

**Pune Vidyarthi Griha's College of Engineering and
Technology & G.K. Pate (Wani) Institute of Management,
Pune- 411009.**

(Affiliated to Savitribai Phule Pune University)



An Internship Report

On

“Web Developer Internship”

By

Deep Pawar T190074255

Under the Guidance of

Prof. M.V. Marathe

Department of Computer Engineering

Academic Year: 2021-2022

INTERNSHIP COMPLETION CERTIFICATE



TechCiti Software Consulting Private Limited

CIN: U72900KA2018PTC117376

D-U-N-S No. : 86 14 54180

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Ref.No.TSCPL/2022-2023/HRD/INT3831

Date: 02nd May, 2022

TO WHOMSOEVER IT MAY CONCERN

We would like to inform you that Mr. **Deep Chandrakant Pawar** has successfully completed his internship with our company, he has been working on the project title “**Blood Bank Management System**” from 11-02-2022 to 11-04-2022 as “Software Developer-Intern”.

We have found him to be a self-starter who is motivated, duty-bound and hardworking. He has worked sincerely on his assignments and his performance is at par excellence.

We wish him all the best for his future endeavors.

Sincerely,



Manager

Human Resources Department

TechCiti Software Consulting Private Limited

Registered office: No. 22 23 24 25/101, BNR Complex, J.P. Nagar 7th Phase, Bengaluru, Karnataka 560078.

Landline: 080 4162 8482 Email: info@techcitisoftware.in Web: www.techcitisoftware.in

OVERVIEW OF THE ORGANIZATION

a. INTRODUCTION OF THE ORGANIZATION

TechCiti Technologies is the leading IT Managed Services Provider (MSP) serving India's successful SMBs. Our clients understand that a true IT partner goes beyond the break/fix model and provides long-term solutions to business challenges and goals.

TechCiti ensures investment in information technology provides the maximum ROI to its stakeholders through IT road mapping, planning and strategy. With one of the highest client satisfaction rates in the industry and the data, referrals and accolades to prove it, TechCiti Technologies builds lasting and trusted relationships.

Since established in 2013, TechCiti has become a pioneer in providing distinguished end-to-end IT infrastructure solutions to its customers through our business functions maximizing customer engagement with personalized services. We believe that today more than ever, businesses are dependent on technology solutions.

We have successfully established in our business functions across 12 + major cities across PAN India with over 56 + satisfied corporate customers.

Vision: "Technology is boundless". Our vision is to enable people and organizations realize their potential reinventing their engagement in defining the future using - technology.

Mission: Our mission is to achieve the leading position as a distinguished & absolute end-to-end technological infrastructure & service provider. We want to develop with profitable growth through superior Customer service, Innovation, Quality and Commitment.

Core Values: Integrity, Excellence, Innovation, Customer-Centricity, Team-Work

b. ORGANIZATION COMMUNICATION DETAILS

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c. INTERNSHIP SUPERVISOR NAME & COMMUNICATION DETAILS

- **INTERNSHIP SUPERVISOR NAME:** Kasthuri Krishnan, Software Developer at TechCiti Technologies Private Limited
- **CONTACT:** 7904838181

d. COMPANY ADDRESS / WEBSITE URL

- **OFFICE ADDRESS:** No. 22 23 24 25/101, BNR Complex,
J.P. Nagar 7th Phase,
Bengaluru, Karnataka 560078
- **OFFICE WEBSITE:** <http://www.techciti.in>

LETTER OF UNDERTAKING

I **Deep Chandrakant Pawar** third year student of Computer Engineering Department, PVG's COET & GKP (W) IOM, Pune-9 hereby confirm that the internship report I have provided is solely my own effort. I did not copy my report partially or completely from any other student or from any other source either against payment or free and I did not provide any plagiarized material in any section of my report. I further confirm that the document (internship completion certificate) that I have provided is genuine (i.e., not forge/fake) and has been issued by the authorized person in the organization. If I am found guilty of misstating, misleading or concealing the facts about my activities (either academic or non-academic but relevant to this course) at any stage, the university is authorized to take disciplinary action against me according to university policies and regulations. I assure that I will follow the instructions regarding presentation. and will appear on the scheduled date for presentation which will be intimated to me by the department. In case of any negligence, I shall be held responsible.

Name: Deep Chandrakant Pawar

Signature.....

Date:

**Pune Vidyarthi Griha's College of Engineering and
Technology & G.K. Pate (Wani) Institute of Management,
Pune- 411009.**

(Affiliated to Savitribai Phule Pune University)



CERTIFICATE

This is to certify that the Internship report entitled “**Web Developer Internship**”, submitted by, **Deep Chandrakant Pawar** seat no – **T190074255** is a record of bonafide work carried out by him/her, in the partial fulfilment of the Presentation & Term-work of Third year in Computer Engineering of Savitribai Phule Pune University at Pune Vidyarthi Griha's College of Engineering and Technology & G.K. Pate (Wani) Institute of Management, Pune under Savitribai Phule Pune University, Pune. This work is done during, Academic Year 2021-22.

Date: -

Place: - Pune

Prof. M.V. Marathe
(Guide Name)

Prof. D.D. Sapkal
External Name

ACKNOWLEDGEMENT

Internship in BTech is one of the initial paths for entering the corporate world. It helped me to gain industry experience. The theoretical knowledge which we learnt in the classrooms, are practically implemented by the firm and got an opportunity to test our ability in the real environment. This industrial experience will polish the skills and the way we approach towards anything further in our studies.

At the outset, I would like to thank **CEO Mr. Paritosh Kashyap Kumar** of TechCiti Technologies Private Limited, Bangalore for giving me an opportunity to train with its employees and successfully complete my internship in their esteemed organization and for their precious time and valuable guidance that they provided during the training period. For their unstinted and invaluable guidance, I would like to express my heartfelt gratitude to my mentor **Ms. Kasthuri Krishnan mam** who gave me an excellent opportunity to work on this project. I am grateful for their guidance and assistance. Their recommendations and suggestions have been invaluable for the successful completion of this project.

I am grateful to our **HOD Prof. Deepak D. Sapkal**, and our guide **Prof. M.V. Marathe** for their excellent co-ordination with the industry for the Internship Program and thus giving me an opportunity to enhance my knowledge and skills

Deep Chandrakant Pawar

(T.E. Computer Engineering)

ABSTRACT

This report is a detailed overview of my internship journey at TechCiti Technologies Private Limited. During my Internship I have learned a lot about Python, Django and its different applications. I got to know the work flow of services provided by the software companies along with the functions the developer and testing department performs. I have learned to work in a corporate space which not only enriched me professionally but also helped me grow personally as well. My contribution was appreciated by my supervisor and other members of the department.

This internship provided the work experience that helps me to put my education into practice, develop leadership skills and also provide me an opportunity to see if the particular career field is the right one for me. The career path I would be selecting for myself is quite influenced from my internship as I have had a great opportunity to practically see how Software Companies are working and evolving. I have tried my level best to make it meaningful by reflecting my works at the TechCiti Technologies Private Limited. Also, I have summarized my overall experience, with my learning and challenges faced as an intern.

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CHAPTER 1: INTRODUCTION

A blood donation is a process whereby a person voluntarily has blood drawn to be used for future transfusions when in need at hospitals for treatment procedures that require them. Donation may be of whole blood (blood drawn directly from the body) or of specific components of the blood. Blood banks often participate in the process of collecting blood and other procedures such as managing stocks, approving blood requests and updating donation information.

The purpose of this project was to develop a blood management information system to assist in the management of blood donor records and ease/or control the distribution of blood in various parts of the country basing on the hospital demands. Without quick and timely access to donor records, creating market strategies for blood donation, lobbying and sensitization of blood donors becomes very difficult.

The blood management information system offers functionalities to quick access to donor records collected from various parts of the country. It enables monitoring of the results and performance of the blood donation activity such that relevant and measurable objectives of the organization can be checked. It provides to management timely, confidential and secure medical reports that facilitates planning and decision making and hence improved medical service delivery.

The proposed of Blood Bank Management System helps the people who need a blood by giving them all details of blood group availability or regarding the donors with the same blood group. They don't need to go anywhere to search the blood when they need. They just need to use this software then all the result will appear in just a second. Our life is so busy so we don't have time to spend going here and there, we can use technical way to search the blood by using the Blood Bank software we can find thousands of people who are donating the blood and also get the detail the of that person that in which city he belongs to and what is the Blood group of that person.

CHAPTER 2: TITLE

Web Developer Internship at TechCiti Technologies Private Limited, Bangalore to develop **Blood Bank Management System**.

CHAPTER 3: PROBLEM STATEMENT

The following problem arises when using a typical blood bank's existing system:

- Personal profile accessibility (P1)

The donor's information can only be updated by the administrators of the blood bank. A donor can update their information by calling, faxing, e-mailing, but not by themselves. This is a waste of time just for updating a piece of information and it may be troublesome for some donors.

- Donation record accessibility (P2)

The donor ID card is the only tangible evidence that contains the donor's recent donation records, if the card gets lost, donors may find it difficult to schedule their next appointment since they are not able to see the last time they had donated

- Blood result notifications (P3)

After the process of blood donation, the donor will receive a card that only contains their name and blood type. They will not be notified of their blood result unless they request that information from the blood bank.

- Blood stock management (P4)

Blood banks are required to maintain account of blood bags in the inventory. This increases with each blood donation recorded in our system and decreases as they are checked out upon hospital requests. Our system will need to keep the information up to date to ensure correctness of the inventory.

CHAPTER 4: USER REQUIREMENTS

There are two internal users involved in this system. The user requirements are considered as follows:

- **DONOR**

1. To be able to view their donation records, including where and when they made donations, and the blood results for each, to learn of their donated blood quality and schedule their next donations. (Solving P2, P4)
2. To be able to view and update their personal information, including name, contact address, and phone number, to keep their donor's information record up to date with the blood bank. (Solving P1)

- **ADMINISTRATOR**

1. To be able to create, update, delete, and query donor's records in order to manage donor information.
2. To be able to create, update, delete, and retrieve donation records to manage information about donations made.
3. To be able to deposit donated blood into inventory when donations are made.
4. To be able to withdraw blood from the inventory and keep a record of bloodstocks to always keep count of the blood bags. (Solving P4)
5. To be able to create, update, delete, and retrieve request records from hospitals to manage hospital requests for blood.
6. To be able to create, update, delete, and query hospital's records in order to manage hospital information.

CHAPTER 5: OBJECTIVES

The goal of my internship project is to develop a web application for blood banks to manage information about their donors and blood stock. The main objectives of this website development can be defined as follows:

- To develop a system that provides functions to support donors to view and manage their information conveniently.
- To maintain records of blood donors, blood donation information and bloodstocks in a centralized database system.
- To inform donors of their blood result after their donation.
- To support searching, matching and requesting for blood convenient for administrators.

➤ PROJECT AIM

The system (Blood Bank Management System) is designed to help the Blood Bank administrator to meet the demand of Blood by sending and/or serving the request for Blood as and when required. The proposed system gives the procedural approach of how to bridge the gap between Recipient, Donor, and Blood Banks. This Application will provide a common ground for all the three parties (i.e. Recipient, Donor, and Blood Banks) and will ensure the fulfilment of demand for Blood requested by Recipient and/or Blood Bank.

The features of proposed system are ease of data entry, system should provide user friendly interfaces, no need to maintain any manual register and form, immediate data retrieval and so on. The new system covers all the aspects of the existing system as well as enhanced features for the existing system for e.g. Bill provision etc.

CHAPTER 6: MOTIVATION AND RATIONALE OF THE STUDY

6.1 MOTIVATION TO STUDY DOMAIN (PYTHON AND DJANGO)

As expected with most open-source projects, Django has a great community of users and backers. Therefore, there is a massive amount of material and resources on it (everything from documentation and tutorials to videos and articles), as well as meetups and workshops. This means that if you happen to come across any issues, someone has probably tackled it before, and will be willing to help you out.

Scalability is rather important when it comes to developing web apps. Django includes a series of default components that can be unplugged and replaced for more specific solutions, making scalability effortless. The framework also has the ability to handle traffic and mobile app API usage for a whopping 400 million users, therefore maximizing scalability and minimizing web hosting costs. What is more, Django lets you use plugins to extend your web app, and there are countless packages available to help you scale up your product.

6.2 MOTIVATION TO IMPLEMENT PROJECT

The process of managing the blood bag that is received from the blood donation events needs a proper and systematic management. The blood bag must be handled with care and treated thoroughly as it is related to someone's life. The development of Web-based Blood Bank Management System (BBMS) is proposed to provide a management functional to the blood bank in order to handle the blood bag. This web-based management system was developed to meet the requirements for blood banks.

Application for Blood Bank Management System is a way to synchronize Blood banks and Hospitals with the help of Internet. It is a Web Application through which Registered Hospitals can check the availability of required Blood and can send Request for blood to the nearest blood bank or donor matching with blood requirement and can be ordered online as and when required. Blood bank can also send a request to another blood bank for unavailable blood. Person willing to donate blood can find out nearest blood banks using Blood Bank Management Application.

The proposed system (Blood Bank Management System) is designed to help the Blood Bank administrator to meet the demand of Blood by sending and/or serving the request for Blood as and when required. The proposed system gives the procedural approach of how to bridge the gap between Recipient, Donor, and Blood Banks.

CHAPTER 7: LOG BOOK

Sr. No	Date	Week No	Work Done	Remark by internship external mentor	Remark by internship internal mentor
1	11/02/2022 To 17/02/2022	Week 1	Performing HTML and CSS Tasks and creating a website.		
2	18/02/2022 To 24/02/2022	Week 2	JavaScript Tasks and applying validations on created website using JavaScript.		
3	25/02/2022 To 03/03/2022	Week 3	Performing Python Tasks and creating real world applications.		
4	04/03/2022 To 10/03/2022	Week 4	Performing Tasks on Django Views and Templates.		
5	11/03/2022 To 17/03/2022	Week 5	Performing tasks of URL mapping and Page redirection in Django.		
6	18/03/2022 To 24/03/2022	Week 6	Performing Tasks on Django Models and Query Sets.		
7	25/03/2022 To 31/03/2022	Week 7	Understanding to implement project and apps in Django.		
8	01/04/2022 To 07/04/2022	Week 8	Requirements gathering and Implementation of Assigned Project.		
9	08/04/2022 To 11/04/2022	Week 9	Assigned Project completion.		

Table 7.1: Log Book

CHAPTER 8: METHODOLOGICAL DETAILS

8.1 INTERNSHIP PROJECT IMPLEMENTING METHODOLOGY

1. Project Identification and Selection

In this project, we aimed to develop an online blood bank system which will focus mainly on managing the donor's blood information. Anyone who is interested in blood donation can donate the blood at the hospital or blood donation centers.

2. Project Initiation and Planning

To begin the project, we have gathered user requirement of this system and prepare the scope and objective. The results from this phase are scope and limitation, objectives, cost and benefits, feature of the proposed system and user interface design.

3. Analyzing System needs

We have studied and identified problems of existing system, then we develop data flow diagram for the existing system. We also develop data flow diagram (DFD) and entity relation diagram (E-R diagram) for the proposed system.

4. Designing the Proposed System

Based on the analysis phase, we converted E-R diagram into relational database model and created data dictionary and DFD and user interface are designed in this process.

5. Development of the Proposed System

In this phase, we are going to convert the design of proposed system to computer software, which includes computer programming using Python as a software program tool and Django, which is intended to handle the administration of MySQL, and translating the design specifications into the computer code.

6. Testing the Proposed System

This step is the process of testing whether the programming code will work correctly with the conditions in our system or not. In this phase, we will fix bugs in order to produce a system with maximum performance.

7. Implementing the Proposed System

We wish to launch this system on the internet, so that donors are able to view their blood donation records online and administrators can create, update, delete, and query records conveniently.

8.2 LANGUAGES / FRAMEWORKS USED

- **HTML**

HTML (HyperText Markup Language) is the most basic building block of the Web. HTML is the standard markup language for documents designed to be displayed in a web browser. It defines the meaning and structure of web content. "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web.

HTML uses "markup" to annotate text, images, and other content for display in a Web browser. HTML markup includes special "elements" such as <head>, <title>, <body>, <header>, <footer>, <article>, <section>, <p>, <div>, , , <aside>, <audio>, <canvas>, <datalist>, <details>, <embed>, <nav>, <output>, <progress>, <video>, , , and many others.

- **CSS**

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is used to control the style of a web document in a simple and easy way. CSS is the acronym for "Cascading Style Sheet".

There are three types of CSS which are given below:

1. **Inline CSS**

Inline CSS contains the CSS property in the body section attached with element is known as inline CSS. This kind of style is specified within an HTML tag using the style attribute.

2. **Internal or Embedded CSS**

This can be used when a single HTML document must be styled uniquely. The CSS rule set should be within the HTML file in the head section i.e the CSS is embedded within the HTML file.

3. External CSS

External CSS contains separate CSS file which contains only style property with the help of tag attributes (For example class, id, heading, ... etc.). CSS property written in a separate file with .css extension and should be linked to the HTML document using link tag. This means that for each element, style can be set only once and that will be applied across web pages.

- **JAVASCRIPT**

JavaScript, often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. Over 97% of websites use JavaScript on the client side for web page behavior, often incorporating third-party libraries.

JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions. While it is most well-known as the scripting language for Web pages, many non-browser environments also use it, such as Node.js, Apache CouchDB and Adobe Acrobat. centric applications. It is complimentary to and integrated with Java. JavaScript is very easy to implement because it is integrated with HTML. It is open and cross-platform.

- **PYTHON**

Python is a high-level, interpreted, interactive and object-oriented scripting language. Python is designed to be highly readable. It uses English keywords frequently where as other languages use punctuation, and it has fewer syntactical constructions than other languages.

Python is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. I will list down some of the key advantages of learning Python:

1. Python is Interpreted – Python is processed at runtime by the interpreter. You do not need to compile your program before executing it. This is similar to PERL and PHP.
2. Python is Interactive – You can actually sit at a Python prompt and interact with the interpreter directly to write your programs.
3. Python is Object-Oriented – Python supports Object-Oriented style or technique of programming that encapsulates code within objects.
4. Python is a Beginner's Language – Python is a great language for the beginner-level programmers and supports the development of a wide range of applications from simple text processing to WWW browsers to games.

- **DJANGO**

Django is a high-level Python Web framework that encourages rapid development and clean pragmatic design. A Web framework is a set of components that provide a standard way to develop websites fast and easily. Django's primary goal is to ease the creation of complex database-driven websites. Some well-known sites that use Django include PBS, Instagram, Bitbucket and Mozilla.

Django helps you write software that is:

1. Complete

Django follows the "Batteries included" philosophy and provides almost everything developers might want to do "out of the box". Because everything you need is part of the one "product", it all works seamlessly together, follows consistent design principles, and has extensive and up-to-date documentation.

2. Versatile

Django can be (and has been) used to build almost any type of website — from content management systems and wikis, through to social networks and news sites. It can work with any client-side framework, and can deliver content in almost any format (including HTML, RSS feeds, JSON, XML, etc).

3. Secure

Django enables protection against many vulnerabilities by default, including SQL injection, cross-site scripting, cross-site request forgery and clickjacking (see Website security for more details of such attacks).

4. Scalable

Django uses a component-based "shared-nothing" architecture (each part of the architecture is independent of the others, and can hence be replaced or changed if needed). Having a clear separation between the different parts means that it can scale for increased traffic by adding hardware at any level: caching servers, database servers, or application servers. Some of the busiest sites have successfully scaled Django to meet their demands (e.g. Instagram and Disqus, to name just two).

- **DJANGO ARCHITECTURE**

In a traditional data-driven website, a web application waits for HTTP requests from the web browser (or another client). When a request is received the application works out what is needed based on the URL and possibly information in POST data or GET data. Depending on what is required it may then read or write information from a database or perform other tasks required to satisfy the request.

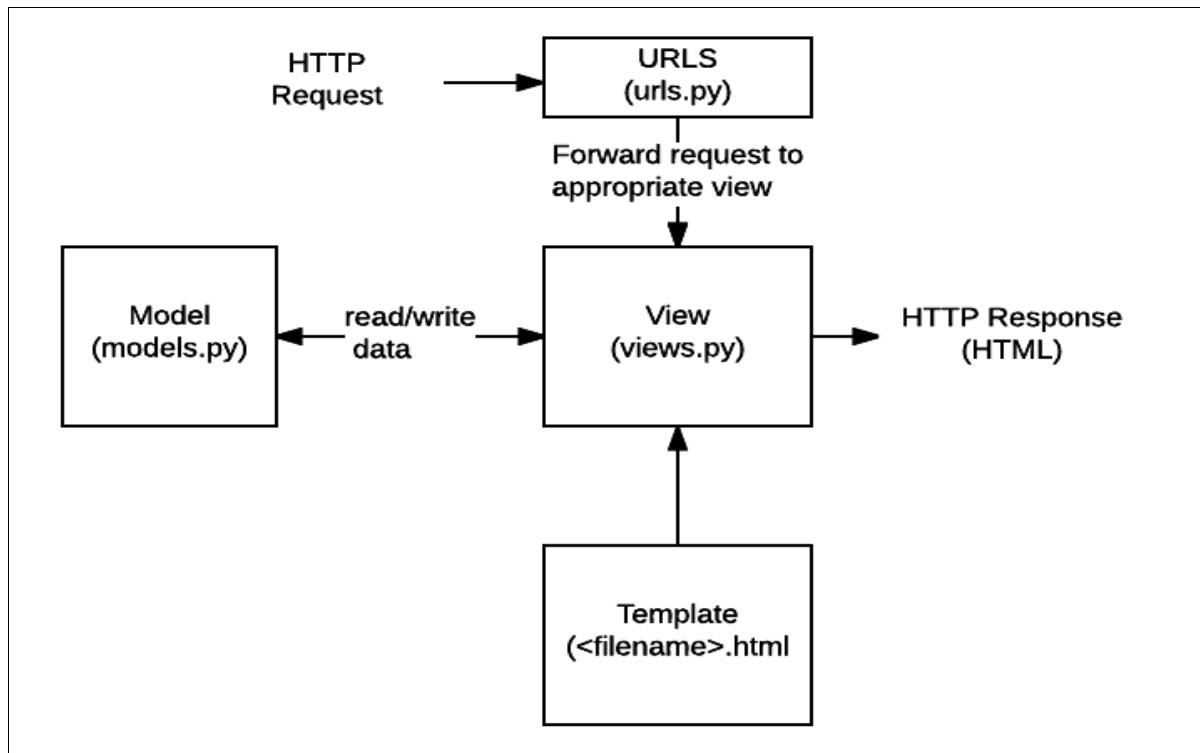


Fig 8.1: Django Architecture

Components of Django Architecture:

1. URLs

While it is possible to process requests from every single URL via a single function, it is much more maintainable to write a separate view function to handle each resource. A URL mapper is used to redirect HTTP requests to the appropriate view based on the request URL.

2. View

A view is a request handler function, which receives HTTP requests and returns HTTP responses. Views access the data needed to satisfy requests via models, and delegate the formatting of the response to templates.

3. Models

Models are Python objects that define the structure of an application's data, and provide mechanisms to manage (add, modify, delete) and query records in the database.

4. Templates

A template is a text file defining the structure or layout of a file (such as an HTML page), with placeholders used to represent actual content. A view can dynamically create an HTML page using an HTML template, populating it with data from a model. A template can be used to define the structure of any type of file; it doesn't have to be HTML!

8.3 LOGICAL DESIGNS OF THE BLOOD BANK MANAGEMENT SYSTEM

- **DATA FLOW DIAGRAM**

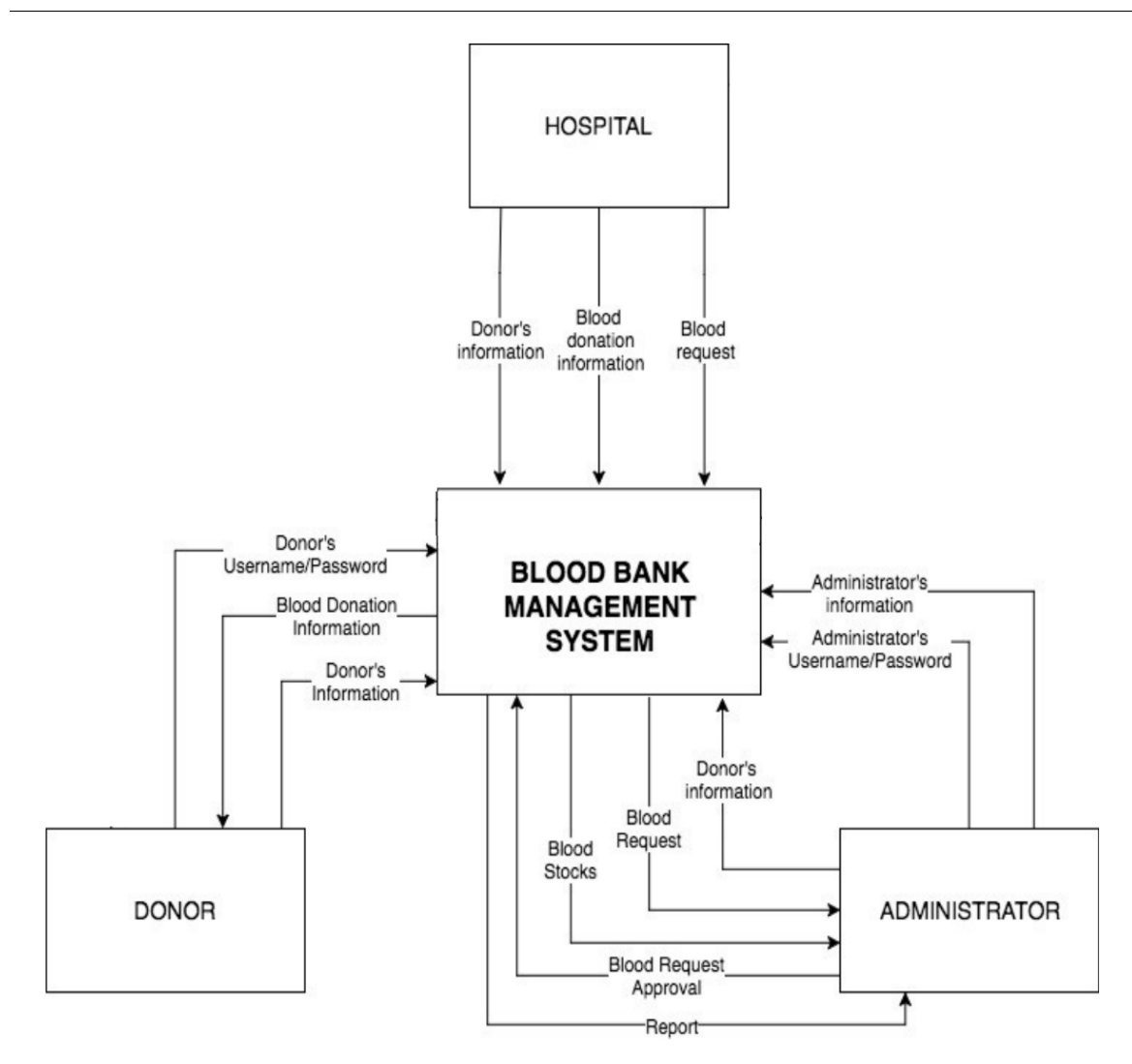


Fig 8.2: Data Flow Diagram

- **ER (ENTITY RELATIONSHIP) DIAGRAM**

It shows the system's database design based on blood bank management requirements. The system can encode donors and recipient's information. The admin can have access to the donor status and recipient information. They can handle the data needed in managing blood donation information as well as the request made by the possible recipients.

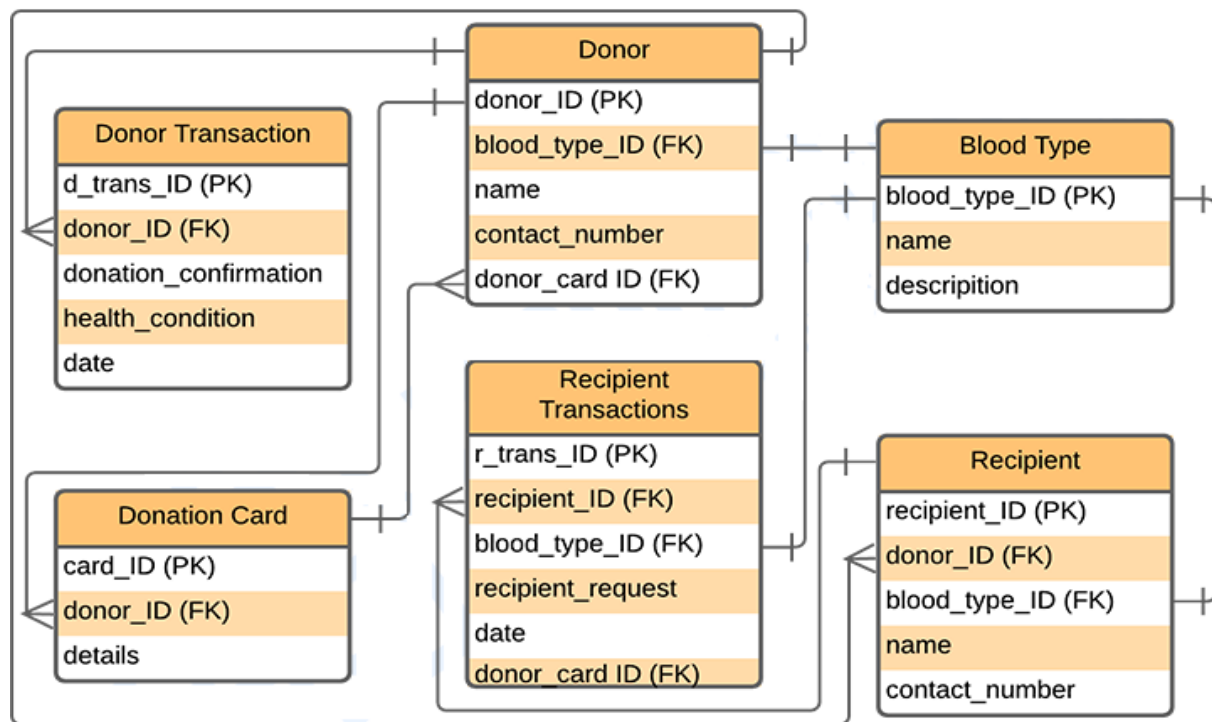


Fig 8.3: ER Diagram

Here's the database design for Blood Bank Management system with ER Diagram of Blood Bank Management. This means that the system can handle and manage the donors and recipients with the help of his system.

a. Donor Management

This feature plays a big role for the system because this gathers the important information of the donor. This information was used to track them and with important matters regarding the system.

b. Manage Recipient

This system can also manage the recipients regarding with request for blood. They also trace if the recipient is applicable to have the blood.

c. Transaction and Reports Management

This feature will store the transactions made including their information and the reports every transactions and timetables.

- **CLASS DIAGRAM**

It is a designed structure that shows the systems' classes and their relationships. This UML Class Diagram is made to guide programmers along with the Online Blood Bank Management system development. It contains the systems' class attributes, methods as well as the relationships between classes. The class diagram makes sure that your Online Blood Bank Management system development is inline with what should be its functions.

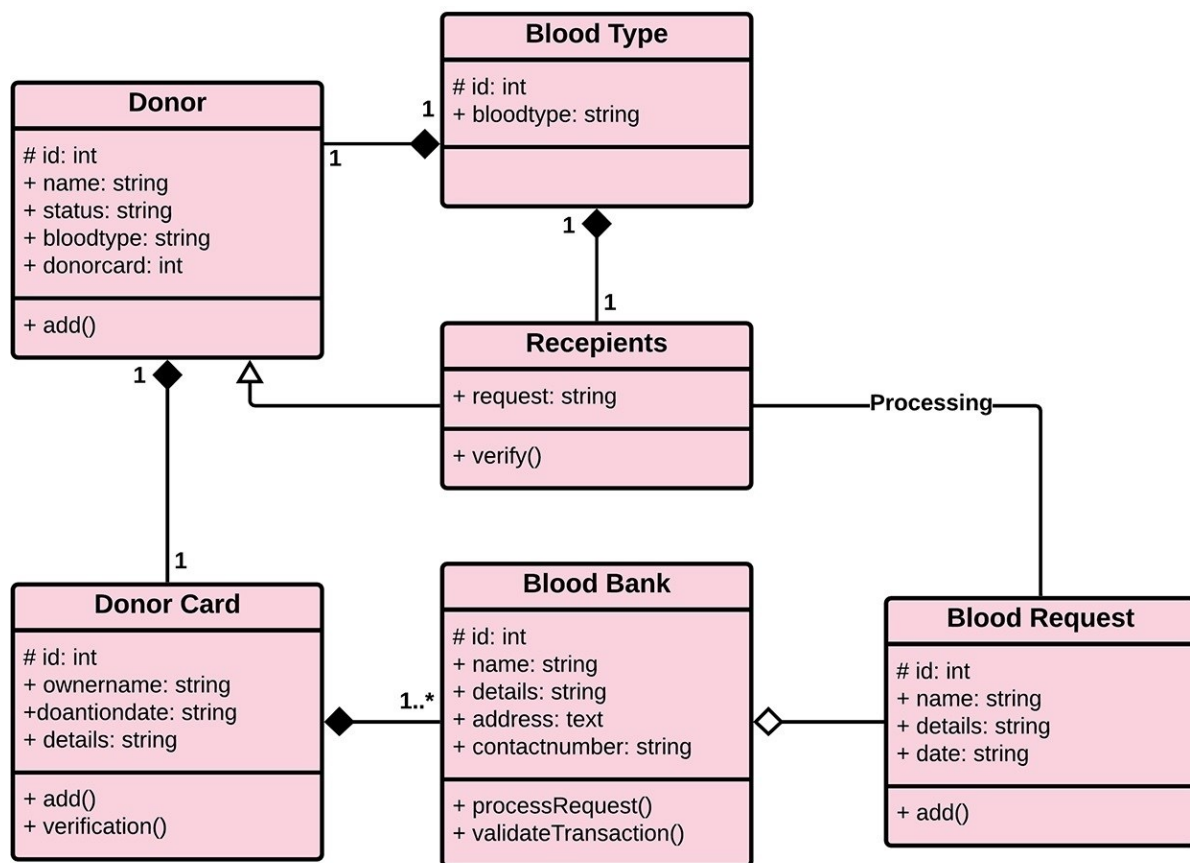


Fig 8.4: Class Diagram

It resembles a flowchart in which classes are represented as boxes with three rectangles inside each box. The top rectangle has the class's name; the middle rectangle contains the class's properties; and the bottom rectangle contains the class's methods, commonly known as operations.

CHAPTER 9: SOFTWARE REQUIREMENTS SPECIFICATIONS

- System configurations

The software requirement specification can produce at the culmination of the analysis task. The function and performance allocated to software as part of system engineering are refined by established a complete information description, a detailed functional description, a representation of system behaviour, and indication of performance and design constrain, appropriate validate criteria, and other information pertinent to requirements.

- Software Requirements

Sr. No.	Content	Specification
1.	Operating system	Windows 7, 8, 10 & 11
2.	Coding Language	Python 3.7
3.	Front-End	Django 4.0.4
4.	Data Base	XAMPP Control Panel v3.3.0 MySql

Table 9.1: Software Requirement

- Hardware Requirements

Sr. No.	Content	Specification
1.	System Processor	i3 5th Generation
2.	Hard Disk	500 GB / 1 TB
3.	RAM	4 GB / 8 GB

Table 9.2: Hardware Requirement

CHAPTER 10: RESULTS

Fig. 10.1 shows the main page of the BBMS. This interface can be accessed by all of the users of this system. This interface is accessible not only for the registered user of the system but also can be access by the public.

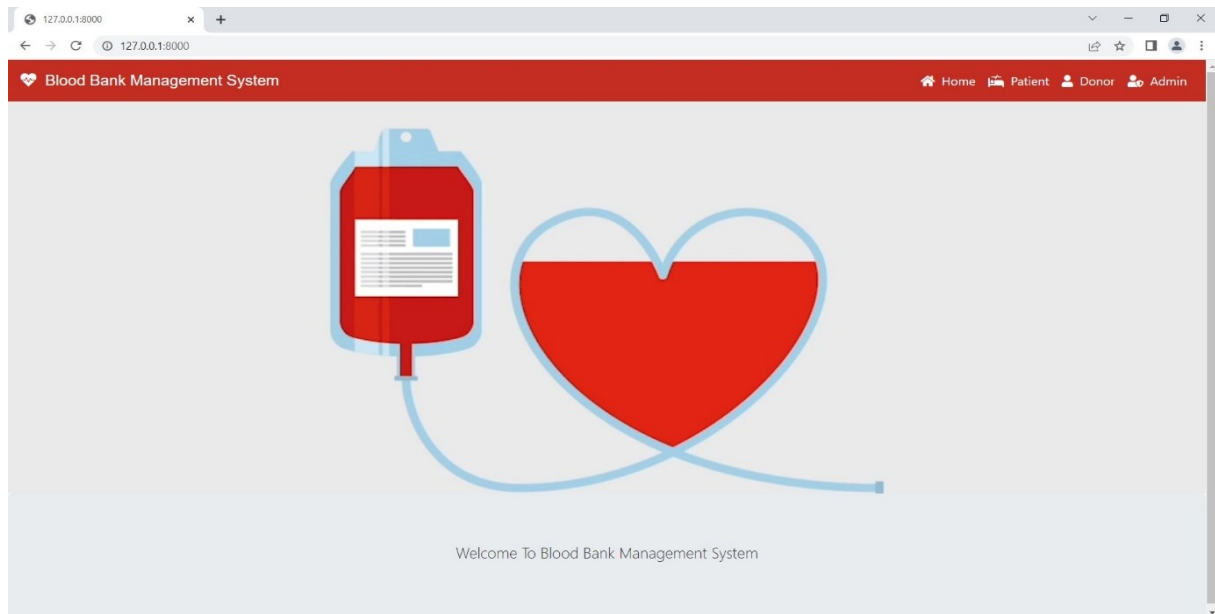


Fig 10.1: Home page

Fig. 10.2 shows the example of the information that can be obtained by the registered user and public. The information that the public can get are related to blood donation such as what blood group can donate to which blood group, and what are the advantages that the donor gets according to how frequent the donor donates their blood.

A screenshot of the "MAKE BLOOD REQUEST" page in the BBMS. The browser's address bar shows the URL "127.0.0.1:8000/patient/make-request". The page has a red header with the title "Blood Bank Management System" and a "Logout" button. A dark sidebar on the left contains navigation links for "Home", "Make Request", and "Request History". The main content area is a white form titled "MAKE BLOOD REQUEST" with the following fields: "Patient Name" (text input with "Omkar"), "Patient Age" (text input with "22"), "Reason" (text input with "Accident"), "Blood Group" (dropdown menu with "B+" selected), and "Unit (ml)" (text input with "200"). A red "REQUEST" button is located at the bottom of the form.

Fig 10.2: Requesting Blood Page

Fig. 10.3 shows the homepage for the Donor. The Donor can view the blood donation schedule, blood donation history and also blood test results for each of the blood donation that has been made. He or she also can view the previous blood advance test.

The screenshot shows a web browser window with the URL `127.0.0.1:8000/donor/donate-blood`. The page has a red header bar with the text "Blood Bank Management System" and a "Logout" button. A dark sidebar on the left contains navigation links: Home, Donate Blood, Donation History, Blood Request, and Request History. The main content area features a "DONATE BLOOD" form with the following fields: "Blood Group" (a dropdown menu showing "A+"), "Unit (ml)" (a text input with "100"), "Disease (if any)" (a text input with "Nothing"), and "Age" (a spinner input with "20"). A green "DONATE" button is positioned at the bottom of the form.

Fig 10.3: Donating Blood Page

Fig. 10.4 and 10.5 shows the admin page interface

The screenshot shows a web browser window with the URL `127.0.0.1:8000/donor/donor-dashboard`. The page has a red header bar with the text "Blood Bank Management System" and a "Logout" button. A dark sidebar on the left contains navigation links: Home, Donate Blood, Donation History, Blood Request, and Request History. The main content area displays four summary cards: "Request Made" with a value of 0 and a blue plus icon, "Pending Request" with a value of 0 and a yellow refresh icon, "Approved Request" with a value of 0 and a green checkmark icon, and "Rejected Request" with a value of 0 and a red X icon.

Fig 10.4: Admin Page 1

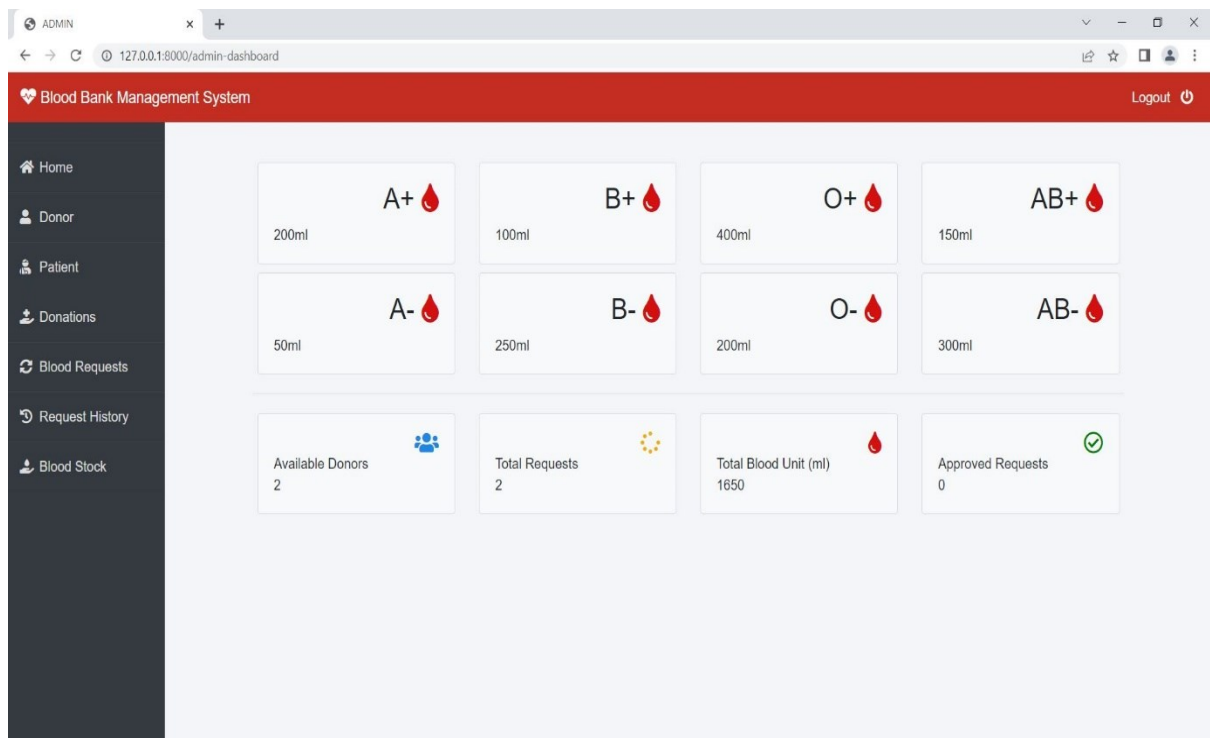


Fig 10.5: Admin Page 2

CHAPTER 11: CONCLUSION

Doing my internship at TechCiti Technologies Private Limited gave me the opportunity to put what I am learning into action, in a real-world environment. This helps me better understand the theories and strategies I have been reading about, cementing the learning process and giving me greater focus.

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 my Project” BLOOD BANK Management System” was one of these opportunities. It gave me the requisite practical knowledge to supplement the already taught theoretical concepts thus making me more competent as a computer engineer. The project from a personal point of view also helped me 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 internship also provided me the opportunity of interacting with our experts and to gain knowledge from their best experience.

CHAPTER 12: SUGGESTIONS / RECOMMENDATIONS FOR IMPROVEMENT TO INDUSTRY, IF ANY

- None

CHAPTER 13: ATTENDANCE RECORD

- Virtual Internship

CHAPTER 14: REFERENCE

➤ LIBRARY BOOKS

1. Mastering Django by Nigel George
2. Django for APIs: Build web APIs with Python and Django by William S. Vincent
3. Programming Python by Mark Lutz

➤ OTHER SOURCES

1. <https://www.djangoproject.com/>
2. <https://developer.mozilla.org/en-US/docs/Learn/Server-side/Django/Introduction>
3. <https://realpython.com/tutorials/django/>
4. <https://www.fullstackpython.com/django.html>