

1.ACKNOWLEDGEMENTS

It is my pleasure to be indebted to various people, who directly or indirectly contributed in the development of this work and who influenced our thinking, behavior, and acts during the course of our training.

I express my sincere gratitude Mr.Lovedeep Singh, worthy mentor, guide and a great teacher who influenced and inspired me in many ways.

Lastly, I would like to thank the almighty and my parents for their moral support and my friends with whom I shared our day-to-day experience and received lots of suggestions that improved our quality of work.

3.About Project

Blood Bank Management System

3.1 Introduction

The BLOOD BANK MANAGEMENT SYSTEM is great project. this project is designed for successful completion of project on blood bank management system. the basic building aim is to provide blood donation service to the city recently. Blood Bank Management System (BBMS) is a browser based system that is designed to store, process, retrieve and analyze information concerned with the administrative and inventory management within a blood bank. This project aims at maintaining all the information pertaining to blood donors, different blood groups available in each blood bank and help them manage in a better way. Aim is to provide transparency in this field, make the process of obtaining blood from a blood bank hassle free and corruption free and make the system of blood bank management effective.

The *Blood bank system project report* contain information related to blood like

- Blood type
- Date of Donation of blood
- validity of Blood s
- Available Blood group

3.2 Need of Blood Bank Management System

Bank blood donation system in java is planned to collect blood from many donators in short from various sources and distribute that blood to needy people who require blood. To do all this we require high quality software to manage those jobs. The government spending lot of money to develop high quality "Blood Bank management system project". For do all those kinds of need

blood bank management system project in java contain modules which are include the detail of following areas:

- Blood Donor
- Equipments
- Stick
- Blood Recipient
- Blood collection
- Camp
- Stock details
- blood bank system project Reports
- Blood issued
- Blood bank system project

3.3 Abstract of Blood Bank Management System

Help Line is an voluntary and non-governmental organization.It maintains Online library of blood donors in India. Sometimes Doctors and Blood bank project have to face the difficulty in finding the blood group Donors at right time. Help Line has attempted to provide the answer by taking upon itself the task of collecting Blood bank project nationwide for the cause and care of people in need.

At any point of time the people who are in need can reach the donors through our search facility. By mobilizing people and organization who desire to make a difference in the lives of people in need. On the basis of humanity, Everyone is welcome to register as a blood donor.

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management within a blood bank. This project aims at maintaining all the information pertaining to blood donors, different blood groups available in each blood bank and help them manage in a better way. Aim is to provide transparency in this field, make the process of obtaining blood from a blood bank hassle free and corruption free and make the system of blood bank management effective.

3.4 Benefits

Our Vision

In the IT era, there are almost not any fields exist where computers are not used. Techshot would like to contribute to the total SATISFACTION to its esteemed CUSTOMERS by providing them with the high quality products.

Techshot wants to make products highly reliable, affordable, & consistent which will serve the customer domain.

Techshot concerned for its customers & serves them in precise time, with right product of right quality. By enhancing consulting and other potentials, we help move customers forward in each & every part of their businesses, from strategic planning to day-to-day operations.

Our Clients benefit from access to information solutions that help them better cope-up their business, cooperate with customers and make financial and operational decisions.

Our Mission

To endow with strategic and technical expertise to companies wanting to leverage the latest innovations. Our mission is to Define Quality Policy for the IT era, set new span for Services to customers.

3.5 Features:

3.5.1 Blood Camp Management And Reporting

- Provides recording of details of camp beginning from allocation of staff, details of facilities available in the camp venue.
- Provides assigning of donor to a particular camp and generate camp organizer report
- Automated report generation of camp details for submission to the Government
- **Donor Management**
 - The system allows automatic component data generation based on the component selected in the blood donor form.
 - The system allows bulk update for serology for blood units. Serology result for many donors can be updated at once.
 - The system allows for either component creation before serology test or vice versa. Based on the serology test, the component created are updated automatically
 - The system allows bar-coded blood bag number entry

- All donor related reports are excel downloadable
- All Reports provides filtering over many factors like Blood Group, gender, area, blood Camp, date of donation, donor type etc.
- The system provides easy link for easy edit or adding details for various sections of the donor form
- During form filling, the system notifies the user how much percentage of donor data has been updated

3.5.3 Donor Test Results Management and Adverse Reaction Data Management

- Provides filterable selections for donor selections
 - Excel download of all reports
 - The reports are highly configurable and can be configured to display data as per institution requirements.
- **Search based on Component ID, Donor Registration ID, Donor BloodBag Number and Donor Name**
 - a) The results displayed in search is highly configurable
 - The search functionality also allows for site-wide search. It means a user can search for any data available in the system
 - Custom links can be added in the search results to allow easier navigation and accessibility
- **Blood Components Management**

- Automatic generation of components form donor form
- Based on the date of collection, the system automatically derives the date of expiry and disallows issue of component if unit has expired
- Until the serology test is done, the system marks the status of the the component as test awaited. And only after serology test is done, the component is marked for Ready for Issue
- The Available components list is available and the system automatically generates the list of components that are ready for issue to be available.

- **Patient Management System**
 - Captures patient personal information as well as the hospital where blood is requireda)
 - The system allows for reserving a unit for 24 hours for a patient)
 - The blood component issued, the payment made as well as link to the final bill is available when the patient page is opened
 - The data allows reports like: Issue Register, Reserved Units and Patient Inventory Liste)
 - The system allows for capturing transfusion reaction data

- **Blood Issue and Billing**

- Ability to provide adjustments in the final payment receipt for concession for blood unit
 - The system prevents blood issue if cross-match is not done or fails
 - Final bill gets generated only if only the payment has been accounted for
 - Final bill gets generated only component selected has been serology tested and is ready for issue
 - Auto-generated final receipt
 - Auto-generated Cross-matching report
- **Managing Practical Solutions For Blood Bank Management**
- The system allows components to be created before serology and vice-versa.
 - The system takes care to automatically update the components when serology is done.

3.6 Applications: This application is built such a way that it should suits for all type of blood banks in future. So every effort is taken to implement this project in this blood bank, on successful implementation in this blood bank, we can target other blood banks in the city.

3.7 OBJECTIVE:

The main objective of this application is to automate the complete operations of the blood bank. They need maintain hundreds of thousands of records. Also searching should be very faster so they can find required details instantly.

To develop a web-based portal to facilitate the co-ordination between supply and demand of blood . This system makes conveniently available good quality, safe blood and other blood components, which can be provided in a sound, ethical and acceptable manner, consistent with the long-term well being of the community. It actively encourage voluntary blood donation, motivate and maintain a well-indexed record of blood donors and educate the community on the benefits of blood donation. This will also serve as the site for interaction of best practices in reducing unnecessary utilization of blood and help the state work more efficiently towards self-sufficiency in blood.

The system will provide the user the option to look at the details of the existing Donor List, Blood Group and to add a new Donor. It also allows the user to modify the record. The administrator can alter all the system data.

4. About Front End:

The front end is an [interface](#) between the user and the back end. The front and back ends may be distributed amongst one or more systems.

In [network computing](#), *front end* can refer to any hardware that optimizes or protects network traffic. It is called [application front-end hardware](#) because it is placed on the network's outward-facing front end or boundary. Network traffic passes through the front-end hardware before entering the network.

In [compilers](#), the [front end](#) translates a computer programming [source code](#) into an [intermediate representation](#), and the back end works with the intermediate representation to produce code in a computer output language. The back end usually optimizes to produce code that runs faster. The front-end/back-end distinction can separate the [parser](#) section that deals with source code and the back end that [generates code and optimizes](#).

standard form (<?php) rather than the shorthand form.

A PHP file normally contains HTML tags, just like an HTML file, and some PHP scripting code.

4.2.2 HTML

HTML or **Hyper Text Markup Language** is the standard markup language used to create web pages.

HTML was created in 1991 by Tim Berners-Lee at CERN in Switzerland. It was designed to allow scientists to display and share their research.

HTML is written in the form of HTML elements consisting of *tags* enclosed in angle brackets (like <html>). HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent *empty elements* and so are unpaired, for example . The first tag in a pair is the *start tag*, and the second tag is the *end tag* (they are also called *opening tags* and *closing tags*).

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HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links,

quotes and other items. It can embed scripts written in languages such as Java Script which affect the behavior of HTML web pages.

HTML is descriptive markup language. Library of various markup languages is defined in various browsers.

a) HTML Images - The Tag and the Src Attribute

In HTML, images are defined with the tag.

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To display an image on a page, you need to use the src attribute. Src stands for "source". The value of the src attribute is the URL of the image you want to display.

Syntax for defining an image:

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b) HTML FORMS

HTML forms are used to pass data to a server.

The <form> tag is used to create an HTML form:

```
<form>
```

.

input

.

elements

```
</form>
```

An HTML form can contain input elements like text fields, checkboxes, radio-buttons, submit buttons and more. A form can also contain select lists, textarea, fieldset, legend, and label elements.

c) Image tag () :

To add an image to an HTML document, we just need to include an tag with a reference to the desired image. The tag is an empty element i.e. it doesn't require a closing tag and we can use it to include from small icons to large images.

Syntax: <imgsrc="URL" alt="alternative text">

d) HTML Lists :

An ordered list:

- The first list item
- The second list item
- The third list item

An unordered list:

- List item
- List item
- List item

4.2.3 HTML 5

HTML5 will be the new standard for HTML. The previous version of HTML, HTML 4.01, came in 1999. The web has changed a lot since then. HTML5 is still a work in progress.

However, the major browsers support many of the new HTML5 elements and APIs.

HTML5 is cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG).

WHATWG was working with web forms and applications, and W3C was working with XHTML 2.0. In 2006, they decided to cooperate and create a new version of HTML.

Some rules for HTML5 were established:

- a) New features should be based on HTML, CSS, DOM, and JavaScript
- b) Reduce the need for external plug-ins (like Flash)
- c) Better error handling
- d) More markup to replace scripting
- e) HTML5 should be device independent
- f) The development process should be visible to the public

4.2.4 CSS

CSS tutorial or CSS 3 tutorial provides basic and advanced concepts of CSS technology. Our CSS tutorial is developed for beginners and professionals. The major points of CSS are given below:

- CSS stands for Cascading Style Sheet.
- CSS is used to design HTML tags.
- CSS is a widely used language on the web.
- HTML, CSS and JavaScript are used for web designing. It helps the web designers to apply style on HTML tags.

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and user interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.

CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of

presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design).

CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified.

With plain HTML you define the colors and sizes of text and tables throughout your pages. If you want to change a certain element you will therefore have to work your way through the document and change it. With CSS you define the colors and sizes in "styles". Then as you write your documents you refer to the styles. Therefore: if you change a certain style it will change the look of your entire site. Another big advantage is that CSS offers much more detailed attributes than plain HTML for defining the look and feel of your site.

4.2.5 JAVASCRIPT

JavaScript (JS) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also being used in server-side network programming (with Node.js), game development and the creation of desktop and mobile applications.

JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics. The key design principles within JavaScript are taken from the Self and Scheme

programming languages. It is a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles.

The application of JavaScript in use outside of web pages—for example, in PDF documents, site-specific browsers, and desktop widgets—is also significant. Newer and faster JavaScript VMs and platforms built upon them (notably Node.js) have also increased the popularity of JavaScript for server-side web applications. On the client side, JavaScript was traditionally implemented as an interpreted language but just-in-time compilation is now performed by recent (post-2012) browsers.

JavaScript was formalized in the ECMA Script language standard and is primarily used as part of a web browser (client-side JavaScript). This enables programmatic access to objects within a host environment.

JavaScript is the most popular programming language in the world.

It is the language for HTML, for the Web, for computers, servers, laptops, tablets, smart phones, and more.

You can use JavaScript to:

- a) Change HTML elements
 - Delete HTML elements
 - Create new HTML elements
 - Copy and clone HTML elements

5. About Back End:

In a previous blog, we talked about how web programmers are concerned with launching websites, updates, and maintenance, among other things. All of that works to support the front-end of the website. The back-end has three parts to it: server, application, and database.

To better explain how all of this works, let's use the example of a customer trying to purchase a plane ticket using a website. Everything that the customer sees on the webpage is the front-end, as we have explained before, but once that customer enters all of his or her information, sssuch as their name, billing address, destination, etc, the web application stores the information in a database that was created previously on the server in which the website is calling for information.



Introduction:

The database has become an integral part of almost every human's life. Without it, many things we do would become very tedious, perhaps impossible tasks. Banks, universities, and libraries are three examples of organizations that depend heavily on some sort of database system. On the Internet, search engines, online shopping, and even the website naming convention would be impossible without the use of a database. A database that is implemented and interfaced on a computer is often termed a database server.

One of the fastest SQL (Structured Query Language) database servers currently on the market is the MySQL server, developed by T.c.X. DataKonsultAB. MySQL, available for download at www.mysql.com, offers the database programmer with an array of options and capabilities rarely seen in other database servers. MySQL is free of charge for those wishing to use it for private and commercial use. Those wishing to develop applications specifically using MySQL should consult MySQL's licensing section, as there is charge for licensing the product.

These capabilities range across a number of topics, including the following:

- a) Ability to handle an unlimited number of simultaneous users.
- b) Capacity to handle 50,000,000+ records.
- c) Very fast command execution, perhaps the fastest to be found on the market.
- d) Easy and efficient user privilege system.

However, perhaps the most interesting characteristic of all is the fact that it's free. That's right, T.c.X offers MySQL as a free product to the general public.

Reasons to Use MySQL

a) Scalability and Flexibility

The MySQL database server provides the ultimate in scalability, sporting the capacity to handle deeply embedded applications with a footprint of only 1MB to running massive data warehouses holding terabytes of information. Platform flexibility is a stalwart feature of MySQL with all flavors of Linux, UNIX, and Windows being supported.

b) High Performance

A unique storage-engine architecture allows database professionals to configure the MySQL database server specifically for particular applications, with the end result being amazing performance results.

c) High Availability

Rock-solid reliability and constant availability are hallmarks of MySQL, with customers relying on MySQL to guarantee around-the-clock uptime. MySQL offers a variety of high-availability options from high-speed master/slave replication configurations, to specialized Cluster servers offering instant failover, to third party vendors offering unique high-availability solutions for the MySQL database server.

d) Robust Transactional Support

MySQL offers one of the most powerful transactional database engines on the market. Features include complete ACID (atomic, consistent, isolated, durable) transaction support, unlimited row-level locking, distributed transaction capability, and multi-version transaction support where readers never block writers and vice-versa.

e) Web and Data Warehouse Strengths

MySQL is the de-facto standard for high-traffic web sites because of its high-performance query engine, tremendously fast data inserts capability, and strong support for specialized web functions like fast full text searches.

f) Strong Data Protection

Because guarding the data assets of corporations is the number one job of database professionals, MySQL offers exceptional security features that ensure absolute data protection. In terms of database authentication, MySQL provides powerful mechanisms for ensuring only authorized users have entry to the database server, with the ability to block users down to the client machine level being possible.

g) Management Ease

MySQL offers exceptional quick-start capability with the average time from software download to installation completion being less than fifteen minutes. This rule holds true whether the platform is Microsoft Windows, Linux, Macintosh, or UNIX.

PHP Main Features of MySQL

- Tested with a broad range of different compilers.
- Works on many different platforms.
- The MySQL Server design is multi-layered with independent modules.
- Fully multi-threaded using kernel threads. It can easily use multiple CPUs if they are available.
- Provides transactional and non-transactional storage engines.
- Uses very fast B-tree disk tables with index compression.
- Relatively easy to add other storage engines. This is useful if you want to provide an SQL interface for an in-house database.
- A very fast thread-based memory allocation system.
- Very fast joins using an optimized one-sweep multi-join.
- In-memory hash tables, which are used as temporary tables.
- SQL functions are implemented using a highly optimized class library and should be as fast as possible. Usually there is no memory allocation at all after query initialization.
- The server is available as a separate program for use in a client/server networked environment.

6. Minimum Hardware Specification:

6.1 Hardware Requirement

Processor	:	Intel Core Duo 2.0 GHz or more
RAM	:	1 GB or More
Harddisk	:	80GB or more
Monitor	:	15" CRT, or LCD monitor
Keyboard	:	Normal or Multimedia
Mouse	:	Compatible mouse

6.2 Software Requirement

Front End	:	Visual Basic 2005 Express edition
		With Sql Server Compact Edition
		Microsoft SDK 2.0

Or

Visual Basic 2008 Express edition

With Sql Server Compact Edition

Microsoft SDK 3.0

Back End : MS Sql Server

Operation System : Windows 7 with server pack 2

Or

Windows 8.1

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7.6 MySQL's Logical Architecture

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The topmost layer contains the services that aren't unique to MySQL. They're services most network-based client/server tools or servers need: connection handling, authentication, security, and so forth.

The third layer contains the storage engines. They are responsible for storing and retrieving all data stored "in" MySQL. Like the various filesystems available for GNU/Linux, each storage engine has its own benefits and

drawbacks. The server communicates with them through the *storage engine API*. This interface hides differences between storage engines and makes them largely transparent at the query layer. The API contains a couple of dozen low-level functions that perform operations such as "begin a transaction" or "fetch the row that has this primary key." The storage engines don't parse SQL^[4] or communicate with each other; they simply respond to requests from the server.

7.7 Softwares and tools used:

7.7.1 My Sql:



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customers relying on MySQL to guarantee around-the-clock uptime. MySQL offers a variety of high-availability options from high-speed master/slave replication configurations, to specialized Cluster servers offering instant failover, to third party vendors offering unique high-availability solutions for the MySQL database server.

d) Robust Transactional Support

MySQL offers one of the most powerful transactional database engines on the market. Features include complete ACID (atomic, consistent, isolated, durable) transaction support, unlimited row-level locking, distributed transaction capability, and multi-version transaction support where readers never block writers and vice-versa.

e) Web and Data Warehouse Strengths

MySQL is the de-facto standard for high-traffic web sites because of its high-performance query engine, tremendously fast data inserts capability, and strong support for specialized web functions like fast full text searches.

f) Strong Data Protection

Because guarding the data assets of corporations is the number one job of database professionals, MySQL offers exceptional security features that ensure absolute data protection. In terms of database authentication, MySQL provides powerful mechanisms for ensuring only authorized users have entry to the database server, with the ability to block users down to the client machine level being possible.

g) Management Ease

MySQL offers exceptional quick-start capability with the average time from software download to installation completion being less than fifteen minutes. This rule holds true whether the platform is Microsoft Windows, Linux, Macintosh, or UNIX.

statements that lead to vague conclusions. So the first task is to get more crucial information by interviewing and meeting concerned people. It clarifies how the problem is felt, how often it occurs, how it affects the business and which departments are suffering with this. This phase consists of the following tasks.

- **Problem Definition And Initial Investigation**

This was a preliminary investigation done with a view to have a "feel" of the working of the proposed system. This phase has been identified the end-user directly involved in the system who were the managers, assistant officer and database administrator, and the development department. By understanding the working of database, its flow and also after conducting meetings and interviews with the concerned persons of the department, a clear idea about the working was obtained. A flexible approach is adapted towards people who are interviewed. Short hand written notes are prepared based on the response of the employees. The interviews are preferably conducted at the work place of the person being interviewed. Detailed investigation is done in order to define the scope of the problem .The interview is concluded with a quick resume of the ground covered during the interview .The Questionnaire technique is combined with interviews to get the best result. Proper care has been taken in the design of such questionnaires so that the persons answering these questions do not feel hesitant. An explanatory note that serves to gain cooperation and avoid misunderstanding by setting out the purpose of the exercise clearly accomplishes each questionnaire.

8.2.3.3 Feasibility study

A feasibility study is a test of a system proposal according to its workability impact on organization, ability to meet user needs and effective use of resources. The objective of a feasibility study is not to solve a problem but to acquire a sense of its scope. During the study, the problem definition is crystallized and the aspects of the problem to be included in the system are determined. After the initial investigation of the system that helped to have in-depth study of the existing system, understanding its strength and

weaknesses and the requirements for the new proposed system.

Feasibility study was done in three phases documented below.

8.2.3.3.1 Behavioral feasibility: People are inherently resistant to change and computers have been known to facilitate change. There is always some reluctance among the users against the introduction of new system but they were told that this system would eliminate the unnecessary overhead of database migration and conversion, which presently had to be carried out on daily basis to facilitate transactions between the different departments. The objective this feasibility phase is to take the operational staff into confidence

8.2.3.3.2 Economic feasibility: Economic feasibility is the most frequently used method for evaluating the effectiveness of the candidate system. More commonly known as cost\benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with the costs. If benefits outweigh the costs, then the decision is made to design and implement the system. A cost\benefit analysis was done for the proposed system to evaluate whether it would be economically viable or not.

8.2.3.3.3 Technical feasibility: Technical feasibility centers on the existing computer system. (Hardware/software) and to what extent it can support the proposed addition also the organization already has sufficient high-end machines to serve the processing requirements of the proposed system. So there is no need to purchase new software as the organization has necessary software i.e.tomcat5.0, j2ee1.4, Microsoft SQL Server or hardware to support the proposed system

8.2.3.4 ANALYSIS PHASE

Existing System Details and Problems

8.2.3.4.1 It was difficult to set the JDK information on the system in the mean time. Moreover it was a time consuming affair if a person is new to start working with java.

- It was difficult to solve the problems those were arising during a particular installation of the software because of hardware compatibility issues.
- Moreover there is usage an issue concerned with the software .This issue has been resolved by the WEB-IDE by providing Integrated Environment facility to its users.
- This system provides the feature of uploading a java file already on the local machine of the user or he can make altogether a new java program using this IDE and save it on his local machine also..

8.2.3.5 User Requirements

Since end users are the ones who are finally going to use the system, their requirements need to be identified. This involves questioning the end users what their expectations were. The main requirement of the end user is that the system should be easy to use and take less time. In addition to these another important factor was to eliminate the need for database conversion and migration that had to be carried out presently. After conducting interviews with the users a document called the software requirement specification was created. This is the most important document that forms the basis for system development. It should be consistent, complete, unambiguous, traceable and inter-related.

This document has the following components:

- **Functional Requirements:** The functional requirements specify relationship between the inputs and outputs. All the operations to be performed on the input data to obtain output are to be specified. This includes specifying the validity checks on the input and output data, parameters affected by the operations and the other

15.Future Recommendation

BLOOD BANK MANAGEMENT is a software application to built such a way that it should suits for all type of blood banks in **future**.

One important future scope is availability of location based blood bank details and extraction of location based donor's detail, which is very helpful to the acceptant people. All the time the network facilities cannot be use. This time donor request does not reach in proper time, this can be avoid through adding some message sending procedure this will help to find proper blood donor in time. This will provide availability of blood in time.

14. Summary and Conclusion

With the theoretical inclination of our syllabus it becomes very essential to take the utmost advantage of any opportunity of gaining practical experience that comes along. The building blocks of this Major Project "BLOOD BANK Management System" was one of these opportunities. It gave us the requisite practical knowledge to supplement the already taught theoretical concepts thus making us more competent as a computer engineer. The project from a personal point of view also helped us in understanding the following aspects of project development:

- The planning that goes into implementing a project.
- The importance of proper planning and an organized methodology.
- The key element of team spirit and co-ordination in a successful project.

The project also provided us the opportunity of interacting with our teachers