# MINI PROJECT (2020-21)

## "SW MEDICATION"

**Project Report** 



## **Institute of Engineering & Technology**

## Submitted By -

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Under the Supervision of Mr. Mayank Saxena
Technical Trainer

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## **DECLARATION**

I/we hereby declare that the work which is being presented in the Bachelor of technology. Project "SW MEDICATION", in partial fulfillment of the requirements for the award of the *Bachelor of Technology* in Computer Science and Engineering and submitted to the Department of Computer Engineering and Applications of GLA University, Mathura, is an authentic record of my/our own work carried under the supervision of Mr. Mayank Saxena, Technical Trainer, Dept. of CEA,GLA University.

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

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## TRAINING CERTIFICATES

#### **Shivansh Gupta**





Certificate no: UC-aed87c06-6693-435e-85b8-93de02t15d7(
Certificate url: ude.my/UC-aed87c06-6693-435e-85b8-93de02t15d7(
Reference Number: 000

CERTIFICATE OF COMPLETION

# The Complete 2022 Web Development Bootcamp

Instructors Dr. Angela Yu

## Shivansh Gupta

Date Nov. 16, 2021 Length 55.5 total hours

Tanya Agrawal



Cartificate no: UC-fa345de6-64da-4284-a0db-tdff50947905 Certificate uri: ude.my/UC-fa345de6-64da-4284-a0db-tdff50947905 Reference Number: 0004

CERTIFICATE OF COMPLETION

# The Complete 2022 Web Development Bootcamp

Instructors Dr. Angela Yu

#### **Tanya Agrawal**

Date Nov. 17, 2021 Length 55.5 total hours



# Certificate OF PARTICIPATION

This Certificate is hereby bestowed upon

# Tanya Agrawal

for the exceptional performance that has led to the successful completion of

2 Days Live Workshop on JavaScript

An 8 hours of workshop that covers Variables | Data Types | Conditional Statements |
Operators | Objects and Arrays | Loops | Functions | DOM | BOM | AJAX | Backend | Frontend |
JSON | and Advanced Industry Use Cases under the mentorship of Mr. Vimal Daga.

Certificate No - LWIPL-JPR-2021-9044 Date - 12<sup>th</sup> & 13<sup>th</sup> June, 2021 Authorised Signatory LinuxWorld Informatics Pvt. Ltd.

## Snigdha Dhamija

VEC VES

OFFER LETTE

#### Dear SNIGDHA DHAMILA

Congratulations on being selected as a Full Stack Development Intern at ShapeAI. We at ShapeAI are extremely enthusiastic about having you join our team. The internship will start on 10th July 2021 and the expected duration for the same will be 11 weeks long.

Vishal Jain, Lead Full Stack Developer at ShapeAl will be your Mentor during the tenure. It is our opinion that your abilities and experience will be the perfect fit for our company.

In this role, you will be required to take full ownership over the product life cycle, understand customer needs through research and market data, own and shape the backlog, roadmap and vision of one cross-functional product team.

By signing and returning this letter you will confirm your acceptance of the offer. We look forward to having you on our team! If you have any questions, please feel free to reach out at your earliest convenience.



Shaurya Sinha

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#### Yash Mahendian



Certificate in: uds.my/UC-cbbefe7f-fa98-4c62-80e5-df4/4888b86 Certificate un: uds.my/UC-cbbefe7f-fa98-4c62-80e5-df4/4868b86

CERTIFICATE OF COMPLETION

# The Complete 2022 Web Development Bootcamp

Instructors Dr. Angela Yu

#### Yash Mahendian

Date Nov. 17, 2021 Length 55.5 total hours

## **Sujal Shivhare**



This certifies

# Sujal Shivhare

has successfully completed a 1 month internship as "Tathastu Full Stack Scholar" in Twowaits Technologies
Pvt. Ltd from 5th July to 4th Aug 2021.







## **ACKNOWLEDGEMENT**

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us the instructor Mr Mayank Saxena, our technical trainer and supervisor.

He has been helping us since Day 1 in this project. He provided us with the roadmap, the basic guidelines explaining on how to work on the project. He has been conducting regular meeting to check the progress of the project and providing us with the resources related to the project. Without his help, we wouldn't have been able to complete this project.

And at last but not the least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped me find resources during the training.

Thanking You.

## **ABSTRACT**

In this project, we are creating an website, basically a social charity website which we have named "SW Medication". This website will provide users a platform to who were financially more than enough of what he or she needs contributes a part of his or her surplus income for the fulfilment of the needs of those who are less capable. All the users will be having their separate accounts on this website which will be connected to their email id. The aim of this project is to basically help the needy to find supplies related to pharmacy products.

Getting donor is a very hard task, and sometime dealing with some donor's conditions can be a big challenge for NGOs to fulfil it. This SW Medication (charity management system) will help to find donors easily.

This system has three modules namely, Admin, Buyer and Donor.

As a first stage it should setting up online store which is easy to use to the people who are urgent in need and don't face any sort of problems in using our store. As time will pass and tacking care of customer experience we will enhance our website and add more features and product to it so that all the requirements of customers will get fulfill here only and they don't need to search any other place. All the techniques are based on deliberated plans takeing care of government norms.

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## **CHAPTER: 1**

#### **Introduction:**

Charity is an act of kindness, where a person who has financially more than enough of what he or she needs contributes a part of his or her surplus income for the fulfilment of the needs of those who are less capable. So, keeping this idea in mind we have designed this project in which we help needy to find supplies related to pharmacy products.

Getting donor is a very hard task, and sometime dealing with some donor's conditions can be a big challenge for NGOs to fulfil it. This SW Medication (charity management system) will help to find donors easily. This system has three modules namely, Admin, Buyer and Donor.

Admin can login using credentials and manage the requests raised by buyer by approving or rejecting it. Approval will be done after verifying the buyer documents uploaded by buyer. Buyer can register and raise request by uploading their required specifications.

Once admin gets the approval, they can login using credentials. Donor can simply register and login using credentials.

#### **Context:-**

This social charity website "SW Medication" has been submitted in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering at GLA University, Mathura supervised by Mr. Mayank Saxena. This project has been completed approximately 1 month and has been executed in modules, meetings have been organized to check the progress of the work and for instructions and guidelines.

#### **Motivation:**

In recent years after the deadly pandemic covid-19 we realize the importance of human life and how important it is . Many people were affected vastly all around the world due to this pandemic and many lost their life as well to . Many families face sufferings and lost their family members to and one of the reason is that medicines and various medical products are not available to the needy ones at the time of maximum need .

So we decided to make a social charity webstore through which people which have extra medicines and instruments which they want to donate to people in post covid times can do so and the people which cannot afford the medicines and other medical products we can make it available to them .

Most of the products in this store are free of cost as we know how the life and health is important and people spends lakhs of amount on medicines but what to those local and poor people which are unaware and can't afford these things So we have decides to start this so that we can help them and also try to generate humanity in heart of all our users .

## **Objective:-**

- User can view details of the medicines without going anywhere.
- It is convenient for users as this system provides accurate cost or about freely available things and description of the system.
- The website is flexible to be used and for e-shopping for products that were not completely free.
- User can view different categories of product of different pharma company at a single place.
- It is an NGO based website so it will get donors easily.
- Donor can donate few things to needy people just by sitting at home.
- It will help people in need and without any money to shop freely, there may be travelling charges.

#### Project Planning:-

Project planning is part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment. Initially, the project scope is defined and the appropriate methods for completing the project are determined. Following this step, the durations for the various tasks necessary to complete the work are listed and grouped into a work breakdown structure. The logical dependencies between tasks are defined using an activity network diagram that enables identification of the critical path. Float or slack time in the schedule can be calculated using project management software. Then the necessary resources can be estimated and costs for each activity can be allocated to each resource, giving the total project cost. At this stage, the project plan may be optimized to achieve the appropriate balance between resource usage and project duration to comply with the project objectives. Once established and agreed, the plan becomes what is known as the baseline. Progress will be measured against the baseline throughout the life of the project .

## **Existing System:-**

SW Medication Project consists of various use cases but mainly concerned with to provide free best quality medicine to the needy users and also allow them to donate medicines , medical equipment and medical services for social welfare in a user friendly way.

Main Technologies associated with SW Medication are :-

- Web Programming Technologies (HTML, CSS, JavaScript, Bootstrap)
- MERN Stack Technologies
- MongoDB (Database)
- UX / UI (Canva, Figma)

## **Future Scope :-**

The further modification of the project is to create or expand in such way that it can be used by everyone easily . It can be extended to more security using various levels of authentication and verification more security and privacy issues can be maintained by using various aspects .

## CHAPTER: 2

## System Design and Methodology:-

This chapter discusses the architecture, various hardware and software requirements and challenges of the project which we faced during the implementation of the project.

## **System Module:-**

The modules evolved in the project are :-

- 1. User
- The one who will buy the medicines and products from the store
- The other one which will act as donor and donate free medicines to our store for charity.
- 2. Admin
  - The developer of the website who manages the website and maintain all the records and maintain and update the website from time to time.

#### **User In this Module:-**

The End User can do various things in this website :-

- User Can Sign Up in the website.
- User can also donate medicines and medical products and equipment's .

#### **Admin In this Module:-**

The Admin can perform multiple tasks in this module :-

- Admin can see all the pages and do changes in them as per use.
- Admin can maintain all the record of end users .
- Admin can provide all the necessary information related to any topic.
- Admin can delete / update / select users and do changes.
- Admin can update products and information regarding them in webstore.

## **Methodology:-**

- The planning stage
- The analysis stage is the most critical stage, and concerns the content of information and the attractiveness of web application design. It analyses and examines the requirements to produce a complete website (Front-End) throughout the development life cycle. This is to ensure that the webbased information is feasible to be developed.
- The design stage provides a 'skeleton' to the web-based information where it describes how such a website is to be designed. All necessary design specifications are developed including interface design.
- The implementation stage involves constructing interfaces and implementing codes according to design specifications. The actual

- program codes that are written may conform to the web standards Testing the web-based information systems for quality assurance is also required and must take into consideration the nature of the web.
- The maintenance stage ensures the content of the web-based information systems is dynamically updated and made continuously reliable by reviewing and maintaining the systems.

#### **Modules And Functionalities:-**

- **Home Page:** The homepage or home page is the name of the main page of a website where visitors can find hyperlinks to other pages on the site which may refer to medicinal availability, search a particular medicine, contact us, about the website, user profile etc.
- Login Page: A login page a web page or an entry page to a website that requires user identification and authentication, regularly performed by entering a username and password combination. Logins will provide access to an entire site or part of a website. There is also a way on this page for the new users to register themselves which will take them to the registration page.
- **Signup page:** A signup page (also known as a registration page) enables users and organizations to independently register and gain access to your system. It is common to have multiple signup pages depending on the types of people and organizations you want to register. All new users and organizations created by this specific signup page will be created under that organization.
- Admin login: The login page is where we go to access the backend of our website. Once logged in, we can see our dashboard, create new posts and pages, update themes and add new plugins, as well as make other customizations to our site. The handle for this page will only be provided to the team members or creators of the website.
- **Donation page:** A donation page is a web page on your organization's website that is home to donation information, details regarding your mission, and the all-important donation form that collects donor data, including medicinal information which has to be donated, and then processes payments.
- Contact us: A contact page is a common web page on a website for visitors to contact the organization or individual providing the website.

  The page will contains the following items:
- an e-mail address

- a telephone number
- a postal address, sometimes accompanied with a map—showing the location
- links to social media
- a contact form for a text message or inquiry.
- **About Us:** This page will give information regarding the developers of website. It will contain the various social and technical platforms links of all the members who are part of developing team.

## **Implementation Requirements:-**

In this Section we will discuss about the various hardware and software requirements .

#### **Hardware Requirements:-**

• Processor : i3, i5

• Operating System : Windows 10

Ram : 8 GbHardware Devices : Laptop

• HardDisk : 1 Tb

• Display : 15.6 inch

## **Software Requirements:-**

• Technology implemented : MERN Stack

• Language used : HTML, CSS, JS, Bootstrap

• Database : MongoDB, Firebase

• UserInterface Design : Figma, Canva

• Web Browser : Chrome, Firefox, MS Edge

#### **Maintenance:**

The website involves following Maintenance processes –

- Manges products from time to time.
- Manages Post and Contents of site.

- Provide time to time update and fix bugs.
- Manges User database time to time and send them necessary information.
- Update and bring more features to website on reviews and user demands.

## CHAPTER: 3

## **Tools and Technology:-**

This chapter discuss about the tools and technologies we used in making this project from frontend to backend , database uses , the ux and ui which used for designing the website and also all about the full stack technologies .

### **Technologies Used:-**

The major technologies used in this project are the Web development and Full Stack Scripting technologies . Major web development technologies include Html , Css , JavaScript , JQuery , Bootstrap framework and have two major portions frontend and backend . Full Stack include MERN technologies which are best and latest in the market . MERN include MongoDB which used for backed database management , Express JS which is a framework , Node JS which is also a framework of JS use in Backend and last is React which is used for FrontEnd .

#### **WEB DEVELOPMENT:-**

**Web development** is the work involved in developing a Web site for the Internet (World Wide Web) or an intranet (a private network).<sup>[1]</sup> Web development can range from developing a simple single static page of plain text to complex web applications, electronic businesses, and social network services. A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, Web server and network security configuration, and e-commerce development.

Among Web professionals, "Web development" usually refers to the main non-design aspects of building Web sites: writing markup and coding. [2] Web development may use content management systems (CMS) to make content changes easier and available with basic technical skills.

For larger organizations and businesses, Web development teams can consist of hundreds of people (Web developers) and follow standard methods like Agile methodologies while developing Web sites. Smaller organizations may only require a single permanent or contracting developer, or secondary assignment to related job positions such as a graphic designer or information systems technician. Web development may be a collaborative effort between departments rather than the domain of a designated department. There are

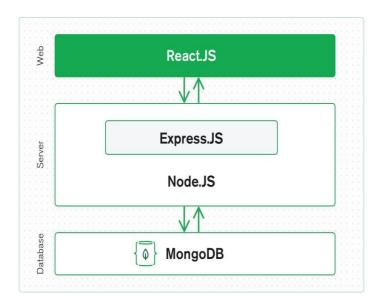
three kinds of Web developer specialization: front-end developer, back-end developer, and full-stack developer. Front-end developers are responsible for behavior and visuals that run in the user browser, while back-end developers deal with the servers.

#### **MERN Stack:-**

MERN is one of several variations of the <u>MEAN stack</u> (MongoDB Express Angular Node), where the traditional Angular.js frontend framework is replaced with React.js. Other variants include MEVN (MongoDB, Express, Vue, Node), and really any frontend JavaScript framework can work.

#### **HOW MERN STACK WORK:-**

The MERN architecture allows you to easily construct a 3-tier architecture (frontend, backend, database) entirely using JavaScript and JSON.



#### **MONGO DB:**-

MongoDB is a NoSQL database where each record is a document comprising of key-value pairs that are similar to JSON (JavaScript Object Notation) objects. MongoDB is flexible and allows its users to create schema, databases, tables, etc. Documents that are identifiable by a primary key make up the basic unit of MongoDB. Once MongoDB is installed, users can make use of Mongo shell as well. Mongo shell provides a JavaScript interface through which the users can interact and carry out operations (eg: querying, updating records, deleting records).

#### **Express:**-

Express is a small framework that sits on top of Node.js's web server functionality to simplify its APIs and add helpful new features.It makes it easier to organize your application's functionality with middle ware and routing; it adds helpful utilities to Node.js's HTTP objects; it facilitates the rendering of dynamic HTTP objects.

Express is a part of MEAN stack, a full stack JavaScript solution used in building fast, robust, and maintainable production web applications.

#### React.js:-

React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It's 'V' in MVC. ReactJS is an open-source, component-based front end library responsible only for the view layer of the application. React uses a declarative paradigm that makes it easier to reason about your application and aims to be both efficient and flexible. It designs simple views for each state in your application, and React will efficiently update and render just the right component when your data changes. The declarative view makes your code more predictable and easier to debug.

A React application is made of multiple components, each responsible for rendering a small, reusable piece of HTML. Components can be nested within other components to allow complex applications to be built out of simple building blocks. A component may also maintain an internal state – for example, a TabList component may store a variable corresponding to the currently open tab.

### Node.js:-

Node.js is an open-source and cross-platform runtime environment for executing JavaScript code outside a browser. You need to remember that NodeJS is not a framework and it's not a programming language. Most people are confused and understand it's a framework or a programming language. We often use Node.js for building back-end services like APIs like Web App or Mobile App. It's used in production by large companies such as Paypal, Uber, Netflix, Walmart, and so on.

## Web Technologies:-

#### HTML:-

The **HyperText Markup Language**, or **HTML** is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

#### **HTML ELEMENTS:-**

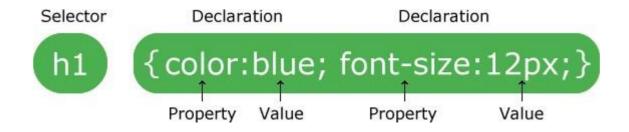
HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets. Tags such as <imp /> and <input /> directly introduce content into the page. Other tags such as surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

#### CSS:-

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.<sup>[3]</sup> This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, which reduces complexity and repetition in the structural content; and enable the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

### **CSS Syntax:-**



### JavaScript:-

**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. JavaScript is a prototype-based, multi-paradigm, single-

threaded, dynamic language, supporting object-oriented, imperative, and declarative (e.g. functional programming) styles.

#### **BootStrap:**

**BootStrap** is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

Bootstrap is an HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents. For example, Bootstrap has provisioned for light- and dark-colored tables, page headings, more prominent pull quotes, and text with a highlight.

Bootstrap also comes with several JavaScript components in the form of jQuery plugins. They provide additional user interface elements such as dialog boxes, tooltips, and carousels. Each Bootstrap component consists of an

HTML structure, CSS declarations, and in some cases accompanying JavaScript code. They also extend the functionality of some existing interface elements, including for example an auto-complete function for input fields.

## **UX & UI Technologies:-**

Revalsys Technologies, creating possibilities for every challenge and in UI/UX development we have a holistic approach with the best combination of technology and user satisfaction as a wise man ones said, "User Interface is like a joke. If you have to explain it, it's not that good."

And our Design Studio developers deploy and live by those lines. The large number of front end technologies used in these yester years with crossindustry expertise has polished our technologists to create the best solution with trusted quality at a short span of time.

#### CANVA:-

**Canva** is a graphic design platform, used to create social media graphics, presentations, posters, documents and other visual content. The app includes templates for users to use. The platform is free to use and offers paid subscriptions such as Canva Pro and Canva for Enterprise for additional functionality. In 2021, Canva launched a video editing tool. Users can also pay for physical products to be printed and shipped.

#### FIGMA:-

**Figma** is a vector graphics editor and prototyping tool which is primarily webbased, with additional offline features enabled by desktop applications for macOS and Windows. The Figma Mirror companion apps for Android and iOS allow viewing Figma prototypes in real-time on mobile devices. The feature set of Figma focuses on use in user interface and user experience design, with an emphasis on real-time collaboration.

## **CHAPTER: 4**

#### **RESULT AND CONCLUSION:-**

Our Full Project of "SW MEDICATION" is available on this online github repository. The link of the github repository is attached below.

https://github.com/TanyaMittal31/SW-Medication

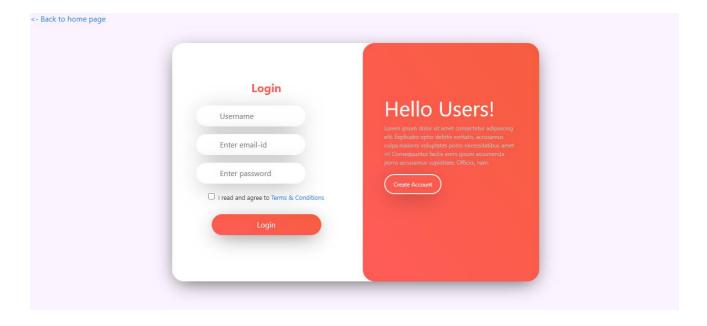
Certain Glimpse – Home page –



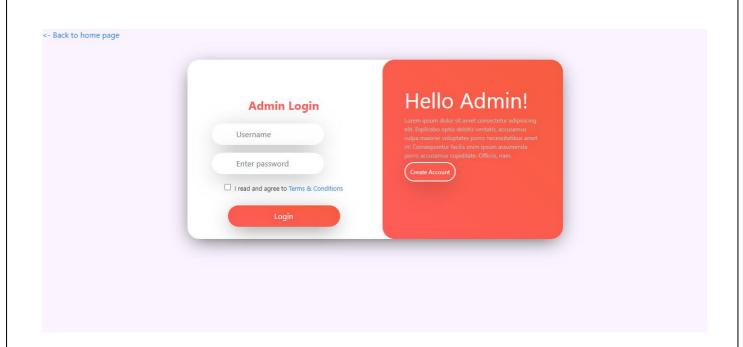
#### MOTIVE

We provide major these facilities to our customers.

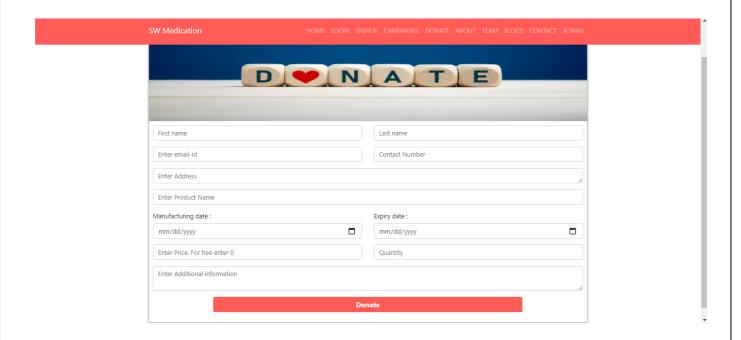
# Login page –



# Admin login –



### Donate -



## **CONCLUSION**

Proposed SW Medication website is an social charity website that will allow users to search for the required medicines and medical equipment's . Users can also donate medicines and medical equipment's which are extra to them and they want to help the needy ones . In our store we will provide free medicines to ground level people who cant afford them .

Our website has a good range of scope in upcoming era as we have recently pass out the time of covid 19 most are the families are still affected and required the help of people who wan to donate for good, so for good of these people as website will act as helpful partner and also inspire the other people who want to help the needy ones but are hesitating in some way or other.

The further modification of the project is to create or expand in such way that it be used by everyone easily . It can be extended to more security using various levels of authentication and verification more security and privacy issues can be maintained by using various aspects .

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