

# Health Care and E-Pharma Management System

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**ABSTRACT** : E-pharmacy is one of the advanced technology that creates a massive demand in the near future. The goal of the Healthcare and E-pharma management system is to supply the drugs ordered by customers with just a single click and to abate the time consumption. Healthcare and E-pharma is a web-based application. This application provides information about medicines, pre-information of side effects, and advice about symptoms of the disease. Also, the patients can schedule appointments with the available doctors and can purchase medicines online. Medicine will be delivered at the doorstep with the given address. This application provides user login to the customer. The tools used in developing the web application are HTML, CSS, Javascript (the front end) for building the user interface. The Django framework is used (The back-end) to create REST APIs and MySQL (SQL database) for storing customer data.

**Keywords** - Healthcare, E-pharma, Medicines, Customer, HTML, CSS, Database,

## 1. INTRODUCTION

Modern technologies have made our life easier and better. Especially the Internet has brought a multitude and welcome change to the healthcare sector. It gives massive value by revamping the accessibility of healthcare services even to the most remote places of the country. With advanced technology, the healthcare industry is likely to go through a revolution and ameliorate to a phase where consumers would be enlightened and empowered. And with this, E-pharmacy is playing a very major role and is about to create a massive demand in the upcoming days. In today's modern world, when most of the products and services are being delivered to the customer's doorstep, there is a massive demand to access models that aid patients and customers to avail the convenience of medicine delivery without having to leave their homes. Because of simplicity and transparency, people are admiring online delivery services.

With the use of technology and access to an inventory of multiple stores at a time, E-Pharmacies can aggregate supplies, making otherwise hard-to-find medicines available to consumers across the country. This will significantly help the old and sick patients who are not in a condition to find a pharmacy and the village population where there is limited presence of retail pharmacy. Therefore, the project aims to connect and serve as an intermediary between hospital Pharmacies and patients through a platform that helps in appointments with the doctor, order of medicines with the click of a button, and simultaneously maintain the records of patients and ordered medicines.

## 2. OBJECTIVE

The goal of the project is to develop web-based software on the E-pharma Management system. It is lucrative for the effective management of a pharmaceutical store, enabling effective communication between the pharmacy and its patients thereby making the purchase of medicines and other activities easy and well detailed.

This serves to achieve the following objectives:

- To keep the software user-friendly.
- To ensure an effective purchase of medicines, transactions, and other operations in the E-pharmacy.
- Ensuring effective policing by giving statistical information on the drugs in E-Store.
- Maintaining a secure and valuable database of all medicines in stock

## 3. LITERATURE REVIEW

The pharmacy management system, also known as the pharmacy information system, is a system that stores data and enables functionality that organizes and maintains the medication use process within pharmacies. These systems may be an independent technology for the pharmacy's use only, or in a hospital setting, pharmacies may be integrated within an inpatient hospital computer physician order entry (CPOE) system.[1]

Necessary actions for a basic, functioning pharmacy management system include a user interface, data entry and retention, and security limits to protect patient health information.[2] Pharmacy computer software is usually purchased ready-made or provided by a drug wholesaler as part of their service. Various pharmacy software operating systems are used throughout the many practice settings of pharmacy across the world.[4] [5] [6]

The pharmacy management system serves many purposes, including the safe and effective dispensing of pharmaceutical drugs. During the dispensing process, the system will prompt the pharmacist to verify the medication they have filled is for the correct patient, contains the right quantity and dosage, and displays accurate information on the prescription label. Advanced pharmacy management systems offer clinical decision support and may be configured to alert the pharmacist to perform clinical interventions, such as an opportunity to offer verbal counseling if the patient’s prescription requires additional education.

**4. METHODOLOGY**

The primary goal of this project is to provide medical facilities like the sale or supply of drugs including prescription services, supply of other healthcare products, information about medicines, and also advice about symptoms to the customers. Users can log in with their accounts, make appointments with the doctors, and buy medicines prescribed by doctors. This application saves a lot of time for patients and proved to be very lucrative in such a modern world.

The implementation of online services in a healthcare practice presents several challenges [6].On the other hand, the utilization of online health services has the potential to impact user behavior and perceived usefulness [7].

**4.1 Identify Problem -**

Identify the requirements for building the software.

**4.2 Design and Development -**

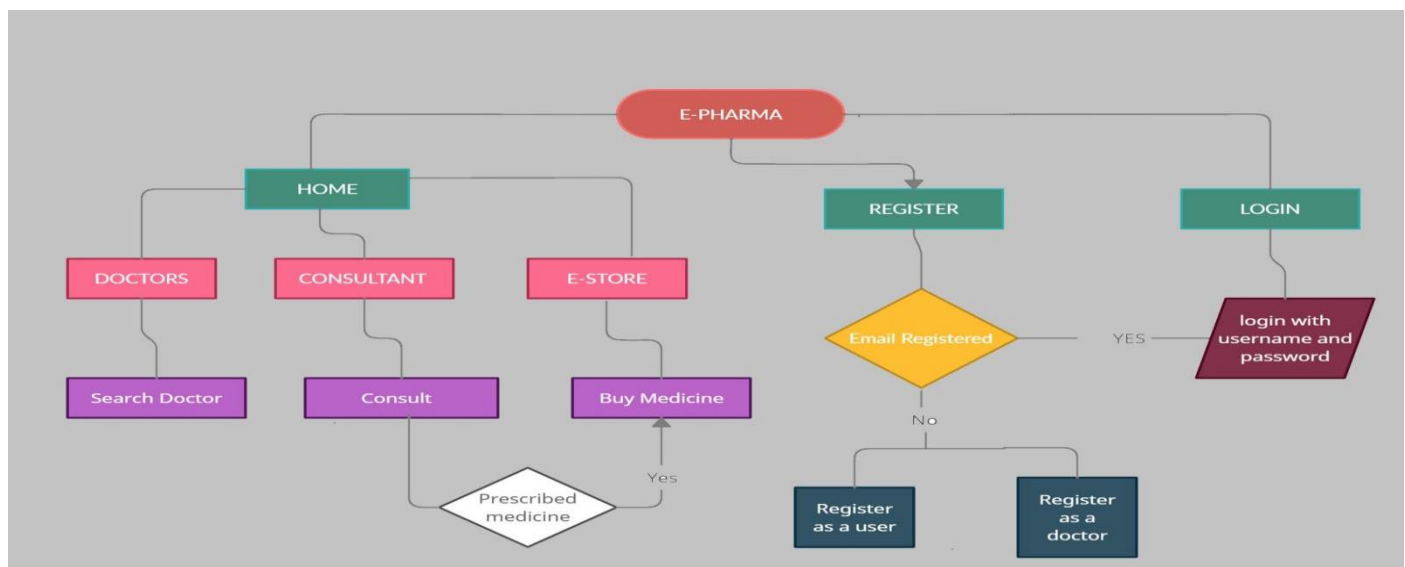
The design and development of the software were based on the Agile methodology, [8-9] using “sprints” of seven days managed on Trello app online service. Layouts of the whole project were designed for the development of the user interface. Backend and database were prepared for the development of the software.

**4.3 Evaluation-** The evaluation of software was started after the development activity, and included the tests (unit testing and another testing).

**5. IMPLEMENTATION**

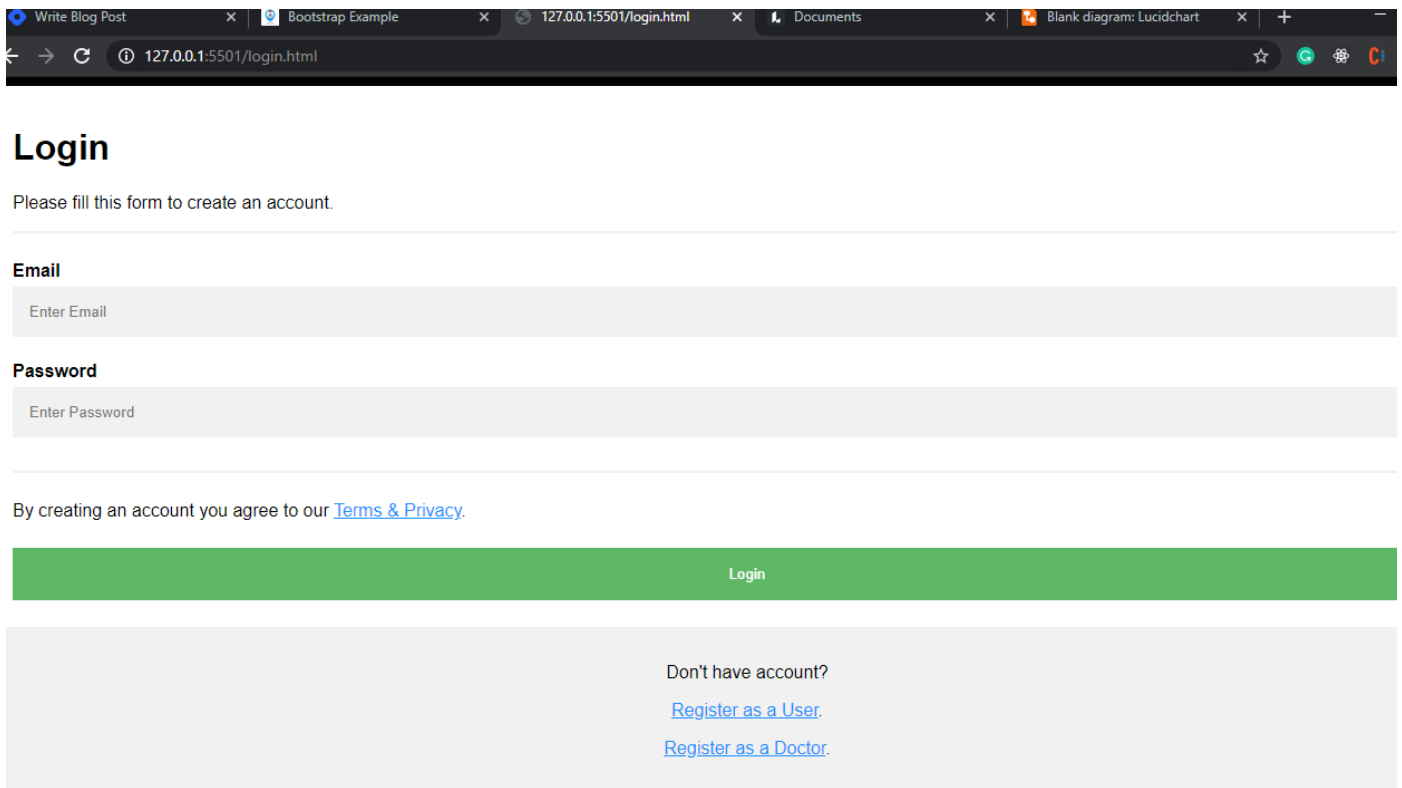
We have used HTML, CSS for the user interface, and Django + MySQL as the server backend (Database).

**Flow Chart**



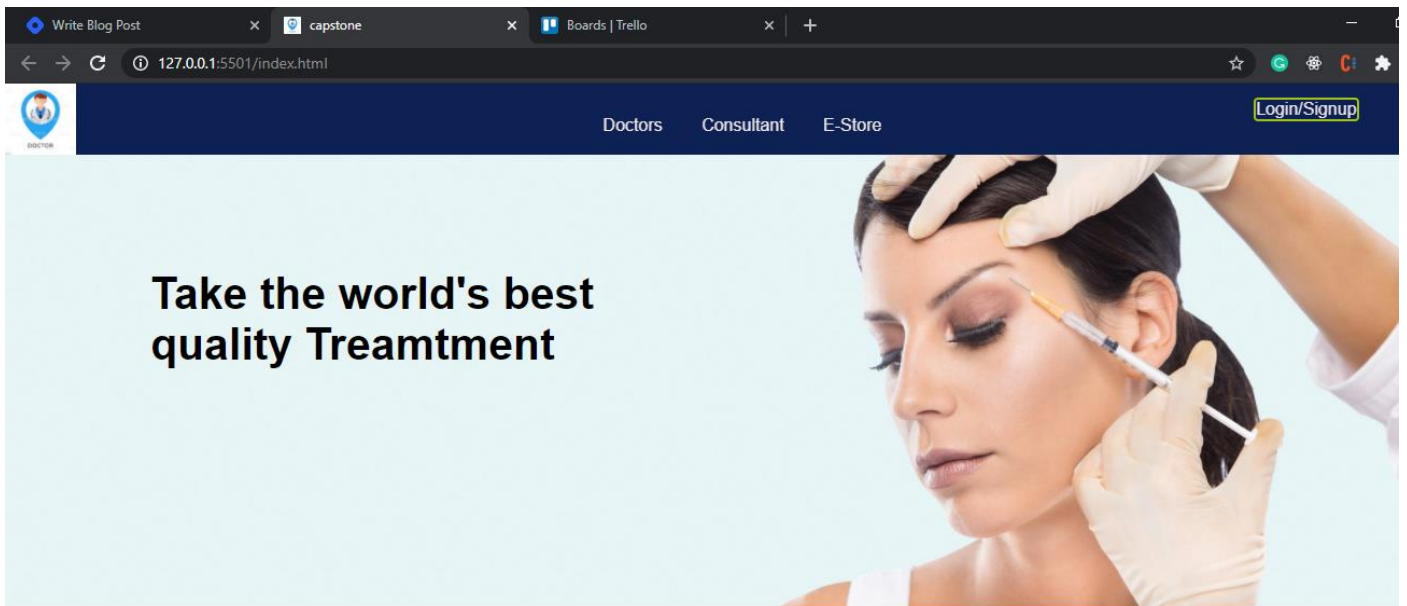
## 6. RESULT ANALYSIS

### 6.1 Login Page



### 6.2 Home Page

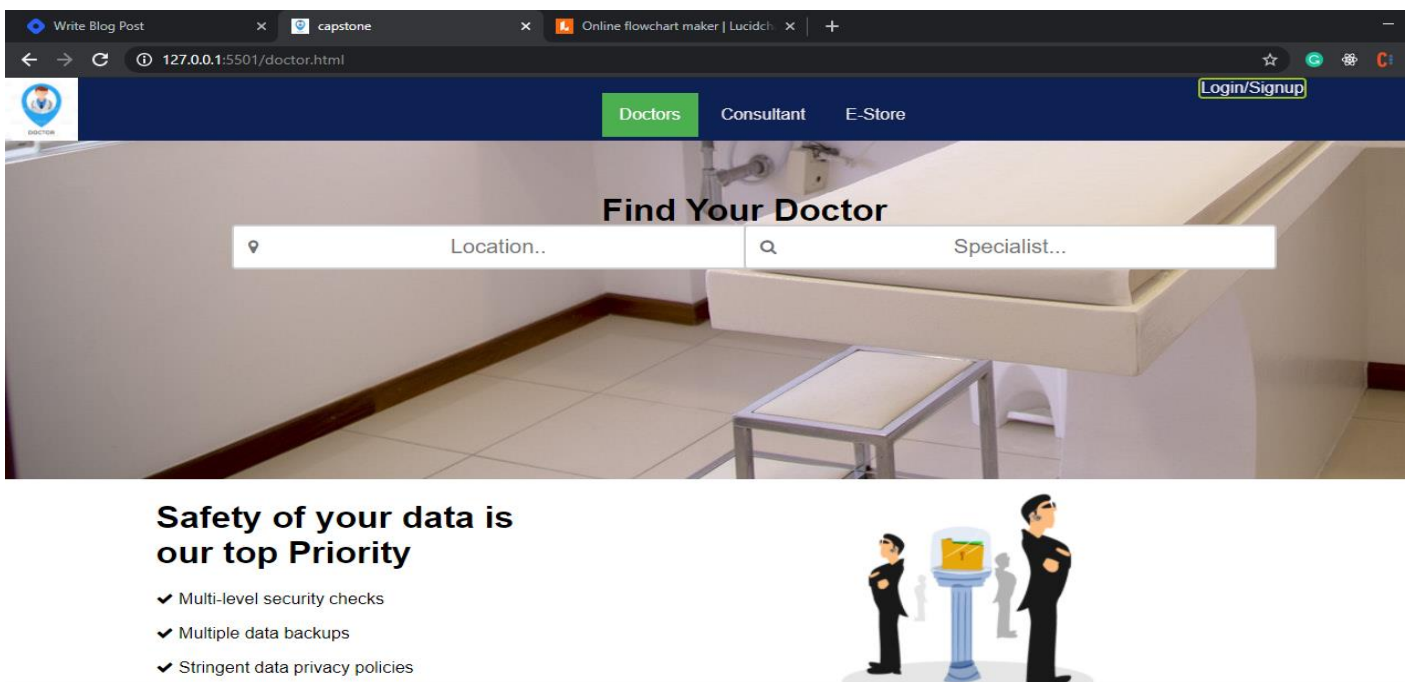
**Description-** This is the project's homepage.



### 6.2.1 Consultant

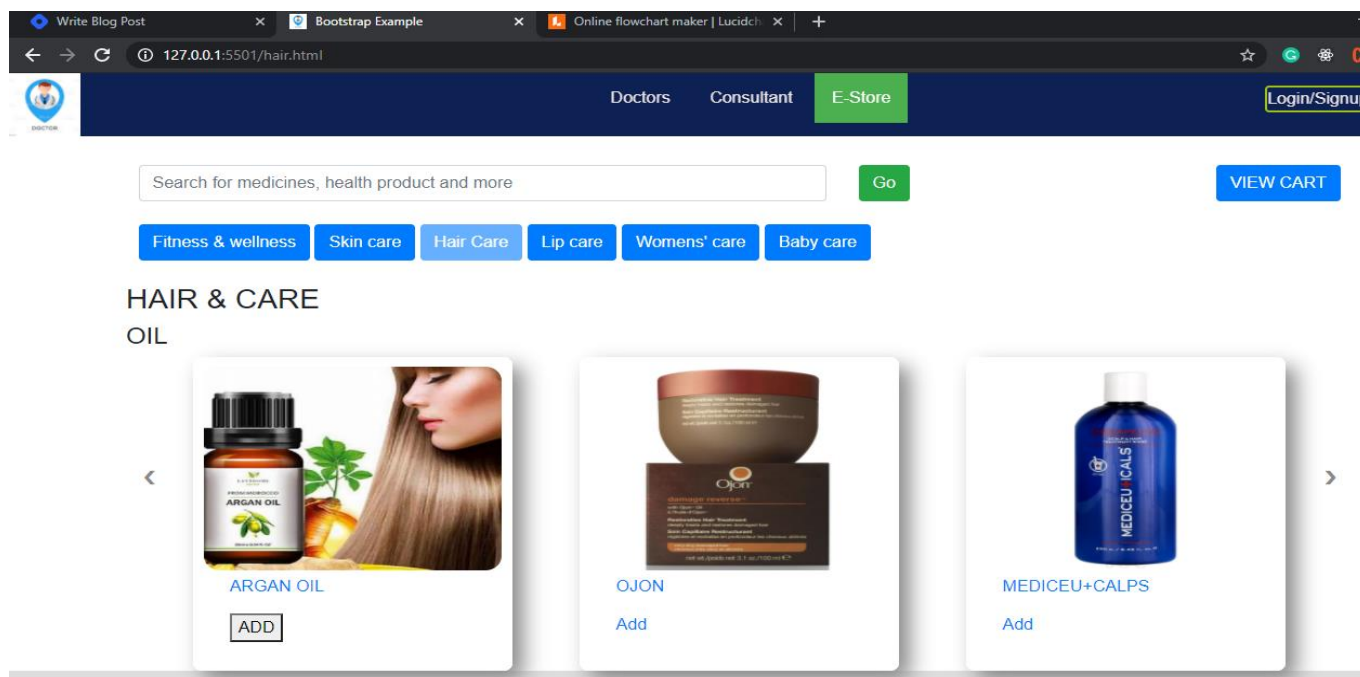
**Description-** Patients can consult with the doctors about their respective health problems.

### 6.2.2 Doctors



### 6.2.3 E-Store

**Description-** Patients can buy medicines prescribed by the doctor from this E-store.



## 7. CONCLUSION

With the advancement in technology, the healthcare industry is expected to be massively changed and transformed into a system where the customer would be informed and empowered. This shift could be brought about by an e-Healthcare model, which is built around solving problems of the customer in the most optimized manner, where the customer would have the power of knowledge and demand better service, a transparent system which would be free of middlemen causing distortions, and price/quality mismatch. The technology innovations which have positioned itself as an attractive model in the online medical space is e-Pharmacy and this model is expected to create a massive demand in the coming future.

E-pharmacy is very lucrative as it provides efficient delivery, simple handling, a simple ordering process, quick service with a one-click, and also expert doctor searching facilities.

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