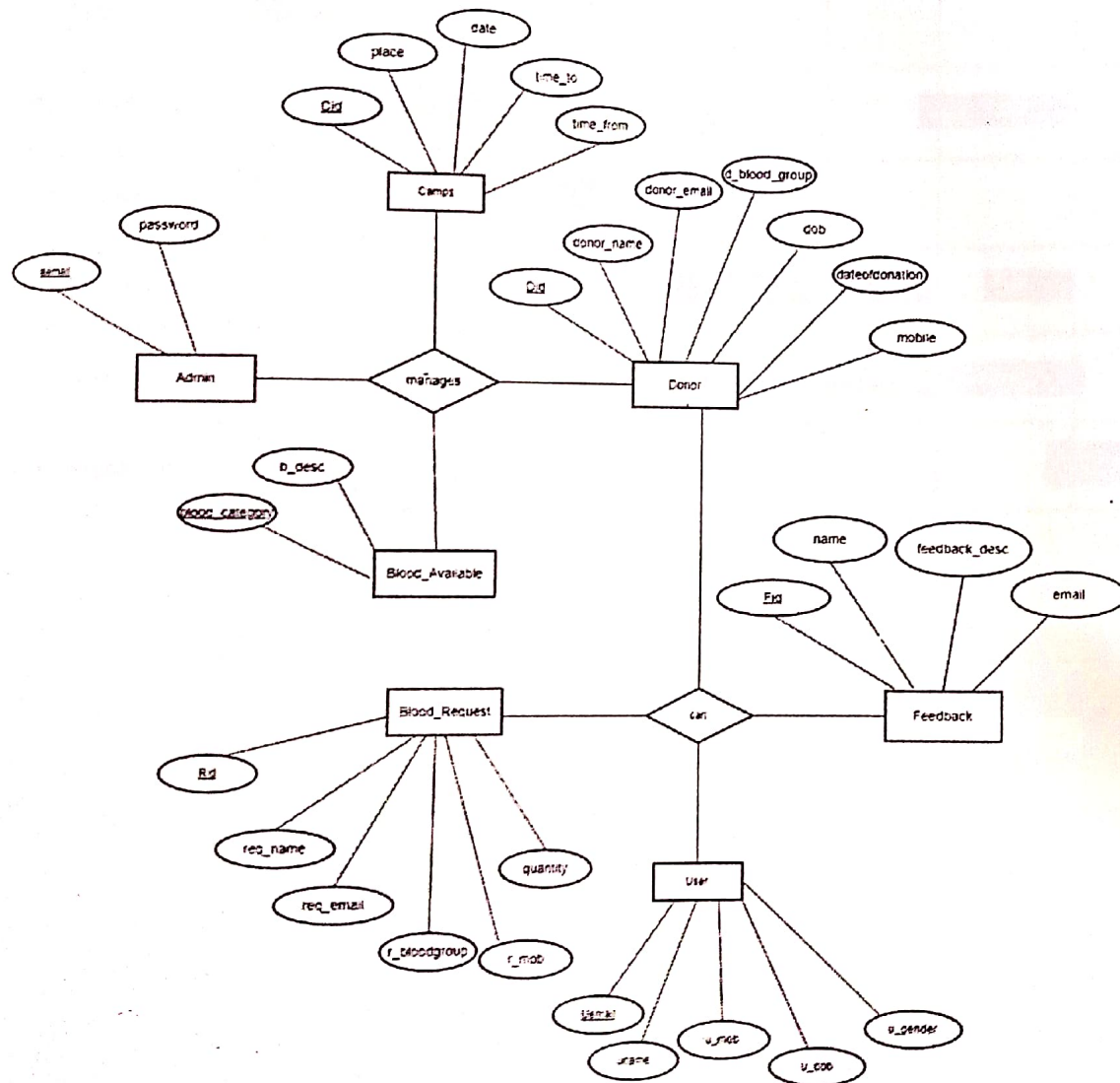
Figure 6





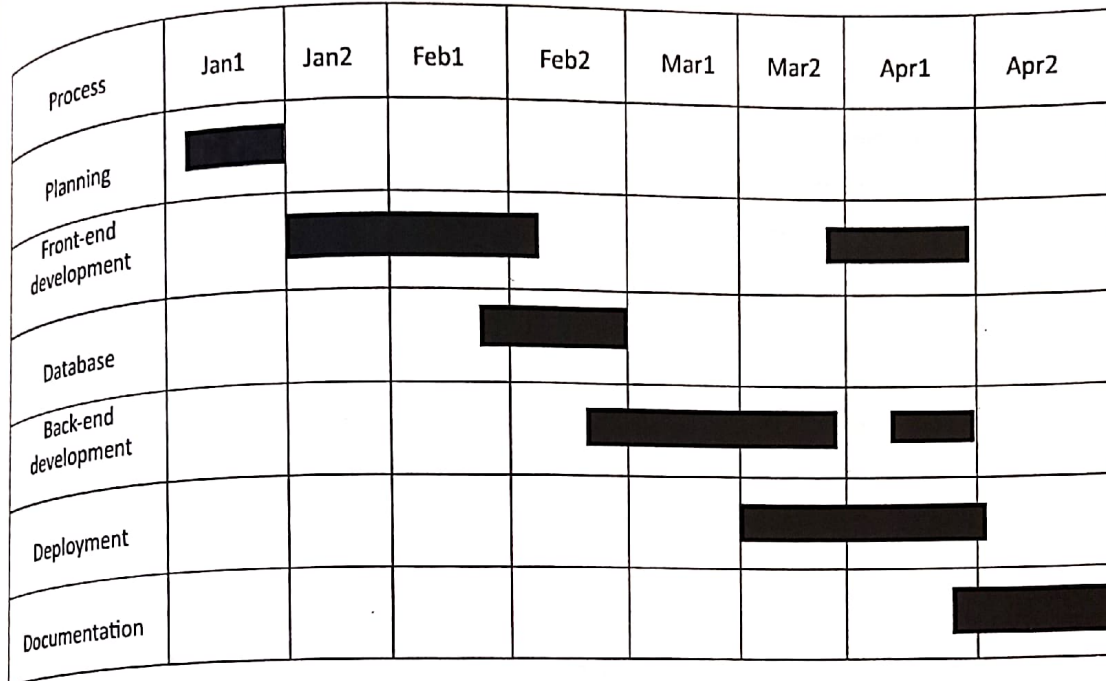
### 3.4 Entity Relationship Diagram

Figure 7



### 3.5 Gantt Chart

Figure 8



## CHAPTER 4: TESTING

Testing is the process of evaluating an application or system to detect defects, bugs, errors and other issues that may affect its quality, reliability, or functionality. The main objective of testing is to ensure that the application meets the requirements and specifications set forth by its user and that it performs the tasks it is designed to do in a consistent, reliable and efficient manner. So here we are using various testing approaches to check that the developed system met the specified requirements or not.

### 4.1 Unit testing:

We performed unit testing in each and every smallest unit of the project individually to check it's working. We used different test data to perform the testing. We try each and every type of possible input to check their corresponding outputs and its working. We performed these tests on admin login, add donor, add camps, add blood available and other remaining units. We also tested the complete admin module.

Test Case ID	Section	Element Name	Test Data	Expected Result	Actual Result
L1-1	Admin Login	Email, Password	No Data	Please fill out the field.	Test case passed
L1-2	Admin Login	Email, Password	Wrong email and password	Error occurred	Test case passed
L1-3	Admin Login	Email, Password	Correct email and password	Successfully logged in	Test case passed
L2-1	Add Donor	Name, Email, dob, blood_group, Mobile no., dateofdonation	No Data	Please fill out the field	Test case passed
L2-2	Add Donor	Name, Email, dob, blood_group, Mobile no., dateofdonation	Insert wrong data	Error occurred	Test case passed



L2-3	Add Donor	Name, Email, dob, blood_group, Mobile no., dateofdonation	Insert correct data	Successfully logged in	Test case passed
L3-1	Add Camp	City, place, date, time_From, time_to.	No Data	Please fill out the field	Test case passed
L3-2	Add Camp	City, place, date, time_From, time_to.	Insert wrong data	Error occurred	Test case passed
L3-3	Add Camp	City, place, date, time_From, time_to.	Insert correct data	Successfully logged in	Test case passed
L4-1	Add Blood_Available	Blood_category, Blood_desc	No Data	Please fill out the field	Test case passed
L4-2	Add Blood_Available	Blood_category, Blood_desc	Insert wrong data	Error occurred	Test case passed
L4-3	Add Blood_Available	Blood_category, Blood_desc	Insert correct data	Successfully logged in	Test case passed

## 4.2 Compatibility testing:

Compatibility testing refers to the process of testing its compatibility across different platforms, devices, browsers, operating system and network environments. The objective is to ensure that the website functions work properly and consistently for users.

Test Scenario	Element Name	Element Type	Input	Expected Result	Actual Result	Test Result
1	Device Compatibility	Responsiveness on different devices	Checking Responsiveness on devices for e.g. Laptops, tablets, Smartphones	Website will adapt different screen sizes on different devices without any disbalancing	As expected, the website is full responsive and working perfectly	Passed
2	Operating System Compatibility	Checking website behaviour on different operating systems	Working on different Operating Systems e.g., Android systems, macOS, iOS, Windows etc.	There shouldn't be any changes in website Designing, Working, Accessibility and Performance speed, while switching the Operating System	As Expected, The Website is working all same even on different Operating System expect Linux operating system	Passed
3	Admin-user Security	Data Security	Testing security measures of admin	The logged in admin will be able to see details and	As Expected, Details of login username is	Passed

				check all information of user and make changes if required.	shown no one can see details of other users. Only admin can access hence Secured.	
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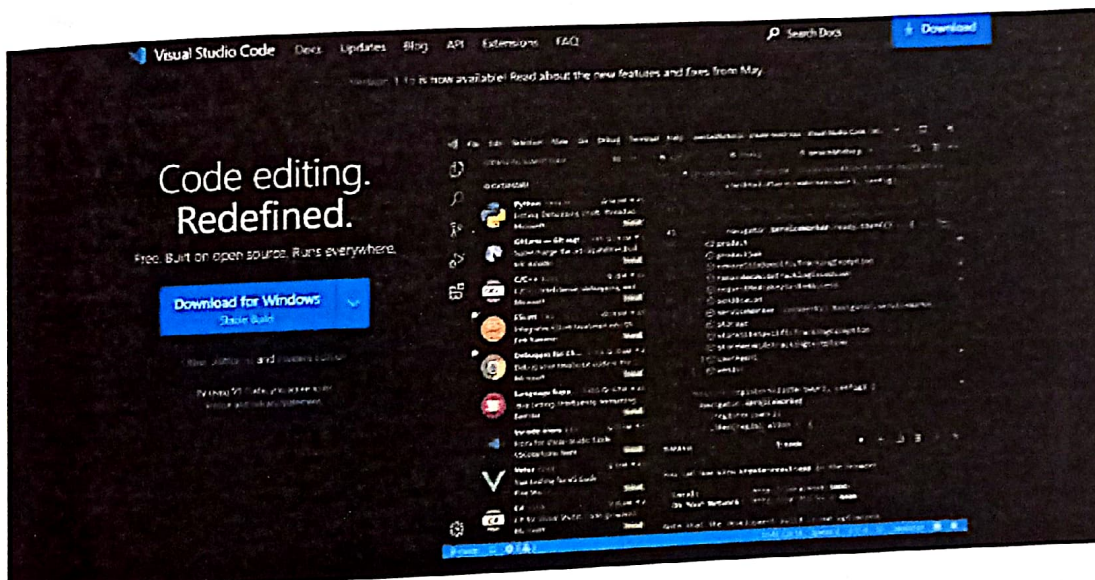


## CHAPTER 5: IMPLEMENTATION

First of all, we have to download some software to the system for the implementation of our project which are as follows: -

### 5.1 Visual Studio Code:

- Go to the official Visual Studio website <https://visualstudio.microsoft.com/downloads/>
- Click on the "Download" button for the version of Visual studio you want to install.
- Choose the components you want to install, such as languages, frameworks, and tools.
- Click on the "Install" button to start the installation process.
- Follow the installation wizard and select the options that suit your needs.



### 5.2 Installing Node in the local machine:

Implementing Node.js involves setting up a development environment and writing JavaScript code to create server-side applications. Here are some of the outlines:

- Install Nodejs: First I install the Nodejs on the system by following the instructions given on official website.
- Setup the project directory: using your terminal or command prompt, create a new directory for your node.js project and navigate inside it.
- Launch a new Nodejs project: initiate a package.json file in your project directory by running 'npm init'. This file will contain metadata about your project and any dependencies you use.
- Install the necessary packages: Depending on my project requirement I install the various additional packages using 'npm install' command following the package name. For example, 'npm install Express' this command installs the express.js framework.

- v. Write your Node.js code: Create a JavaScript file (eg.App.js) in project directory and start writing Node.js code,
- vi. Launch Node.js application: Save app.js file and then use the Node.js application using the node app.js command to launch your Node.js application,
- vii. Test your application: After opening a web browser, browse <http://localhost:3000>.

### 5.3 Installing Express and React:

As we have first installed nodejs, The nodejs contains npm Node package manager which already contains various open-source libraries, The expressjs is one of the libraries included in it. Use the Command in the terminal to install expressjs.

Command to install express: =

Command:

`npm install express`

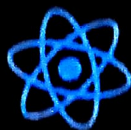
Command to create react app with all dependencies: =

Command:

`npm create-react-app <folder name>`

This command will download some dependencies and will create and run a default Reactapp.

🔄 🌐 localhost:3000



**Welcome to React**

To get started, edit `src/App.js` and save to reload.



## 5.4 Installing our database locally (MongoDB)

Setting up MongoDB and connecting to it involves a few steps. First, you need to install MongoDB, then start the MongoDB server (MongoDB) and finally connect to it using the MongoDB shell MongoDB driver in your preferred programming language. Here's a step-by-step guide:

- i. **Install MongoDB:** Visit the MongoDB website and follow the installation instruction for your operating system.
- ii. **Start the MongoDB server:** After installing MongoDB, you need to start the MongoDB server. Open the terminal and run the following command.

**Command: -**

```
mongod
```

The above command will start the MongoDB server at default port. If you want to specify the port, you can use `'--dbpath'` or `--port`. For example,

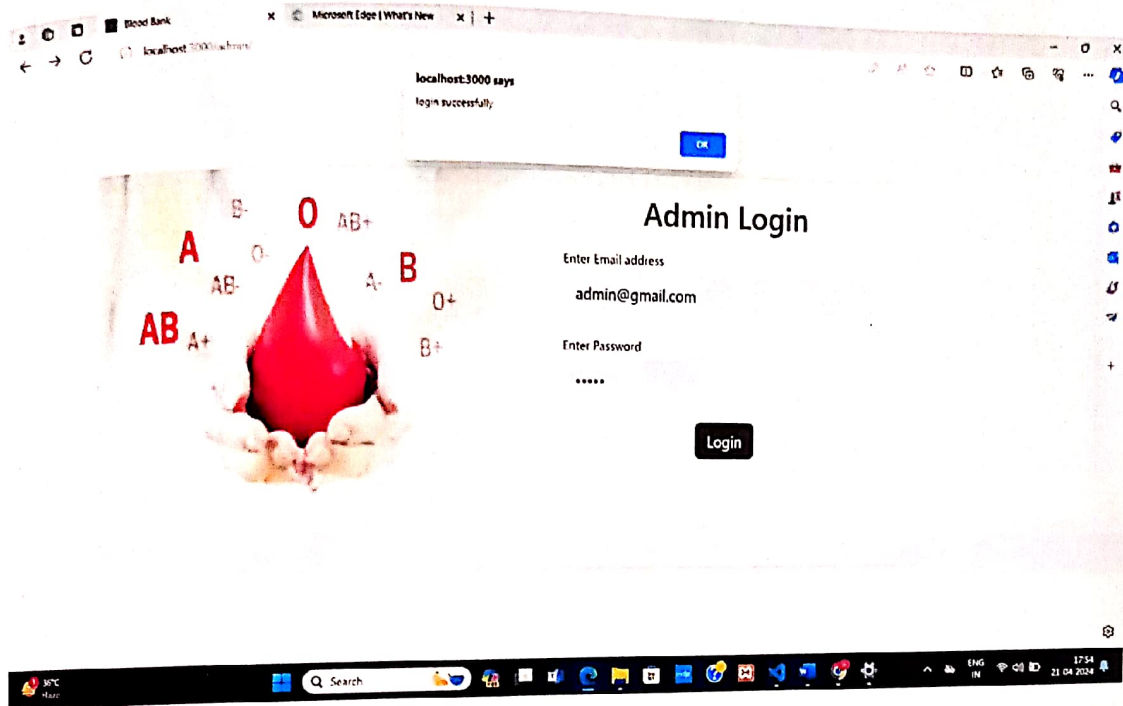
```
mongod --dbpath/path/to/data/directory -port 5000
```

**Connect to MongoDB:** After starting the MongoDB, connect to the MongoDB server by using MongoDB shell or MongoDB drive and preferred programming language. I used MongoDB drive in Nodejs to connect to the MongoDB.

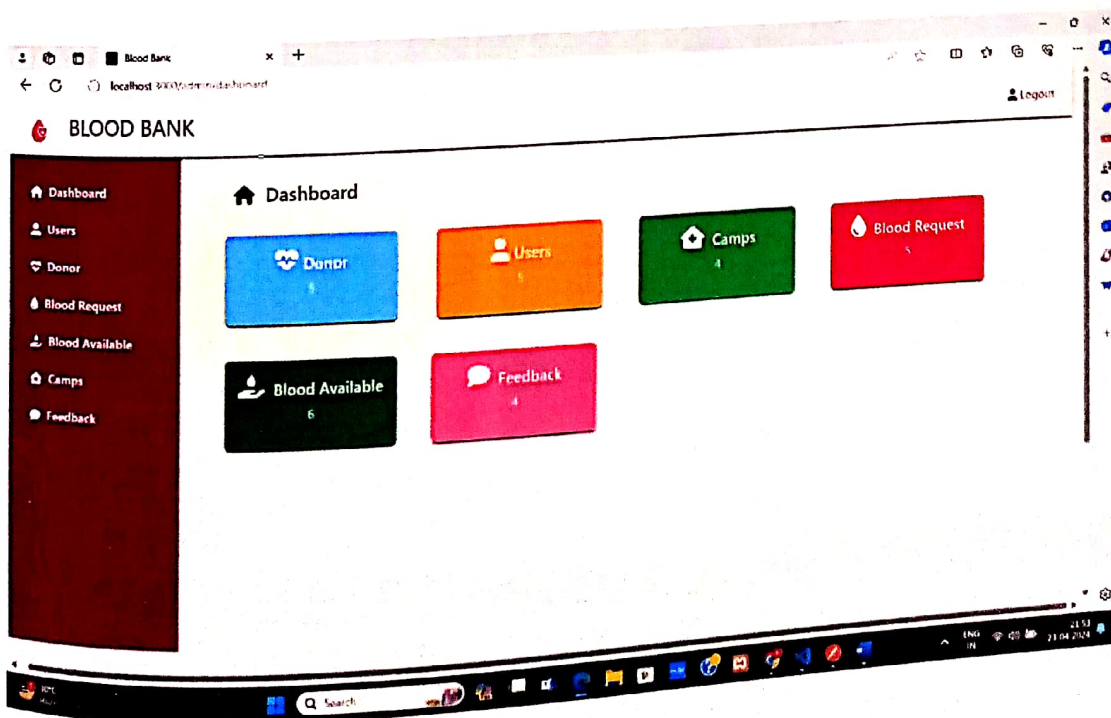


## CHAPTER 6: SAMPLE FORMS AND REPORTS

### 6.1 Login



### 6.2 Dashboard



## 6.3 Add Donor

**BLOOD BANK**

localhost:3000 says  
New Donor Added Successfully

**DONOR**

Donor name: Rohan Sharma

Email: rohan@gmail.com

Blood Type: B+

Mob no: 7891245063

DOB: 15-05-2000

Date of Donation: 02-04-2024

Buttons: insert, Cancel

Logout

Dashboard, Users, Donor, Blood Request, Blood Available, Camps, Feedback

## 6.4 Add Camps

**BLOOD BANK**

localhost:3000 says  
New Camp Added Successfully

**ADD CAMPS**

City: Indore

Place: laxminagar

Date: 12-03-2024

timeFrom: 08:00

timeTo: 12:00

Buttons: insert, Cancel

Dashboard, Users, Donor, Blood Request, Blood Available, Camps, Feedback

## 6.5 Update Camp

**BLOOD BANK**

localhost:3000 says  
Camp Updated Successfully

**UPDATE CAMP**

Camp ID	City
661b584e607f77248e60e0b0	gwl
Place	Date
city centre	10-03-2024
timeFrom	timeTo
08:00	12:00

[Update](#) [Delete](#)

**BLOOD BANK**  
Blood banks play a vital role in saving lives by providing safe blood for transfusions. Consider

**USEFUL LINKS**  
[Dashboard](#)

**CONTACT**  
New York, NY 10012, US

## 6.6 Delete Camp

**BLOOD BANK**

localhost:3000 says  
Deleted Successfully

**Delete Camp**

S.No.	ID	City	Place	Date	timeFrom	timeTo	Action
1	66178d11368a4d7e128850e8	gwalior	ddnagar	2024-04-05	09:00	12:00	<a href="#">Edit</a> <a href="#">Delete</a>
2	66181285368a4d7e1288510a	Ambah	kila road	2024-04-03	08:00	12:00	<a href="#">Edit</a> <a href="#">Delete</a>
3	661b584e607f77248e60e0b0	gwl	city centre	2024-03-10	08:00	12:00	<a href="#">Edit</a> <a href="#">Delete</a>
4	662539955ed9d21852abdf1a	Indore	laxminagar	2024-04-05	10:00	05:00	<a href="#">Edit</a> <a href="#">Delete</a>

[Add Camp](#)

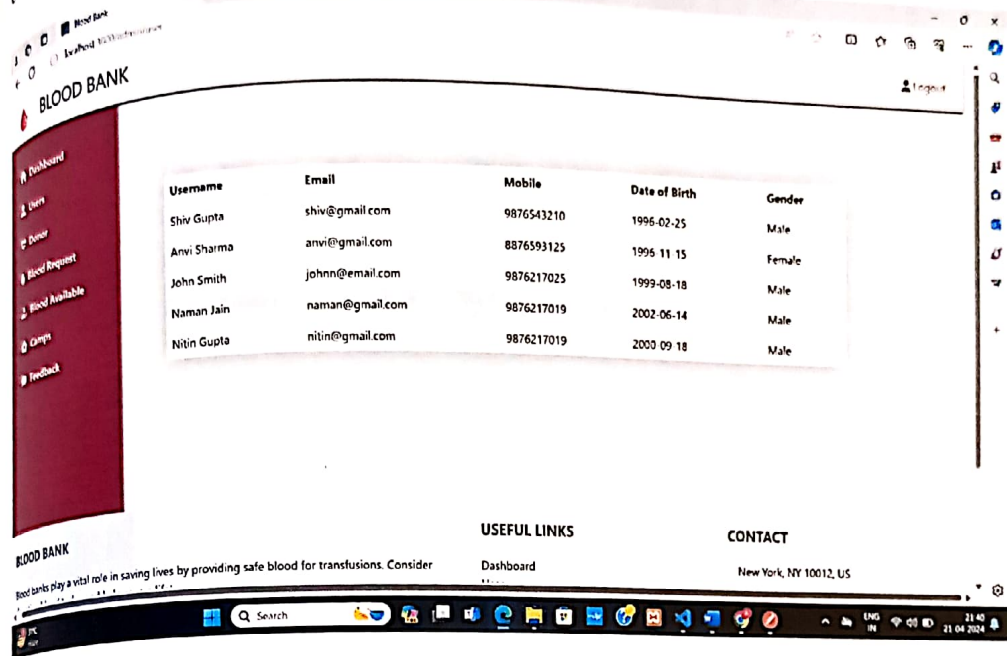
**BLOOD BANK**  
Blood banks play a vital role in saving lives by providing safe blood for transfusions. Consider

**USEFUL LINKS**  
[Dashboard](#)

**CONTACT**  
New York, NY 10012, US



## 6.7 Users

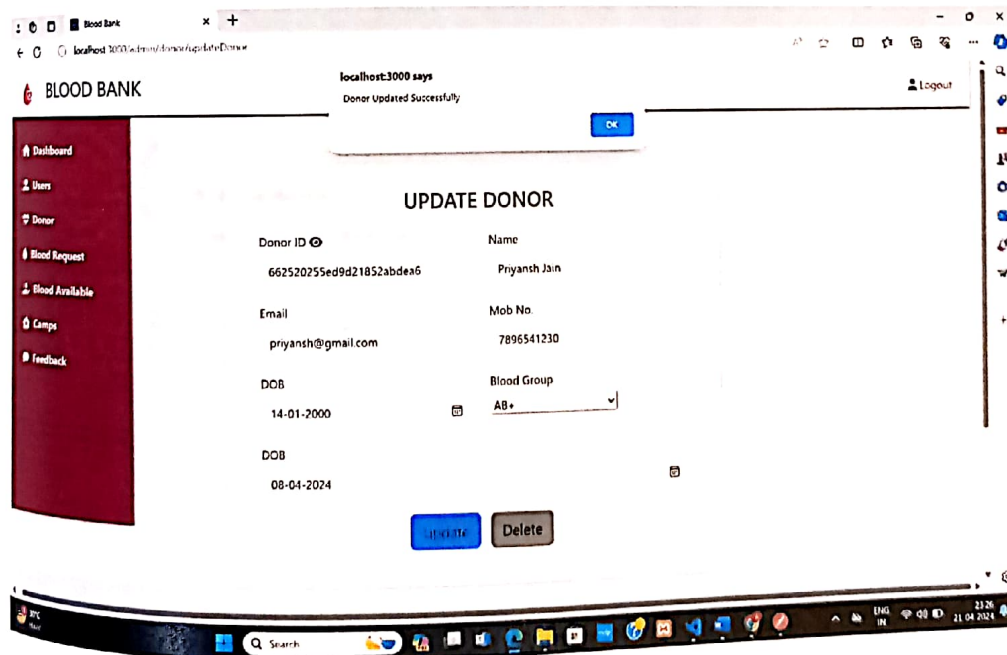


The screenshot shows a web browser window displaying the 'Blood Bank' application. The page title is 'Blood Bank'. On the left, there is a sidebar menu with options: Dashboard, Users, Donor, Blood Request, Blood Available, Camps, and Feedback. The main content area displays a table of users. The table has columns: Username, Email, Mobile, Date of Birth, and Gender. The data rows are as follows:

Username	Email	Mobile	Date of Birth	Gender
Shiv Gupta	shiv@gmail.com	9876543210	1996-02-25	Male
Anvi Sharma	anvi@gmail.com	8876593125	1996-11-15	Female
John Smith	johnn@email.com	9876217025	1999-08-18	Male
Naman Jain	naman@gmail.com	9876217019	2002-06-14	Male
Nitin Gupta	nitin@gmail.com	9876217019	2000-09-18	Male

Below the table, there are two sections: 'USEFUL LINKS' with a link to 'Dashboard' and 'CONTACT' with the address 'New York, NY 10012, US'. The footer contains the text: 'Blood banks play a vital role in saving lives by providing safe blood for transfusions. Consider'.

## 6.8 Update Donor



The screenshot shows a web browser window displaying the 'Blood Bank' application. The page title is 'Blood Bank'. On the left, there is a sidebar menu with options: Dashboard, Users, Donor, Blood Request, Blood Available, Camps, and Feedback. The main content area displays a form titled 'UPDATE DONOR'. The form has two columns for input fields. The first column contains: Donor ID (662520255ed9d21852abdea6), Email (priyansh@gmail.com), and two Date of Birth (DOB) fields (14-01-2000 and 08-04-2024). The second column contains: Name (Priyansh Jain), Mob No. (7896541230), and Blood Group (AB+). Below the form, there are two buttons: 'Update' and 'Delete'. A notification banner at the top of the form area says 'localhost:3000 says Donor Updated Successfully' with an 'OK' button. The footer contains the text: 'Blood banks play a vital role in saving lives by providing safe blood for transfusions. Consider'.

## 6.9 Blood Request

localhost:3000 says  
Request Approved

**Blood Request**

S.No.	Name	Email	Blood Type	Mobile	Quantity	Status	Action
1	Priya Sharma	priya@email.com	AB+	9784561230	10 units	Approved	
2	Raman Goyal	raman@email.com	B+	9384561505	5 units	Approved	
3	Aman Agrawal	aman@email.com	O+	8984561505	4 units	Approved	
4	Anil Gupta	anil@email.com	A+	7827454130	5 units	Pending	
5	Shruti Tomar	shruti@email.com	B-	9827454139	3 units	Pending	

## 6.10 Blood Available

**Blood Availability**

S.No.	Blood Category	Description	Action
1	A+	10 units	
2	AB+	6 units	
3	B-	4 units	
4	O-	4 units	
5	O+	5 units	

## 6.11 Feedback

The screenshot shows a web browser window with multiple tabs. The active tab is titled 'BLOOD BANK'. The browser's address bar shows the URL 'localhost:3030/feedback'. The page has a dark red sidebar on the left with the following menu items: Dashboard, Users, Donor, Blood Request, Blood Available, Camps, and Feedback. The main content area displays a table with feedback entries. The table has five columns: S.No., User, Email, Feedback, and Action. There are two rows of data. The first row shows a user named John Smith with the email john@gmail.com who provided the feedback 'Awesome work, keep it up'. The second row shows a user named Anvi Sharma with the email anvi@gmail.com who provided the feedback 'Great Service'. Each row has a small icon in the Action column. The browser's taskbar at the bottom shows the Windows logo, a search bar, and various application icons. The system clock in the bottom right corner indicates the time is 17:14 on 19/04/2024.

S.No.	User	Email	Feedback	Action
1	John Smith	john@gmail.com	Awsome work, keep it up	
2	Anvi Sharma	anvi@gmail.com	Great Service	



## CHAPTER 7: CONCLUSION

Blood banks play a crucial role in healthcare by ensuring a consistent and safe supply of blood for patients in need. Through the generosity of volunteer donors, blood banks provide essential support for medical treatments, surgeries, and emergency situations. With the support of donors, volunteers, and healthcare professionals, we can make a positive impact on countless lives and contribute to the well-being of our community.

The functionalities within the admin module empower administrators to maintain accurate and up-to-date information regarding blood availability, donor records, and donation camps. By enabling administrators to quickly add new entries, remove outdated information, and make necessary updates, the module ensures the integrity and reliability of data across all facets of blood bank operations.

In conclusion, the blood bank represents a comprehensive and user-centric solution for optimizing blood bank administration. By leveraging innovative technologies and user-friendly interfaces, the module empowers administrators to effectively manage donor relations, coordinate donation activities, track blood availability, and respond to critical blood requests. As a result, the module plays a vital role in advancing the mission of the blood bank, enhancing patient care, and saving lives. With ongoing refinement and enhancement, the admin module will continue to serve as a cornerstone of excellence in blood bank management for years to come.

## ***Bibliography***

1. <https://code.visualstudio.com/Download>
2. <https://nodejs.dev/learn>
3. <https://www.wikipedia.com>
4. <https://getbootstrap.com/>
5. <https://reactjs.org/tutorial/tutorial.html>
6. <https://www.mongodb.com/docs/manual/tutorial/>

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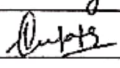


• Bibliographic material



## Fortnightly Progress Reports

### FORMAT


#### FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Akshai Jain		Department	MCA	
Industry/Organization	Praxico Global Research Pvt. Ltd.		Date/Duration	01/01/24 - 15/01/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity: Knowledge up gradation			✓		
Performance: Quality of work			✓		
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Learn CSS, HTML and Javascript				
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Suresh Gupta				
Signature of Industry Mentor	 				
Receiving Date	18/01/24	Name of Faculty Mentor	D. R. S. Jodan	Sign	

# FORMAT

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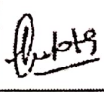

Name of student	Akshati Jain		Department	MCA	
Industry/Organization	Pradico Global Research Pvt. Ltd.		Date/Duration	16/01/24-31/01/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation			✓		
Performance/Quality of work			✓		
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Learn Bootstrap, Advance JavaScript (ES6), Introduction of React				
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Suresh Gupta				
Signature of Industry Mentor	[Signature]				

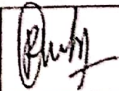


Receiving Date	05/02/24	Name of Faculty Mentor	Dr. R.S. Jagan	Sign	[Signature]
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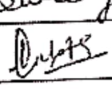
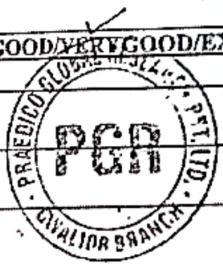
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Industry/Organization	Praedico Global Research Pvt. Ltd.		Date/Duration	01/02/24 - 15/02/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation			✓		
Performance/Quality of work				✓	
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	React setup, Components, Hooks, Props and React Bootstrap Integration				
OVERALL GRADE (Any one)	✓ POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Suresh Gupta				
Signature of Industry Mentor	 				

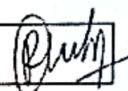
Receiving Date	19/02/24	Name of Faculty Mentor	Dr. R.S. Jadon	Sign	
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Industry/Organization	Praedico Global Research Pvt. Ltd		Date/Duration	16/02/24-29/02/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation			✓		
Performance/Quality of work				✓	
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Working on frontend development using React and Bootstrap				
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERYGOOD/EXCELLENT				
Name of Industry Mentor	Suresh Gupta				
Signature of Industry Mentor	 				

Receiving Date	04/03/24	Name of Faculty Mentor	Dr. R.S. Jodan	Sign	
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

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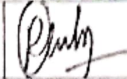
Name of student	Akshati Jain		Department	MCA	
Industry/Organization	Praedico Global Research Pvt. Ltd.		Date/Duration	20/03/24 - 15/03/24	
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Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work				✓	
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	<p>Worked on Node JS, Express JS, MongoDB for Backend &amp; Database</p>				
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Sneety Gupta				
Signature of Industry Mentor					

Receiving Date	20/03/24	Name of Faculty Mentor	Dr. R.S. Jadon	Sign	
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Industry/Organization	Praedico Global Research Pvt. Ltd		Date/Duration	16/03/24 - 31/03/24	
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Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work			✓		
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Worked on Project using MERN Technology.				
OVERALL GRADE (Any one)	✓ POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
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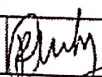
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Industry/Organization	Bioedico Global Research Pvt. Ltd.		Date/Duration	01/04/24 - 15/04/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work				✓	
Behaviour/Discipline/Team work					✓
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Worked on Project				
<b>OVERALL GRADE (Any one)</b>	<b>POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT</b>				
Name of Industry Mentor	Sweety Gupta				
Signature of Industry Mentor					

Receiving Date	16/04/24	Name of Faculty Mentor	Dr. R.S. Jadon	Sign	
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