

**INDUSTRY INTERNSHIP REPORT
ON
“Blood Bank Management”**

AT

**ThinkNEXT Technologies Private Limited
S.C.F-113, Phase-11, Mohali**

**AN INDUSTRY INTERNSHIP REPORT SUBMITTED
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF DEGREE OF**

**BACHELOR OF ENGINEERING
In
COMPUTER SCIENCE AND ENGINEERING**

**SUBMITTED BY:
Bhanu Partap Singh
Roll Number: 2020a1r070**



AUTONOMOUS

**SUBMITTED TO
COMPUTER SCIENCE AND
ENGINEERING
Model Institute of Engineering and Technology (Autonomous)
Jammu, India**

CANDIDATES' DECLARATION

I, **Bhanu Partap Singh , 2020a1r070**, hereby declare that the work which is being presented in the Industry Internship Report entitled, "**Blood Bank Management**" in partial fulfillment of requirement for the award of degree of B.E. (Branch Name) and submitted in the Department Name, Model Institute of Engineering and Technology (Autonomous), Jammu is an authentic record of my own work carried by me at "ThinkNEXT Technologies Private Limited S.C.F-113, Phase-11, Mohali" under the supervision and mentorship of **Ms. Ramandeep Kaur** Branch Head, ThinkNEXT Technologies Private Limited S.C.F-113, Phase-11, Mohali and Faculty **Mr. Sunil Kumar**(Trainer cum Developer, Software Development) respectively. The matter presented in this report has not been submitted to this or any other University / Institute for the award of B.E. Degree.

Signature of the Student

**(Bhanu Partap Singh)
2022
2020a1r070**

Dated:

3rd of October

INTERNSHIP CERTIFICATE

ThinkNEXT Technologies Private Limited



Scan and verify your Certificate
Certificate ID:802043
Ref.No. TNT/C-22/9441



Certificate

This Certificate do hereby recognizes that

Bhanu Partap Singh S/o Joginder Singh

has successfully completed Industrial Training Program from

13th July 2022 to 02nd September 2022

in Python Django Grade A

For ThinkNEXT Technologies Pvt. Ltd.

Authorised Signatory

For ThinkNEXT Technologies Pvt. Ltd.

Munish Mittal
Director

Member Training Division

Director

Corporate Office: S.C.F 113, Phase XI, Mohali (Punjab)

Outstanding Excellent Very Good Good Satisfactory

100-90%

89-80%

79-70%

69-60%

59-50%



ISO Certified



Member of Confederation
of Indian Industry



SUPERVISOR EVALUATION OF INTERN

MODEL INSTITUTE OF ENGINEERING AND TECHNOLOGY

KOT BHALWAL, JAMMU

INTERN EVALUTION FORM

Intern's Name: Bhanu Partap Singh **University Roll No.** 2020a1r070

Name of Organization: ThinkNEXT Technologies Private Limited

Address of Organization: S.C.F-113,Phase-11,Mohali

Phone: 7837402000

Name of Training Manager: Ramandeep Kaur

Official e-mail Id: info@thinknext.co.in

Intern's Job Role or Assignment: Python Django

PART I(Mandatory)

Please complete this evaluation at the end of the student's work period. You are encouraged to discuss the completed form with the intern to aid in their professional development. The evaluation is a mechanism that department has employed for continuous improvement, therefore it is not confidential. Please use the scale below to evaluate your intern's performance in the following areas:

1	2	3	4	5
Needs more training or exposure	Performing below expectations	Acceptable performance	Above average performance	Superior performance

1 General Workplace Performance

Attendance& Punctuality	1	2	3	4	*5
Appropriate attire	1	2	3	4	*5
Attitude	1	2	3	4	*5
Acceptance of criticism	1	2	3	4	*5
Asks appropriate questions	1	2	3	4	*5
Self-motivated	1	2	3	4	*5

Practices ethical behaviour	1	2	3	*4	5
Team works skills / Leadership skills	1	2	3	4	*5

2 Specific Job Assignment Performance

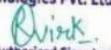
Sufficient knowledge to perform tasks	1	2	3	4	*5
Verbal communication skills	1	2	3	4	*5
Written communication skills	1	2	3	4	*5
Problem Solving Ability	1	2	3	*4	5
Technical Skills	1	2	3	4	*5
Meets deadlines	1	2	3	4	*5
Takes initiative	1	2	3	4	*5
Sets priorities	1	2	3	4	*5

* Put tick on specific box

How would you assess the intern's overall performance?

outstanding above average satisfactory below average unsatisfactory

For ThinkNEXT Technologies Pvt. Ltd.


Authorised Signatory

(Official stamp of the organization)

COMPUTER SCIENCE AND ENGINEERING
Model Institute of Engineering and Technology (Autonomous)
Kot Bhalwal, Jammu, India
(NAAC "A" Grade Accredited)

Ref. No.: 2020a1r070

Date: 03RD OCT 2022

CERTIFICATE

Certified that this Industry Internship Report entitled "**Blood Bank Management**" is the bonafide work of "**Bhanu Partap Singh , 2020a1r070, of 5th Semester, Computer Science and Engineering, Model Institute of Engineering and Technology (Autonomous), Jammu**", who carried out the Industry Internship at "ThinkNEXT Technologies Private Limited S.C.F-113, Phase-11, Mohali" work under my mentorship during 20th July, 2022 to 29th August, 2022

(Mrs Vaishalika)

Mentor-Internal Supervisor

Assistant Professor

Computer Science and Engineering, MIET

This is to certify that the above statement is correct to the best of my knowledge.

ACKNOWLEDGEMENTS

Industry Internship is an important aspect in the field of engineering, where contributions are made by many people and organizations. The present shape of this work has come forth after contribution from different spheres.

Firstly, I would like to express my special thanks of gratitude to my teacher (Mr. Sunil Kumar) who gave me the golden opportunity to do this wonderful project on the topic (Python Django), which also helped me in doing a lot of Research and I came to know about so many new things I am thankful to them. I would also like to thank my parents, friends etc. who helped me in my Industry Internship.

Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

I must record my deep sense of gratitude to Prof. (Dr.) Ankur Gupta (Director, MIET) and Prof. (Dr.) Ashok Kumar (Dean Academics & HOD CSE, MIET) for their guidance, constant inspiration and encouragement, and for their keen involvement throughout the course of present work.

I express my sincere gratitude to “ThinkNEXT Technologies Private Limited S.C.F-113, Phase-11, Mohali” for giving me the opportunity to work on an Industry Internship during my 3rd year of B.E.

I express my sincere gratitude to Model Institute of Engineering and Technology (Autonomous), Jammu for giving me the opportunity to work on Industry Internship during my 3rd year of B.E.

I express my sincere gratitude to ThinkNEXT Technologies Private Limited S.C.F-113, Phase-11, Mohali, Mohali and Model Institute of Engineering and Technology (Autonomous), Jammu for giving me the opportunity. I perceive this opportunity as a big milestone in my career development.

I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future.

At the end thanks to the Almighty for everything

(Bhanu Partap Singh)
2020a1r070

SELF EVALUATION

MODEL INSTITUTE OF ENGINEERING AND TECHNOLOGY

KOT BHALWAL, JAMMU

INTERN EVALUTION FORM

Intern's Name: Bhanu Partap Singh **University Roll No.** 2020a1r070

Name of Organization: ThinkNEXT Technologies Private Limited

Address of Organization: S.C.F-113,Phase-11,Mohali

Phone: 7837402000

Name of Training Manager: Ramandeep Kaur

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Intern's Job Role or Assignment: Python Django

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Asks appropriate questions	1	2	3	4	*5
Self-motivated	1	2	3	4	*5

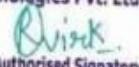
Practices ethical behaviour	1	2	3	*4	5
Team works skills / Leadership skills	1	2	3	4	*5

*** Put tick on specific box**

How would you assess the intern's overall performance?

outstanding above average satisfactory below average unsatisfactory

For ThinkNEXT Technologies Pvt. Ltd.


Authorised Signatory

(Official stamp of the organization)

ATTENDANCE REPORT

ThinkNEXT Technologies Pvt.Ltd Attendance Sheet

July 2022

Student Name	Contact No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	P	A
Bhanu Partap Singh Manhas																																		

August 2022

Student Name	Contact No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	P	A
Bhanu Partap Singh Manhas		p	p	p	p	S	S	p	p	H	p	S	S	H	P	p	p	p	S	S	p	p	p	p	p	S	S							



ABSTRACT

The Blood Bank Management System (BBMS) is an application that stores, processes, retrieves, and analyzes data about blood bank administration. It also supervises the blood inventory management and other blood bank-related activities. The major goal of the blood bank management system is to keep track of blood, donors, blood groups, blood banks, and stock information. It keeps track of all information concerning blood, blood cells, stocks, and blood. Because the project is all done at the administrative level, only the administrator can see it.

The goal of blood bank which is used in storing and managing blood which is collected by blood collection and donation, which can then be used for transfusions in future. It is possible to store data on donors and blood availability online using web-based blood bank management systems, as well as to track transactions and other information. The research on this topic suggests that manual systems are less effective and more costly than computer systems. As a result, it also extols the virtues of computerization for achieving efficiency and effectiveness and highlights some imperative issues that are left unaddressed, such as the proper assignment of responsibility for managing the computer systems.

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Chapter 1

Introduction to the System:

Records of blood, as well as information about the donors of the blood, as well as hospitals and patients who need blood, are kept by blood banks. In this process, there is not a whole lot of margin for error, if any, and therefore, it should be managed and controlled carefully. Blood donation has a very delicate process, and therefore, it should be managed and controlled carefully. When matching a donor with a recipient, the type of blood is taken into consideration, as well as differences in the type of blood, sugar content, antibodies, etc. As such, it is imperative to store and maintain these data and information with high levels of integrity and protection. Furthermore, primary test results are also important information. Today's blood banks keep their data and information in files. This means sheets, papers and files organized alphabetically or numerically keep a record of blood, donors and recipients. In addition, test results are recorded on paper, making data retrieval difficult and time-consuming. This leaves data vulnerable to errors and human error, putting lives at risk. The system is also not very efficient. Retrieving information about donors, recipients, and blood is a tedious process that takes a lot of time. In addition, hospitals' requirements and the urgency usually involved causes hospitals to be more difficult to manage and puts recipients in danger. Data security, backups, and safety also suffer as files and papers can be easily stolen, lost, or destroyed. There are several computerized blood bank management systems (BBMS) available, but the current systems are merely archival databases that are virtually useless to doctors and nurses. As a result, they still haven't been accepted by establishments since they focus more on storage than on coordinating management and operational processes. In this paper, we will analyze relevant researches and documents in order to offer a new solution after a careful analysis

Objective:

The purpose of this research is to find a feasible solution to the problems currently encountered by blood banks and blood donation centers. This research has the following objectives:

- 1- A feasible solution for managing blood bank activities should be developed.
- 2- Establish communication channels between donors, hospitals, donors, and recipients.
- 3- Organize blood banks and blood donation centers to collaborate.

Goal:

Our goal to develop a mobile-web-based system to manage blood requisition within the blood supply chain. The system was designed to cope with above described problem. The main objective is to improve the efficiency of data communication within the supply chain to reduce response time for each blood demand request. We also focused on managing blood inventory at each blood bank effectively. The results have shown that the proposed system helps enhancing the communication among blood partners within the supply chain network.

Need for the System:

Blood bank has a major task to collect blood from donors, monitor blood quality and supply, and distribute blood and blood components to hospitals within the network. Blood distribution is an important activity

within this blood supply chain. If the blood bank is able to deliver blood supply to its respective demand in a timely manner, patients' lives will be saved. But nowadays, many regional blood banks in our region confront with ineffective communication channel and insufficient information to fulfill its obligation. Thus, this leads to an inaccurate blood distribution and a waste of time, which can be harmful to patients with critical conditions.

Chapter 2

Hardware and Software Requirements:

Introduction:

In this chapter we mentioned the software and hardware requirements, which are necessary for successfully running this system. The major element in building systems is selecting compatible hardware and software. The system analyst must determine what software package is best for the "**Blood Bank Management System**" and, where software is not an issue, the kind of hardware and peripherals needed for the final conversion.

System Environment:

After analysis, some resources are required to convert the abstract system into the real one. All the resources, which accomplish a robust

The hardware and software selection begins with requirement analysis, followed by a request for proposal and vendor evaluation.

Software and real system are identified. According to the provided functional specification all the technologies and its capacities are identified. Basic functions and procedures and methodologies are prepared to implement. Some of the Basic requirements such as hardware and software are described as follows: -

Hardware and Software Specification

Software Requirements:

- Technology: Python Django
- IDE: Visual Studio Code or Sublime text
- Client-Side Technologies: HTML, CSS, JavaScript, Bootstrap
- Server-Side Technologies: Python
- Data Base Server: SQLite
- Operating System: Microsoft Windows/Linux

Hardware Requirements:

- Processor: Pentium-III (or) Higher
- Ram: 64MB (or) Higher
- Hard disk: 80GB (or) Higher

Chapter 3

System Analysis:

Purpose:

To manage the online shopping of grocery products. It helps customers to search and buy medicines from anywhere. Also make payment on delivery for it. It helps people to book desired products at their preferred time.

The online grocery shop system is available in the market that can serve customers to book/purchase grocery products online

Project Scope:

The project has a wide scope, as it is not intended for a particular organization. This project is going to develop generic software, which can be applied by any business organization. Moreover, it provides facilities to its customer. Also, the software is going to provide a huge amount of summary data. This web application involves almost all the features of Online Shopping. The Future implementation will be online help for the customers and chatting with website administrator.

System Overview:

The key features required in the system are as follows:

- **Login:** This module has a drop-down list box from where we have to select **ADMIN or USER**. ADMIN has all the rights in the software including updating the status of his site. The other fields in login are username and password. If the username and password are correct, then it is directed to the next page.
- **New user:** This module is for the users who do not have an account. Here users are allowed to create an account to login. The account creation is done by filling in the registration form with user details such as name, phone, email etc.
- **Product:** This module has information regarding the medicines such as its name, category, subcategory, image, price information, its features etc. The **ADMIN** has the authority to Add, Delete, Update etc. The **USER** can only view the products available in the stock etc.
- **Search:** This module helps the customer to ease his search based on his budget or interest. The search can be done on different categories and subcategories like category, subcategory, name, price etc.

Chapter 4

Implementation

Python

Python is a widely used general-purpose, high level programming language. It was initially designed by Guido van Rossum in 1991 and developed by Python Software Foundation. It was mainly developed for emphasis on code readability, and its syntax allows programmers to express concepts in fewer lines of code.

Python is a programming language that lets you work quickly and integrate systems more efficiently.

Python is dynamically typed, and garbage collected. It supports multiple programming paradigms, including procedural, object-oriented, and functional programming. Python is often described as a "batteries included" language due to its comprehensive standard library.

HTML

HTML (Hypertext Markup Language) is the set of markup symbols or

codes inserted in a file intended for display on a World Wide Web browser page. The markup tells the Web browser how to display a Web page's words and images for the user. Each individual markup code is referred to as an element (but many people also refer to it as a tag). Some elements come in pairs that indicate when some display effect is to begin and when it is to end

CASCADING STYLE SHEET (CSS)

Cascading Style Sheets (CSS) are a collection of rules we use to define and modify web pages. CSS is like styles in Word. CSS allows Web designers to have much more control over their pages' look and layout. For instance, you could create a style that defines the body text to be Verdana, 10 points. Later, you may easily change the body text to Times New Roman, 12 points by just changing the rule in the CSS. Instead of having to change the font on each page of your website, all you need to do is redefine the style on the style sheet, and it will instantly change on all the pages that the style sheet has been applied to. With HTML styles, the font change would be applied to each instance of that font and must be changed in each spot.

CSS can control the placement of text and objects on your pages as well as the look of those objects.

HTML information creates the objects (or gives objects meaning), but styles describe how the objects should appear. The HTML gives your page structure, while the CSS creates the "presentation". An external CSS is just a text file with a .css extension. These files can be created with Dreamweaver, a CSS editor, or even Notepad.

The best practice is to design your web page on paper first so you know where you will want to use styles on your page. Then you can create the styles and apply them to your page.

JavaScript

JavaScript is a programming language commonly used in web development. It was originally developed by Netscape to add dynamic and interactive elements to websites. While JavaScript is influenced by Java, the syntax is more like C and is based on ECMAScript, a scripting language developed by Sun Microsystems.

JavaScript is a client-side scripting language, which means the source code is processed by the client's web browser rather than on the web server. This means JavaScript functions can run after a webpage has loaded without COMMUNICATING with the server. For example, a JavaScript function may check a web form before it is submitted to make sure all the required fields have been filled out. The JavaScript code can produce an error message before any information is transmitted to the server.

Like server-side scripting languages, such as PHP and ASP, JavaScript code can be inserted anywhere within the HTML of a webpage. However, only the output of server-side code is displayed in the HTML, while JavaScript code remains fully visible in the source of the webpage. It can also be referenced in a separate .JS file, which may also be viewed in a browser.

Django

Django is a web application framework written in Python programming language. It is based on MVT (Model View Template) design pattern. The Django is very demanding due to its rapid development feature. It takes less time to build application after collecting client requirement.

This framework uses a famous tag line: The web framework for perfectionists with deadlines.

Chapter 5

System Design

Use Case Diagram:

Use case diagram consists of use cases and actors and shows the interaction between them. The key points are:

The main purpose is to show the interaction between the use cases and the actor.

To represent the system requirement from user's perspective.

The use cases are the functions that are to be performed in the module.

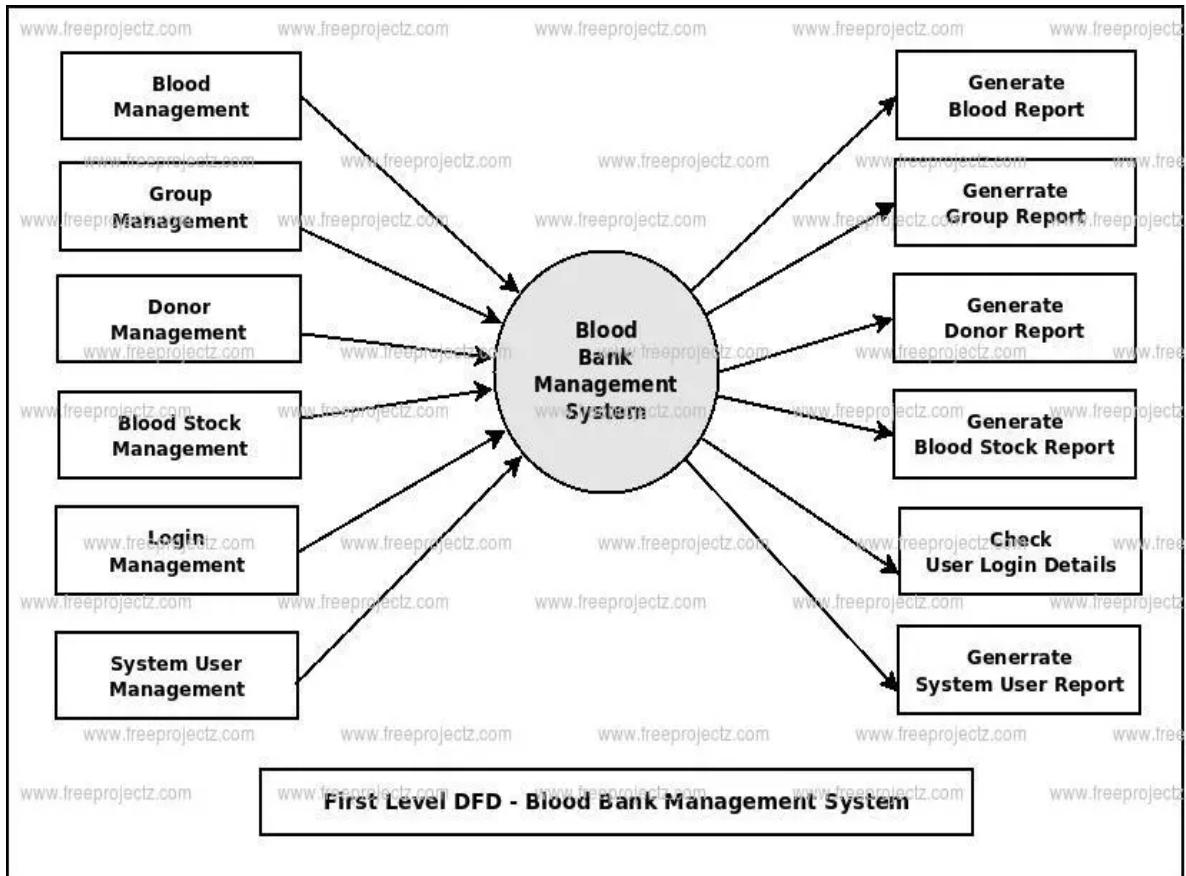
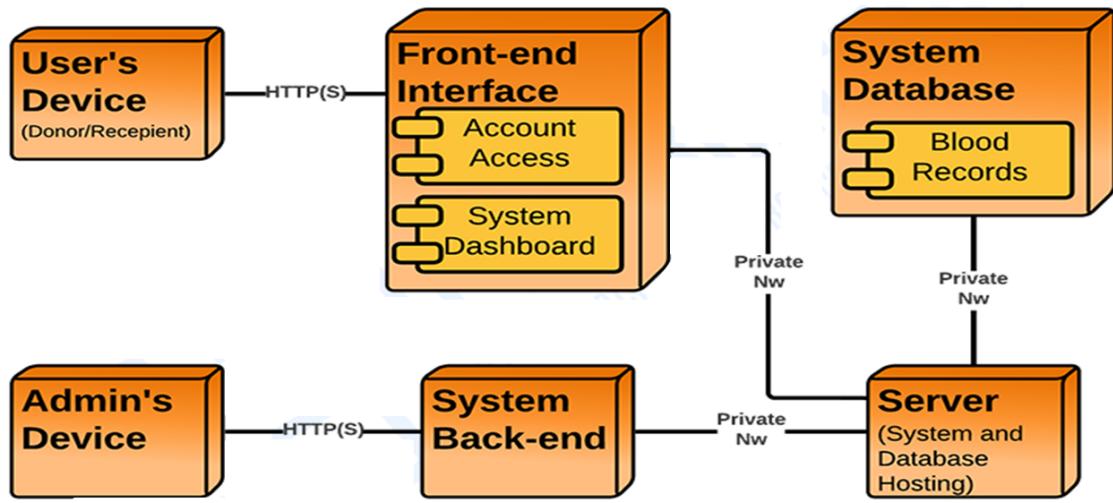


Fig 4: Data Flow Diagram 1(from www.freeprojectz.com)

BLOOD BANK MANAGEMENT SYSTEM



DEPLOYMENT DIAGRAM

Fig 4: Data Flow Diagram 2

Data Flow Diagram

A Data Flow Diagram (DFD) is a graphical representation of the "flow" of data through an Information System. A data flow diagram can also be used for the visualization of Data Processing. It is common practice for a designer to draw a context-level DFD first which shows the interaction between the system and outside entities. This context-level DFD is then "exploded" to show more detail of the system being modeled.

A DFD represents the flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as a function that transforms the input into desired output. A DFD shows movement of data through the different transformations or processes in the system.

Dataflow diagrams can be used to provide the end user with a physical

idea of where the data they input ultimately influences the structure of the whole system from order to dispatch to restock how any system is developed can be determined through a dataflow diagram. The appropriate register is saved in the database and maintained by appropriate authorities.

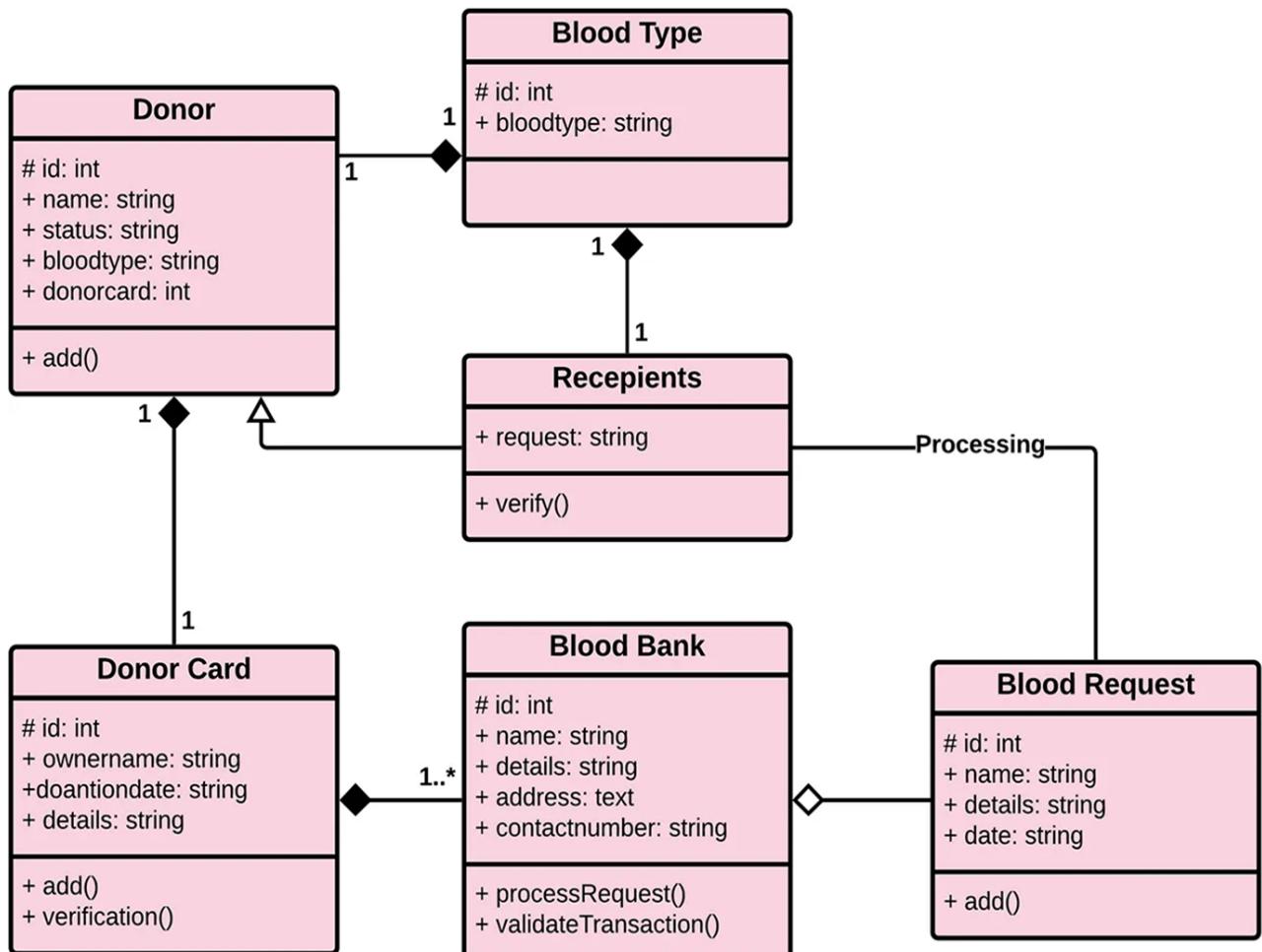


Fig 5: Data Flow Diagram 3

Entity Relationship Diagrams (ER-Diagrams):

An entity-relationship (ER) diagram is a specialized graphic that illustrates the interrelationships between entities in a database. ER diagrams often use symbols to represent three different types of

information. Boxes are commonly used to represent entities. Diamonds are normally used to represent relationships and ovals are used to represent attributes

An **entity-relationship model** (ERM) in software engineering is an abstract and conceptual representation of data. Entity-relationship modeling is a relational schema database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion.

Symbols used in this E-R Diagram:

Entity: Entity is a “thing” in the real world with an independent existence. An entity may be an object with a physical existence such as person, car or employee. Entity symbol is as follows

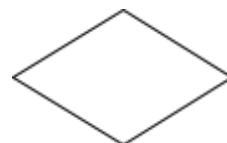


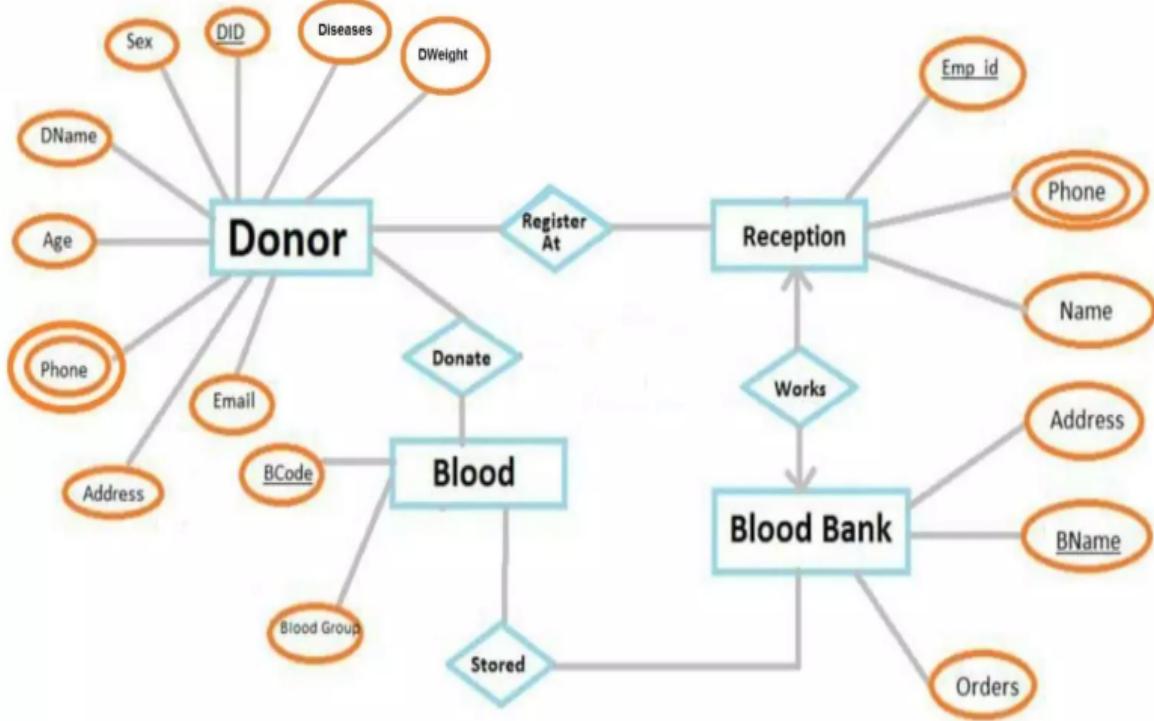
Attribute: Attribute is a particular property that describes the entity. Attribute symbols are



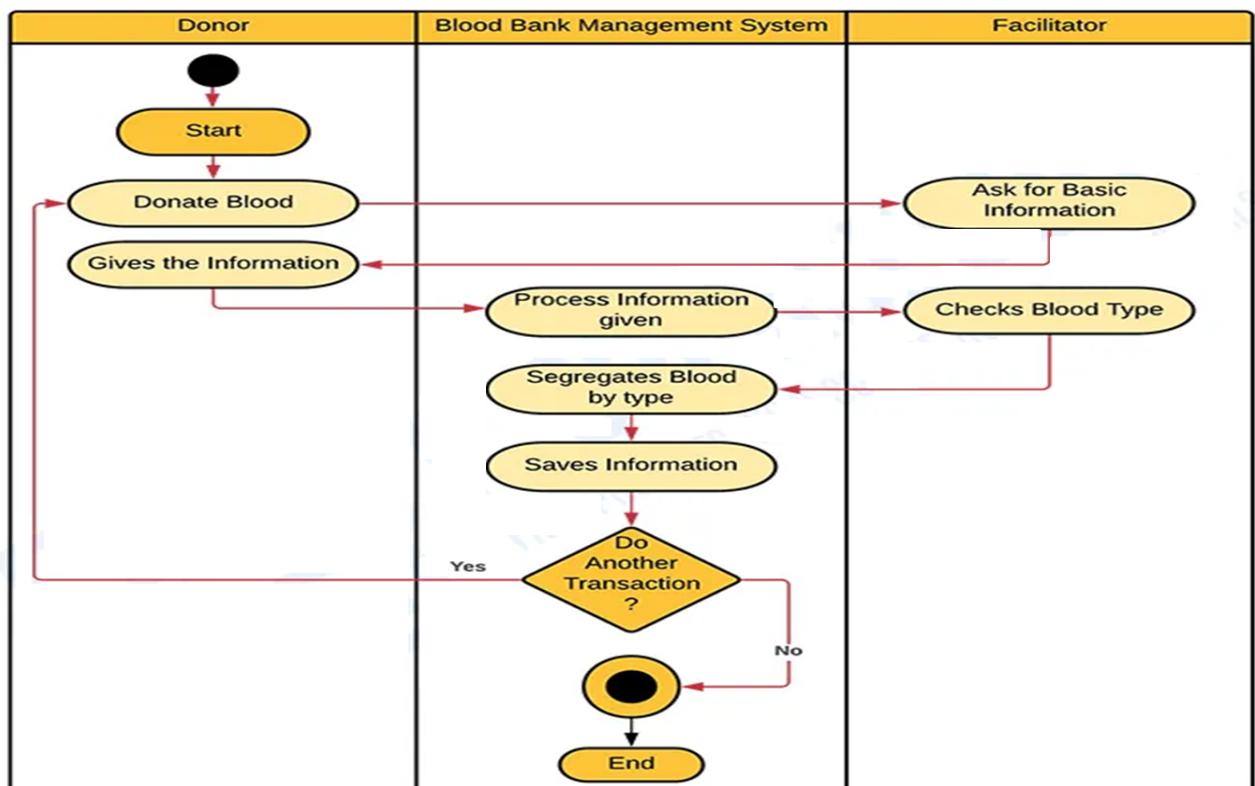
Relationship: Relationship will be several implicit relationships among various entity types whenever an attribute of one entity refers to another entity type some relationship exists. Relationship symbol is:

Key attributes: An entity type usually has an attribute whose values are distinct for each individual entity in the collection. Such an attribute is called key attribute. Key attribute symbol is as follows





BLOOD BANK MANAGEMENT SYSTEM

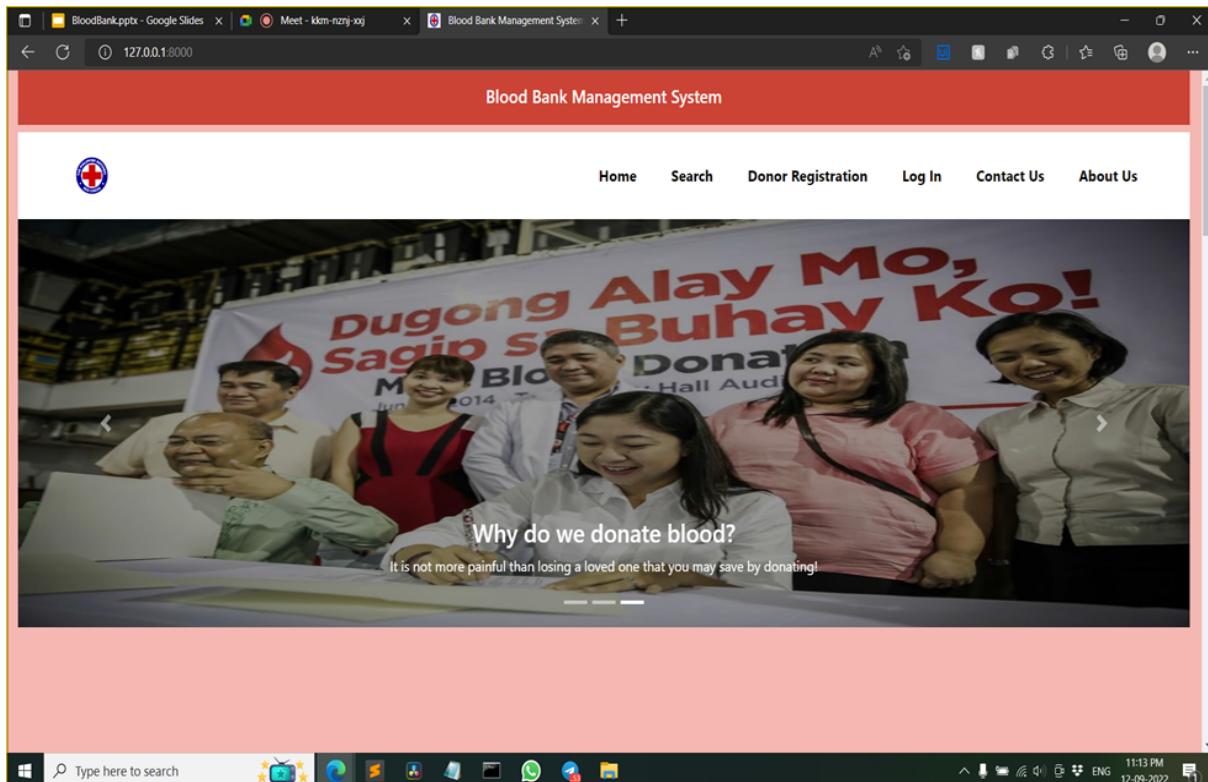


ACTIVITY DIAGRAM

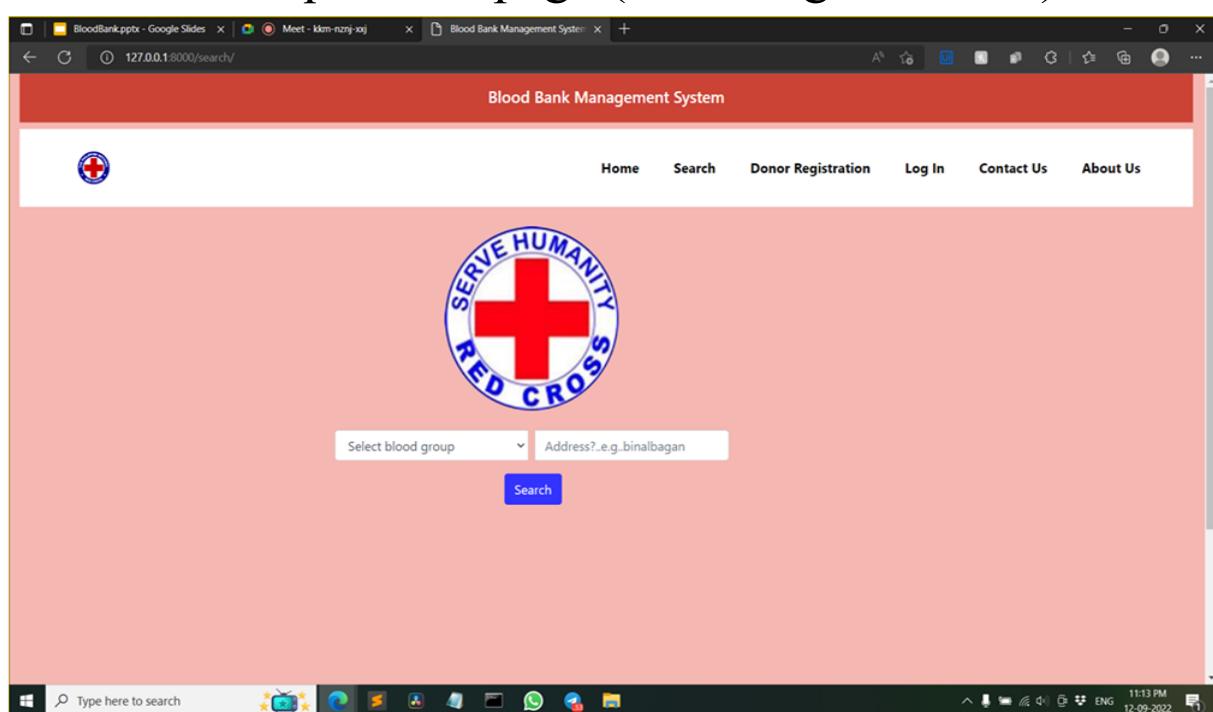
Chapter 6

Output Screen

-Home page of the website



-Requester's page (searching for blood)



-Donar's Registration Page

The screenshot shows a web browser window titled "Blood Bank Management System" at the URL "127.0.0.1:8000/donorreg/". The page has a red header bar with the title. Below it is a white navigation bar containing a logo, links for "Home", "Search", "Donor Registration", "Log In", "Contact Us", and "About Us", and a magnifying glass icon. The main content area is titled "Blood Donor Registration Form". It contains several input fields: "Name:" with a text input box, "Gender:" with a dropdown menu showing "-----", "Date of birth:" with a text input box showing "dd-mm-yyyy" and a calendar icon, "Blood group:" with a dropdown menu showing "-----", "Phone number:" with a text input box, and "Email:" with a text input box. At the bottom of the page is a dark taskbar with various icons and a search bar.

-Page for contacting the IRCS

The screenshot shows a web browser window titled "Blood Bank Management System" at the URL "127.0.0.1:8000/contact/". The page has a red header bar with the title. Below it is a white navigation bar containing a logo, links for "Home", "Search", "Donor Registration", "Log In", "Contact Us", and "About Us", and a magnifying glass icon. The main content area features a large image of two women smiling while donating blood. Overlaid on the image is the text "Contact Us" in bold, followed by "Anybody Can Give Blood." and the quote "Tears Of A Mother Cannot Save Her Child. But Your Blood Can." At the bottom of the page is a dark taskbar with various icons and a search bar.

-About the Indian Red Cross Society

The Indian Red Cross Society (IRCS) is a voluntary humanitarian organization to protect human life and health based in India.^[1] It is part of the International Red Cross and Red Crescent Movement and shares the Fundamental Principles of the International Red Cross and Red Crescent Movement. The society's mission is to provide relief in times of disasters/emergencies and promote health and care of vulnerable people and communities. It has a network of over 700 branches throughout India.^[1] The Society uses the Red Cross as an emblem in common with other international Red Cross societies. Volunteering has been at the very heart of the Indian Red Cross Society since its inception in 1920, with the Society having Youth and Junior volunteering programmes. About IRCS - 7 Fundamental Principles of Red Cross -IRCS Branches Uniform Rules -Governance Structure The Indian Red Cross is a voluntary humanitarian organization having a network of over 1100 branches throughout the country, providing relief in times of disasters/emergencies and promotes health & care of the vulnerable people and communities. It is a leading member of the largest independent humanitarian organization in the world, the International Red Cross & Red Crescent Movement. The movement has three main components, the International Committee of Red Cross (ICRC), National Societies and International Federation of Red Cross and Red Crescent Societies. The Mission of the Indian Red Cross is to inspire, encourage and initiate at all times all forms of humanitarian activities so that human suffering can be minimized and even prevented and thus contribute to creating more congenial climate for peace. Indian Red Cross Society (IRCS) was established in 1920

-Admin Login

Django administration

Username:

Password:

Log In

Coding Chapter 7

USER LOGIN PAGE CODING

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <link rel="stylesheet" href="css/bootstrap.min.css">
  <link rel="stylesheet" href="css/style.css">
  <script src="js/jquery.min.js"></script>
  <script src="js/jquery-3.3.1.slim.min.js"></script>
  <script src="js/popper-1.14.7.js"></script>
  <script src="js/bootstrap.min.js"></script>
  <link rel="shortcut icon" type="image/x-icon"
href="imge/logo/searchlogo.jpg">

  <title> Blood Bank Management System</title>
</head>

<body>
  <div class="container-fluid">
    <!-- head title -->
    <header>
      <h5 class="head text-white text-center p-3">Bood Bank Management
System</h5>
    </header>

    <!-- navbar -->
    <nav class="navbar navbar-expand-sm sticky-top">

      <!-- logo -->
      <a class="navbar-brand ml-5" href="#">
        
      </a>

      <!-- navbar item -->
      <div class="col">
        <ul class="navbar-nav flex-row-reverse">
          <li class="nav-item text-dark">
```

```
        <a class="nav-link font-weight-bolder"
    href="about_us.html">About Us</a>
    </li>
    <li class="nav-item">
        <a class="nav-link font-weight-bolder"
    href="contact_us.html">Contact Us</a>
    </li>
    <!-- Dropdown -->
    <li class="nav-item dropdown">
        <a class="nav-link font-weight-bolder" href="#" data-toggle="dropdown">
            Log In
        </a>
        <div class="dropdown-menu">
            <a class="dropdown-item font-weight-bolder"
    href="#">Admin</a>
            <a class="dropdown-item font-weight-bolder"
    href="log.html">Donor</a>
        </div>
    </li>
    <li class="nav-item">
        <a class="nav-link font-weight-bolder"
    href="register.html">Donor Registration</a>
    </li>
    <li class="nav-item font-weight-bolder">
        <a class="nav-link" href="search.html">Search</a>
    </li>
    <li class="nav-item font-weight-bolder">
        <a class="nav-link" href="index.html">Home</a>
    </li>
</ul>
</div>
</nav>

<!-- <address -->
<div class="">

</div>

<!-- footer -->
<footer>
    <div class="footer clearfix">
        <p class="text-center text-white p-2">
            Philippine National Red Cross Blood Bank Management System
        </p>
    </div>
</footer>

</div>
</body>

</html>
```

REGISTRATION PAGE CODING

```
{% extends 'base.html' %}

{% block content %}
    <div class="container-fluid">
        <div class="form_body">
            <h1 class="text-center">Welcome To PRC Blood Bank...</h1>
            <br>
            <h2 class="text-center">Details about
            {{forms.name.data}}</h2>

            <div class= "donor_details m-5">
                <p><strong>Name:</strong> {{forms.name.data}}</p>
                <p><strong>Gender:</strong> {{forms.gender.data}}</p>
                <p><strong>Date Of Birth:</strong>
                {{forms.date_of_birth.data}}</p>
                <p><strong>Blood Type:</strong> <span
                class="text-uppercase">{{forms.blood_group.data}}</span></p>
                <p><strong>Phone Number:</strong>
                {{forms.phone_number.data}}</p>
                <p><strong>Email:</strong> {{forms.email.data}}</p>
                <p><strong>Occupation:</strong>
                {{forms.occupation.data}}</p>
                <p><strong>Home Address:</strong>
                {{forms.home_address.data}}</p>
                <p><strong>Blood Donated Last Date:</strong>
                {{forms.last_donate_date.data}}</p>
                <p><strong>Any Diseases:</strong>
                {{forms.any_diseases.data}}</p>
                <p><strong>Allergies:</strong>
                {{forms.allergies.data}}</p>
                <p><strong>Cardiac:</strong> {{forms.cardiac.data}}</p>
                <p><strong>Bleeding Disorders:</strong>
                {{forms.bleeding_disorders.data}}</p>
                <p><strong>HBSAG HCV HIV:</strong>
```

```

{{forms.hbsAg_hcv_hIV.data}}</p>
</div>

<h3 class="text-center">{{forms.name.data}} Your
Registration Is Successful...</h3>

</div>

</div>

```

HOME PAGE CODING

```

<!DOCTYPE html>
<html lang="en">

<head>

    {% load static %}

    <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width,
initial-scale=1.0">
        <meta http-equiv="X-UA-Compatible" content="ie=edge">
        <link rel="stylesheet" href="{% static 'css/bootstrap.min.css' %}">
        <link rel="stylesheet" href="{% static 'css/style.css' %}">
        <script src="{% static 'js/jquery.min.js' %}"></script>
        <script src="{% static 'js/jquery-3.3.1.slim.min.js' %}"></script>
        <script src="{% static 'js/popper-1.14.7.js' %}"></script>
        <script src="{% static 'js/bootstrap.min.js' %}"></script>
        <link rel="shortcut icon" type="image/x-icon" href="{% static
'photos/logo/searchlogo.jpg' %}">

    <title>Blood Bank Management System</title>
</head>

<body>
    <div class="container-fluid", style="background-color:#F5B7B1">

```

```

<!-- head title -->
<header>
    <h5 class="head text-white text-center p-3",
style="background-color:#CB4335">Blood Bank Management System</h5>
</header>

<!-- navbar -->
<nav class="navbar navbar-expand-sm sticky-top">

    <!-- logo -->
    <a class="navbar-brand ml-5" href="#">
        
    </a>

    <!-- navbar item -->
    <div class="col">
        <ul class="navbar-nav flex-row-reverse">
            <li class="nav-item text-dark">
                <a class="nav-link font-weight-bolder" href="{% url 'aboutsitem1' %}">About Us</a>
            </li>
            <li class="nav-item">
                <a class="nav-link font-weight-bolder" href="{% url 'contactsite1' %}">Contact Us</a>
            </li>
            <!-- Dropdown -->
            <li class="nav-item dropdown">
                <a class="nav-link font-weight-bolder" href="#" data-toggle="dropdown">
                    Log In
                </a>
                <div class="dropdown-menu">
                    <a class="dropdown-item font-weight-bolder" href="/admin/">Admin</a>
                </div>
            </li>
            <li class="nav-item">

```

```

                <a class="nav-link font-weight-bolder" href="{%
url 'dregsite' %}">Donor Registration</a>
            </li>
            <li class="nav-item font-weight-bolder">
                <a class="nav-link" href="{% url 'searchsite1' %}">Search</a>
            </li>
            <li class="nav-item font-weight-bolder">
                <a class="nav-link" href="{% url 'homesite1' %}">Home</a>
            </li>
        </ul>
    </div>
</nav>

<!-- Carousel --&gt;
&lt;div class="carousel_slid"&gt;
    &lt;div class="opacity_carousel"&gt;&lt;/div&gt;
    &lt;div id="slide" class="carousel_slide" data-ride="carousel"&gt;
        &lt;!-- carousel indicators --&gt;
        &lt;ul class="carousel-indicators"&gt;
            &lt;li data-target="#slide" data-slide-to="0" class="active"&gt;&lt;/li&gt;
            &lt;li data-target="#slide" data-slide-to="1"&gt;&lt;/li&gt;
            &lt;li data-target="#slide" data-slide-to="2"&gt;&lt;/li&gt;
        &lt;/ul&gt;
        &lt;div class="carousel-inner"&gt;
            &lt;div class="carousel-item carousel-img-1 active"&gt;
                &lt;img src="{{ home_slider.slider_1.url }}" alt="Slid Image"&gt;
                &lt;div class="carousel-caption"&gt;
                    &lt;h3&gt;Why do we donate blood?&lt;/h3&gt;
                    &lt;p&gt;Donating just one pint of blood can save more than one person's life.&lt;/p&gt;
                &lt;/div&gt;
            &lt;/div&gt;
        &lt;!-- carousel item --&gt;
    &lt;/div&gt;
</pre>

```

```

        <div class="carousel-item carousel-img-2">
            
            <div class="carousel-caption">
                <h3>Why do we donate blood?</h3>
                <p>Whenever you donate blood, you're giving
                someone the opportunity to have a new lease on life, not to mention
                that you're also giving your overall health a great boost.</p>
            </div>
        </div>
        <div class="carousel-item carousel-img-3">
            
            <div class="carousel-caption">
                <h3>Why do we donate blood?</h3>
                <p>It is not more painful than losing a
                loved one that you may save by donating!</p>
            </div>
        </div>
        <!-- carousel control -->
        <a class="carousel-control-prev" href="#slide"
        data-slide="prev">
            <span class="carousel-control-prev-icon"></span>
        </a>
        <a class="carousel-control-next" href="#slide"
        data-slide="next">
            <span class="carousel-control-next-icon"></span>
        </a>
    </div>
</div>

{%
    block content %
}

{%
    endblock %
}

<!-- footer -->
```

```

<div class="footer clearfix", style="background-color:#CB4335">
    <p class="text-center text-white p-2">
        All content copyright © Indian Red Cross Society. All
        rights reserved.
        <br> www.indianredcross.org is the official and only
        website of the National Headquarters of Indian Red Cross Society
    </p>
</div>
</body>
</html>

```

ABOUT US PAGE CODING

{% extends 'base.html' %}

{% block content %}

```

<!-- page image -->
<header id="page-header">
    <div class="col-md-6 m-auto text-center text-light">
        <h1>About Us</h1>
        <p class="lead">Every Blood Donor Is A Life Saver</p>
    </div>
</header>

<!--about-->
<div class="about text-center">
    <p class="font-weight-bold">{{ about.about_text }}</p>

```

```
</div>
```

```
{% endblock %}
```

BASE PAGE CODING

```
{% load static %}
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <link rel="stylesheet" href="{% static 'css/bootstrap.min.css' %}">
    <link rel="stylesheet" href="{% static 'css/style.css' %}">
    <script src="{% static 'js/jquery.min.js' %}"></script>
    <script src="{% static 'js/jquery-3.3.1.slim.min.js' %}"></script>
    <script src="{% static 'js/popper-1.14.7.js' %}"></script>
    <script src="{% static 'js/bootstrap.min.js' %}"></script>
    <link rel="shortcut icon" type="image/x-icon" href="{% static
'photos/logo/blogo.jpg' %}">

    <title>Blood Bank Management System</title>
</head>

<body>
    <div class="container-fluid", style="background-color:#F5B7B1">
        <!-- head title -->
        <h5 class="head text-white text-center p-3",
style="background-color:#CB4335"> Blood Bank Management System</h5>

        <!-- navbar -->
        <nav class="navbar navbar-expand-sm sticky-top">

            <!-- logo -->
            <a class="navbar-brand ml-5" href="#">
                
            </a>

            <!-- navbar item -->
            <div class="col">
                <ul class="navbar-nav flex-row-reverse">
                    <li class="nav-item text-dark">
                        <a class="nav-link font-weight-bolder" href="{% url
'aboutsitem1' %}">About Us</a>
                    </li>
                </ul>
            </div>
        </nav>
    </div>
</body>
```

```

        <li class="nav-item">
            <a class="nav-link font-weight-bolder" href="{% url
'contactsite1' %}">Contact Us</a>
        </li>
        <!-- Dropdown -->
        <li class="nav-item dropdown">
            <a class="nav-link font-weight-bolder" href="#" data-toggle="dropdown">
                Log In
            </a>
            <div class="dropdown-menu">
                <a class="dropdown-item font-weight-bolder" href="/admin/">Admin</a>
            </div>
        </li>
        <li class="nav-item">
            <a class="nav-link font-weight-bolder" href="{% url
'dregsite' %}">Donor Registration</a>
        </li>
        <li class="nav-item font-weight-bolder">
            <a class="nav-link" href="{% url 'searchsite1'
%}">Search</a>
        </li>
        <li class="nav-item font-weight-bolder">
            <a class="nav-link" href="{% url 'homesite1' %}">Home</a>
        </li>
    </ul>
</div>
</nav><br>

{% block content %}

{% endblock %}

<!-- footer --&gt;
&lt;div class="footer clearfix", style="background-color:#CB4335"&gt;
    &lt;p class="text-center text-white p-2"&gt;
        All content copyright © Indian Red Cross Society. All rights
reserved.
        &lt;br&gt; www.indianredcross.org is the official and only
website of the National Headquarters of Indian Red Cross Society
    &lt;/p&gt;
&lt;/div&gt;

&lt;/div&gt;
&lt;/body&gt;

&lt;/html&gt;
</pre>

```

DETAILS PAGE CODING

```
{% extends 'base.html' %}

{% block content %}

<div class="container-fluid">
    <div class="form_body">
        <h1 class="text-center">Details about {{details.name}}</h1>

        <div class= "donor_details m-5">
            <p><strong>Name:</strong> {{details.name}}</p>
            <p><strong>Gender:</strong> {{details.gender}}</p>
            <p><strong>Date Of Birth:</strong> {{details.date_of_birth}}</p>
            <p><strong>Blood Group:</strong> <span
                class="text-uppercase">{{details.blood_group}}</span></p>
            <p><strong>Phone Number:</strong> {{details.phone_number}}</p>
            <p><strong>Email:</strong> {{details.email}}</p>
            <p><strong>Occupation:</strong> {{details.occupation}}</p>
            <p><strong>Home Address:</strong> {{details.home_address}}</p>
            <p><strong>Blood Donated Last Date:</strong>
                {{details.last_donate_date}}</p>
            <p><strong>Any Diseases:</strong> {{details.any_diseases}}</p>
            <p><strong>Allergies:</strong> {{details.allergies}}</p>
            <p><strong>Cardiac:</strong> {{details.cardiac}}</p>
            <p><strong>Bleeding Disorders:</strong>
                {{details.bleeding_disorders}}</p>
            <p><strong>HBSAG HCV HIV:</strong>
                {{details.hbsAg_hcv_hIV}}</p>
        </div>
    </div>
</div>

{% endblock %}
```

LIST PAGE CODING

```
{% extends 'base.html' %}

{% block content %}
<div class="container donor_list">
    <h2 class='text-center'>Blood Donor List...</h2>
    <table class="table table-hover">
        <thead class="theadcolor">
            <tr>
```

```

        <th>Donor Name</th>
        <th class="text-uppercase">Blood Group</th>
        <th>Last Donate Date</th>
        <th>Address</th>
    </tr>
</thead>
{% for donor in donor_filter %}
    <tbody>
        <tr>
            <td><a href="{% url 'donorlistdetailsite' donor.email %}">{{donor.name}}</a></td>
            <td>{{donor.blood_group | capfirst }}</td>
            <td>{{donor.last_donate_date}}</td>
            <td>{{donor.home_address}}</td>
        </tr>
    </tbody>
{% endfor %}
</table>
</div>

{% endblock %}

```

SEARCH PAGE CODING

```

{% extends 'base.html' %}

{% block content %}

    <!-- Search -->
    <div class="search">
        
        <br><br>
        <form action="{% url 'donorlistsite' %}" method="POST">
            {% csrf_token %}
            <div class="input-group mb-3">
                {{forms_search.select_blood_group}}&ampnbsp&ampnbsp
                {{forms_search.select_location}}
            </div>
            <button type="submit" class="btn search_bt">Search</button>
        </form>
    </div>

{% endblock %}

```

CONTACT US PAGE CODING

```
{% extends 'base.html' %}

{% block content %}

<div class="about_page">
    <div class = "Contact_body">
        <!-- page image -->
        <header id="page-header">
            <div class="col-md-6 m-auto text-center text-light">
                <h1>Contact Us</h1>
                <p class="lead">Anybody Can Give Blood.
                    <br>"Tears Of A Mother Cannot Save Her Child. But Your
                    Blood Can."</p>
            </div>
        </header>

        <!-- address -->
        <div class="address text-center">
            <address class="p-5 font-weight-bold">{{ contact.contact_text
            }}</address>
        </div>
    </div>
</div>

{% endblock %}
```

Chapter 8

Conclusion

Advantages of “Blood Bank Management System”:

“Blood Bank Management System” provides various features, which complement the information system and increase the productivity of the system. These features make the system easily usable and convenient. Some of the important features included are listed as follows:

- This project has a login page which allows only the registered user to login and thereby preventing unauthorized access.

- This system can be used to view all the donor details and accordingly select the right donor.
- The user will be able make quick decision in selecting a donor.
- Usage of this application will greatly reduce time in selecting the right donor.
- This application can be used by any common people.
- The application can prove very beneficial in to the clinics, hospitals as the requirement is very high in such places.
- Map interface to general users to give details of donors and blood banks.
- Inventory management for blood bank.
- On-line quality control.
- Searching facility to recipient based on various types (blood group, location etc).

Limitations of “Blood Bank Management System”:

Besides the above achievements and the successful completion of the project, we still feel the project has some limitations, listed below:

Problems with conventional blood bank system:

1. Lack of immediate retrievals: -The information is very difficult to retrieve and to find particular information like- E.g. – To find out about the donor's history, the user has to go through various registers. This results in inconvenience and wastage of time.
2. Does not meet emergency requirements.
3. Searching required blood group and donor is tedious job.

People who are not familiar with computers can't use this software.

FUTURE SCOPE

The system functions and features of our system will include the following:

- Registration**

This function allows the donor and administrator to register as a user to interact with the system. The system requires the user to login before viewing and editing any information.

- View and edit information online**

Donors are allowed to view their blood donation records online by their given account. They can also edit their personal information through the system.

- Manage blood inventory**

The blood stock that is checked-in to the system first will be the first one given to the hospital when requested. When the blood stock is expired, the administrator is responsible for removing the stock from the inventory and updating the system.

- Notify by E-mail**

Hospitals can receive e-mail responding to their requested blood whether it is available in our stock or not.

- Summary report**

The system will be able to generate a report to summarize all records including blood donation, blood requests and blood stock for the administrator.

CONCLUSION

The project entitled “Blood Bank Management” is developed using HTML, CSS and Bootstrap as front end and Python Django and SQLite database in back end to computerize the process that The main objective is to improve the efficiency of data communication within the supply chain to

reduce response time for each blood demand request. This system promises very less or no paper work and also provides help to blood recipient, blood banks and donors also. This project covers only the basic features required.

References

<https://docs.python.org/3/tutorial/>
<https://www.pythontutorial.net/>
<https://www.geeksforgeeks.org/python-programming-language/learn-python-tutorial/>
<https://www.w3schools.com/python/>
www.google.com
www.bing.com