

A Mini Project Report on
Easy-cure: online doctor consultation

T.E. - I.T Engineering

Submitted By

Madhur Dukhande 20104014

Aryan Amin 20104071

Mayur Jain 20104024

Under The Guidance Of

Geetanjali Kalme



DEPARTMENT OF INFORMATION TECHNOLOGY

A.P. SHAH INSTITUTE OF TECHNOLOGY

G.B. Road, Kasarvadavali, Thane (W), Mumbai-400615

UNIVERSITY OF MUMBAI

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CERTIFICATE

This to certify that the Mini Project report on Online Doctor Consultation has been submitted by Madhur Dukhande(20104014), Aryan Amin(20104071) and Mayur Jain(20104024) who are a Bonafede students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfilment of the requirement for the degree in **Information Technology**, during the academic year **2022-23** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

Prof. Geetanjali Kalme
Guide

Dr. Kiran Deshpande
Head Department of Information Technology

Dr. Uttam D. Kolekar
Principal

External Examiner(s)

- 1.
- 2.

Place: A.P. Shah Institute of Technology, Thane

Date:

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Abstract

The Internet has been a steady source of medical data previously; it has just as of late been utilized for online private patient-doctor consultations. As of late, the market has seen a surge in applications providing healthcare services on the go.

An online consultation has secured a foothold in the market and individuals are opening up to the likelihood of substituting a visit to a physical facility with an online option.

This study reports a review of the literature on online medical consultation from various databases as well as various surveys and reports published.

As per published work/reports/surveys, the various factors which led to a sudden surge in the online medical consultation are the convenience, shift in disease patterns, cost-effective, privacy and second opinion.

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Chapter 1

Introduction

Easy-cure is the term utilized as a part of this paper to allude to web-based remote patient-specialist (consumer-provider) medicinal discussions. With the approach of broadband, numerous people have swung to online web-portals to get an online consultation. Utilization of this technological innovation has numerous advantages for both the doctor as well as the patient; including cost savings, comfort, accessibility, and enhanced privacy and communication. This idea is for patients with a variety of medical needs originating from different areas of a country or several nations. Patients may pick or be assigned to any specialist/general duty doctor who is accessible on the web. They are not limited to a particular care provider either by past learning or by geographical closeness. The aim of this review article is to explore the possible reasons behind the beginning of a new era of consultation, which is online medical consultation. It examines features and themes evident in the literature and in a range of currently operating platforms providing online medical consultation.

Problem Identified:

Due to lockdown people stay at home. If someone gets ill, they had to stay inside home. Doctors come at specific period of time at clinic/hospital and patients used to wait until they come.

▪ Solution Proposed:

By online consultation, user can ask their health problems whenever they want. In case of emergency, user can contact doctor at that time and does not need to go hospital

1.1 Purpose

The purpose of Easy-Cure website is to create an interface between Doctors and Patients. Though online consultation has a somewhat ambiguous definition, the concept is based on using technology to improve the quality of healthcare, and the advances have allowed both patients and medical professionals to gain access to a variety of resources make healthcare more efficient and cost effective. Easy-Cure empowers patients to take an active role in their treatment, allowing them to gain a deeper understanding of their conditions and how to effectively manage them.

1.2 Problem Statement

Nowadays user don't have a proper application for online doctor consultation or e-healthcare and make it available to help the people. So using this application users can reach the doctors easily through online mode and explain the problem or disease they facing and get the solution to get cured.

1.3 Objective

- To provide a user-friendly, comfortable interface between the patient and doctor which we have achieved using HTML and CSS.
- To provide priorities to patients' reference by using the desired language.
- To give more comfort to patients.
- To prevent illness due to patients in crowded areas.
- To reduce paperwork and time.
- To develop a user-friendly website that can be accessible anytime and anywhere.

1.4 Scope

- It is used in remote places.
- User will get a 24 X 7 service.
- User will be able to check the availability of doctors whenever they want.
- It is used to reduced paperwork
- Used to check the patients' previous reports.

Chapter 2

Literature Review

YEAR	AUTHOR	TITLE	TECHNOLOGY STACK	OUTCOMES	DRAWBACKS
2015	Mrs. Kathleen Gray	Online Medical Consultation	Database:Inspec	It is highly cost-effective for patients who need regular doctor visits and works well in case of emergencies.	The majority of papers provided an evaluation of remote consultation use for a particular medical practice but not for a large group.
2018	Mr. Arun Singh	Online Medical Assistant	Database: pub-Med	One of the advantages is that you do not have to wait in a clinic for the doctors.Instead you can submit the information and symptoms at any time.	If there is a failure to get communicate with the regular doctor,it is quite hard to get another doctor evaluation of one's medical issue.

Chapter 3

Proposed System

To make a truly Online Doctor System, system to have meet with online doctors, all manual process has been automated through this system. Patient have to fill online form by which id and password created and send to their email and upon accepting data, automatic login to patient panel. Through this panel, patients can select the doctors and have appointment with them on their time from their own place. Patients will get all their reports and medicine prescriptions in their inbox by notification indication just after appointment session. There is no need of cash and a secure payment gateway has been used to pay the required fees using their account.

3.1 Features and Functionality

- **Safe and Secure:** All the information will be encrypted and no third person can access it.
- **User-friendly:** We have made app better and user friendly so patients and doctors will not face any issue.
- **Detailed Information:** Information about doctors and their specializations which will help patients for selecting doctor easily.

Chapter 4

Requirement Analysis

Functional requirements

- System must be able to verify and validate information.
- The system must encrypt the password of the user to provide security.
- Username and password will be used for login after user registration is confirmed.

Hardware requirements

- **RAM**

The application requires a device with a minimum of 512MB RAM while running.

- **Processor speed**

The application requires a device with a minimum processor speed of 1GHz while running.

Software requirements

- **Operating system**

The application must run on Windows Operating System.

Chapter 5

Project Design

5 a. Use Case Diagram

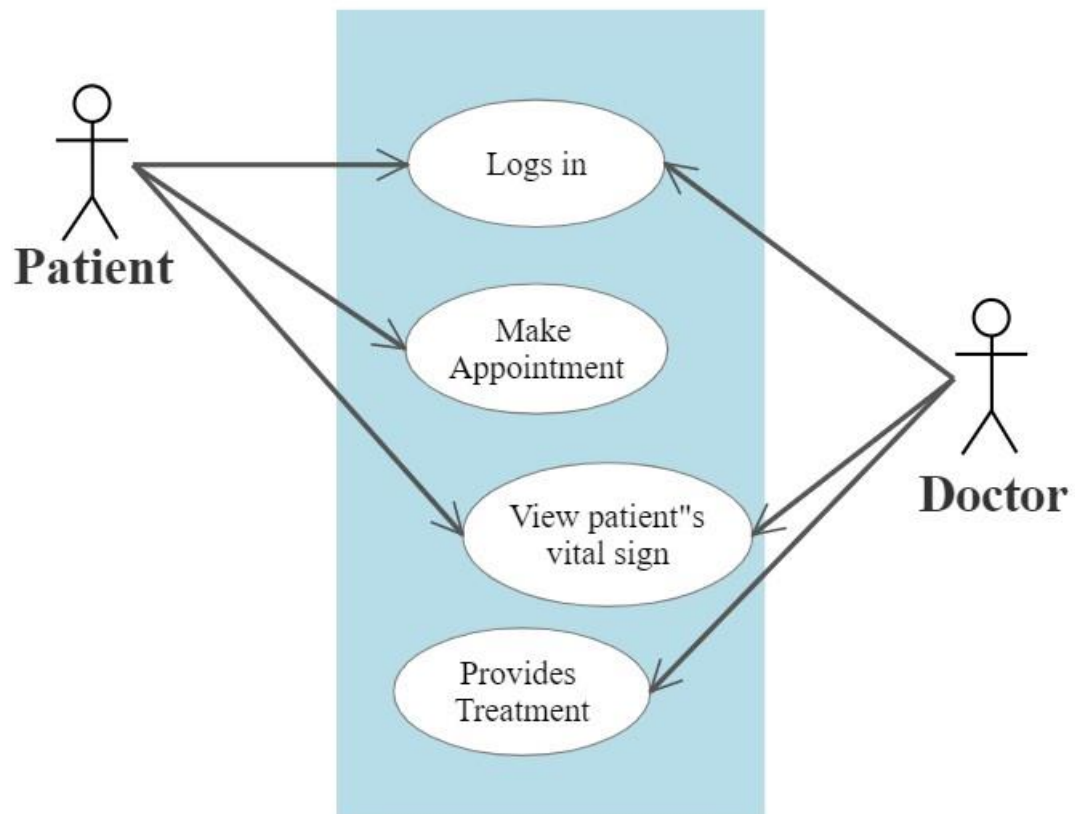


Fig 5.1: use case diagram

5 b. DFD

The DFD helps represent the system. For Online medical consultation, DFD shows that the system has only one entity which is the user. The process includes looking for the necessary department for the medical consultation.

5 b.1. 0 Level Diagram:

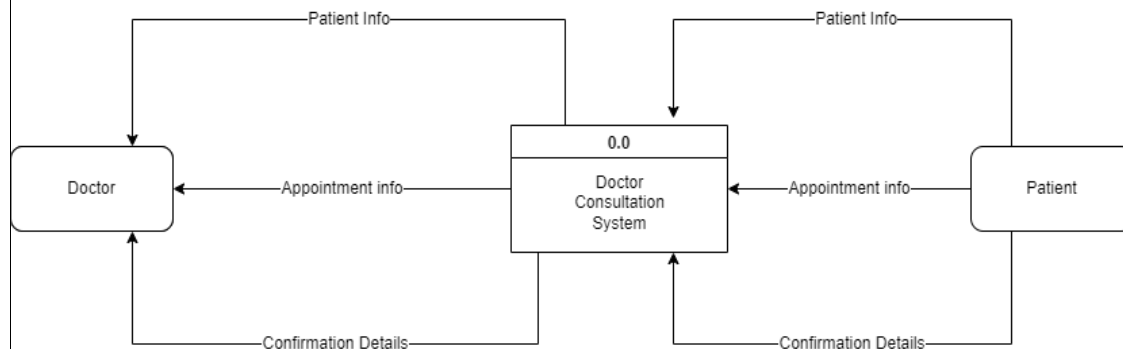


Fig 5.2: DFD diagram(level 0)

5 b.2. 1st Level Diagram:

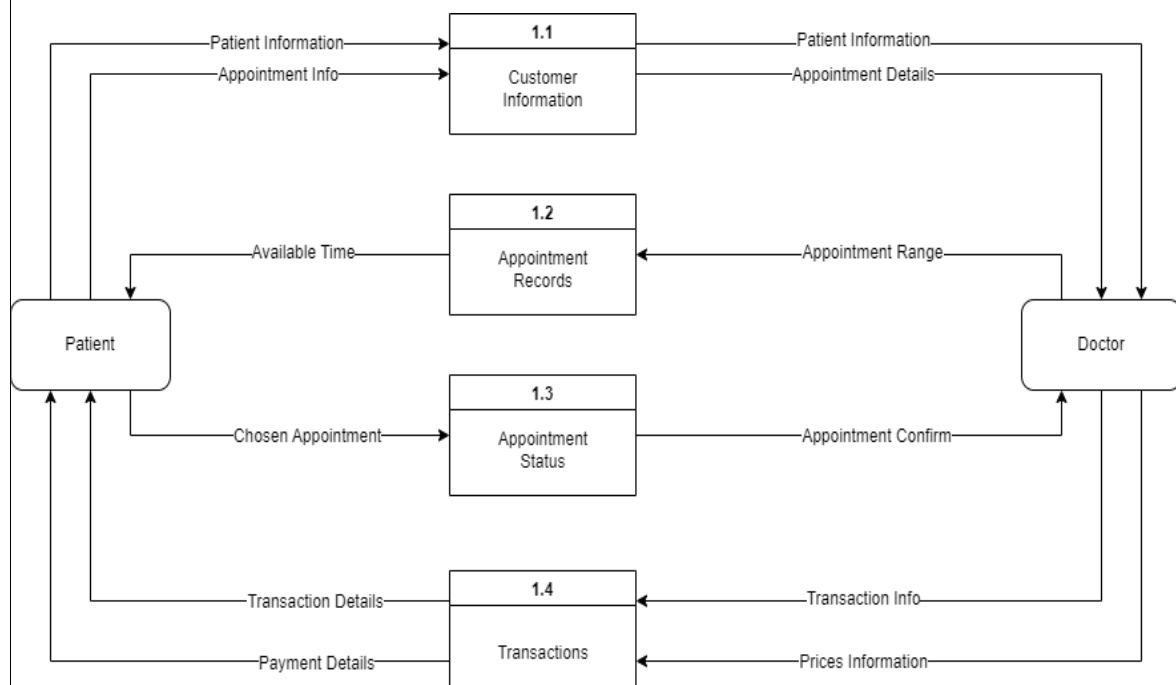


Fig 5.3: DFD diagram(level 1)

5 b.1. 2nd Level Diagram:

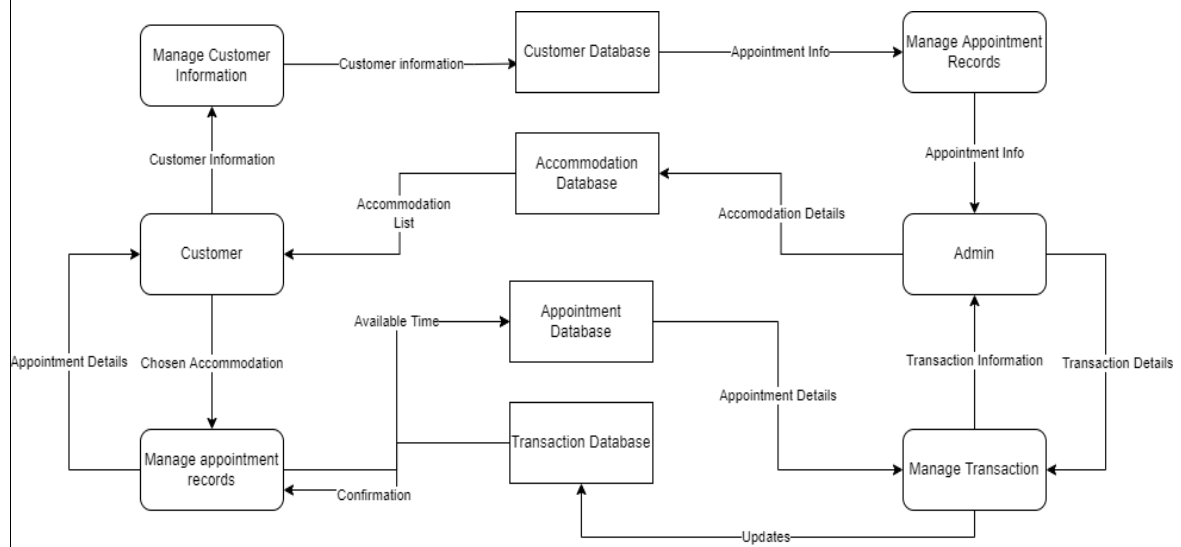


Fig 5.4: DFD diagram(level 2)

5 c. System Architecture

The system architecture diagram is a visual representation of the system architecture. It shows the connections between the various components of the system and indicates what functions each component performs. The general system representation shows the major functions of the system and the relationships between the various system components.

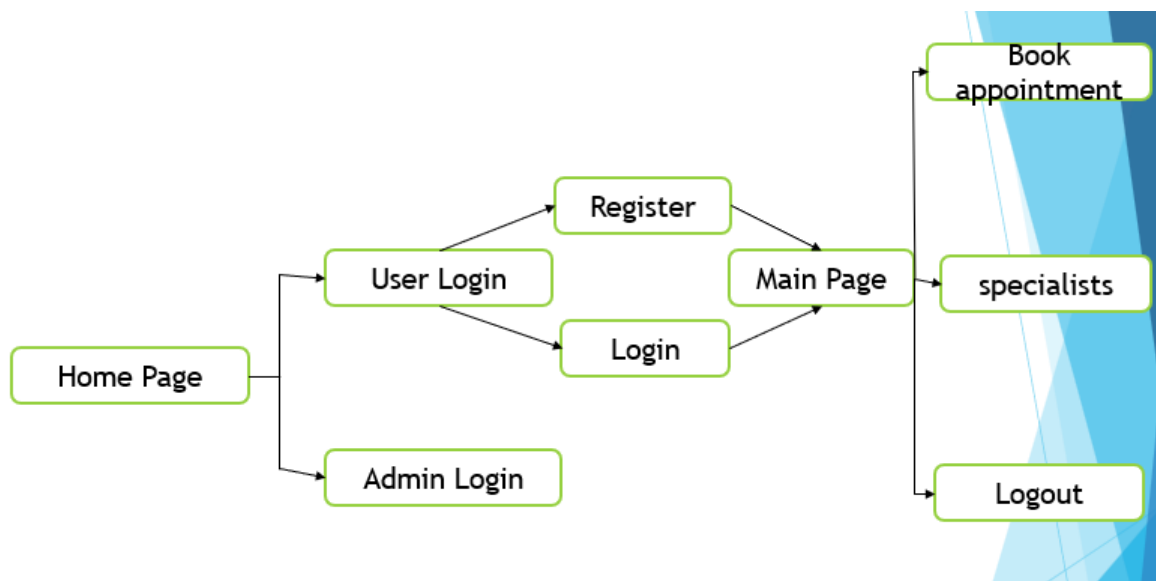


Fig5.5 system architecture diagram

Chapter 6

Technical Specification :

Development: VS Code

VS Code also known as Visual Studio Code is a source code editor made by Microsoft for Windows, Linux, MacOS. It has various features such as Debugging, Syntax highlighting, extension, intelligent code completion.

Frontend: Html, CSS, JavaScript, React

As a web developer, the three main languages we use to build websites are HTML, CSS, and JavaScript. JavaScript is the programming language, we use HTML to structure the site, and we use CSS to design and layout the web page. These days, CSS has become more than just a design language, though. You can actually implement animations and smooth transitions with just CSS.

OS : Windows

Windows is a graphical operating system developed by Microsoft. It allows users to view and store files, run the software, play games, watch videos, and provides a way to connect to the internet. It was released for both home computing and professional works.

Backend: PHP, MySQL

With PHP, you can connect to and manipulate databases. MySQL is the most popular database system used with PHP. PHP combined with MySQL are cross-platform (you can develop in Windows and serve on a Unix platform) .The data in a MySQL database are stored in tables. A table is a collection of related data, and it consists of columns and rows. Databases are useful for storing information categorically.

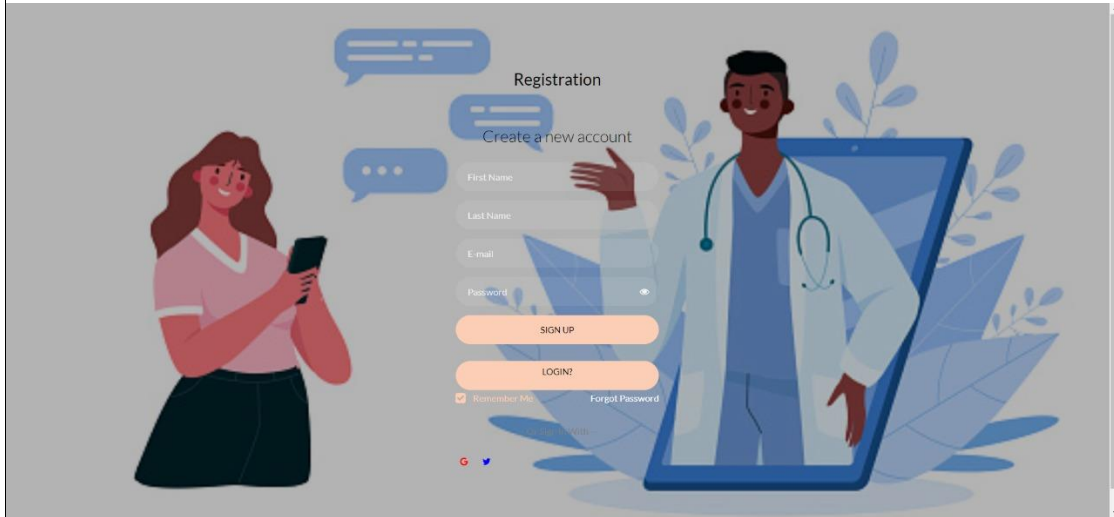
Chapter 7

Project Scheduling Template:

Sr. No	Group Member	Time duration	Work to be done
<u>1</u>	Madhur Dukhande	1 st week of July	Login and registration page with database connection
	Mayur Jain	2 nd week of July	Testing login and registration page to find the possible bugs
	Aryan Amin		
<u>2</u>	Madhur Dukhande <hr/> Mayur Jain <hr/> Aryan Amin	3 rd week of July	Implementing Home page and description page and testing the code to find possible bugs
<u>3</u>	Madhur Dukhande	1 st week of August	Implementing video chat through meet and provides navigation through map and also testing the code to find bugs if any
	Mayur Jain		
	Aryan Amin		

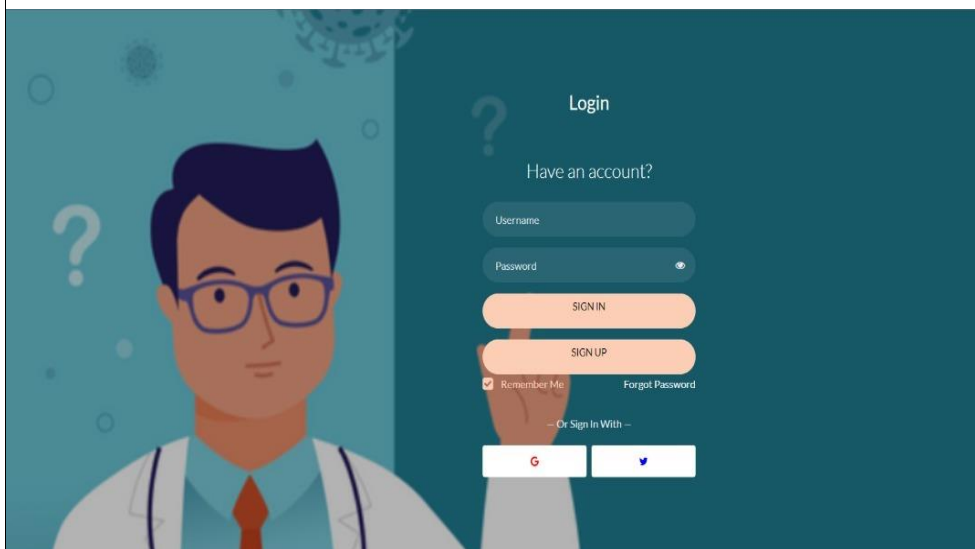
Chapter 8

Implementation:



The illustration shows a registration form titled "Registration" with the subtitle "Create a new account". On the left, a woman with long brown hair, wearing a pink shirt and black skirt, is holding a smartphone. On the right, a doctor in a white lab coat with a stethoscope is standing next to a large blue tablet. The form fields include "First Name", "Last Name", "E-mail", and "Password" (with an eye icon for visibility). Below these are two orange buttons: "SIGN UP" and "LOGIN?". There is a checkbox for "Remember Me" and a link for "Forgot Password". At the bottom, there is a "Sign in with" section featuring Google and Twitter logos.

Fig 8.1: Registration form



The illustration shows a login form titled "Login" with the subtitle "Have an account?". On the left, a man with dark hair and glasses, wearing a white lab coat over a blue shirt and red tie, is looking at the form. On the right, the form fields include "Username" and "Password" (with an eye icon for visibility). Below these are two orange buttons: "SIGN IN" and "SIGN UP". There is a checkbox for "Remember Me" and a link for "Forgot Password". At the bottom, there is a "Or Sign In With" section featuring Google and Twitter logos.

Fig 8.2: Login form

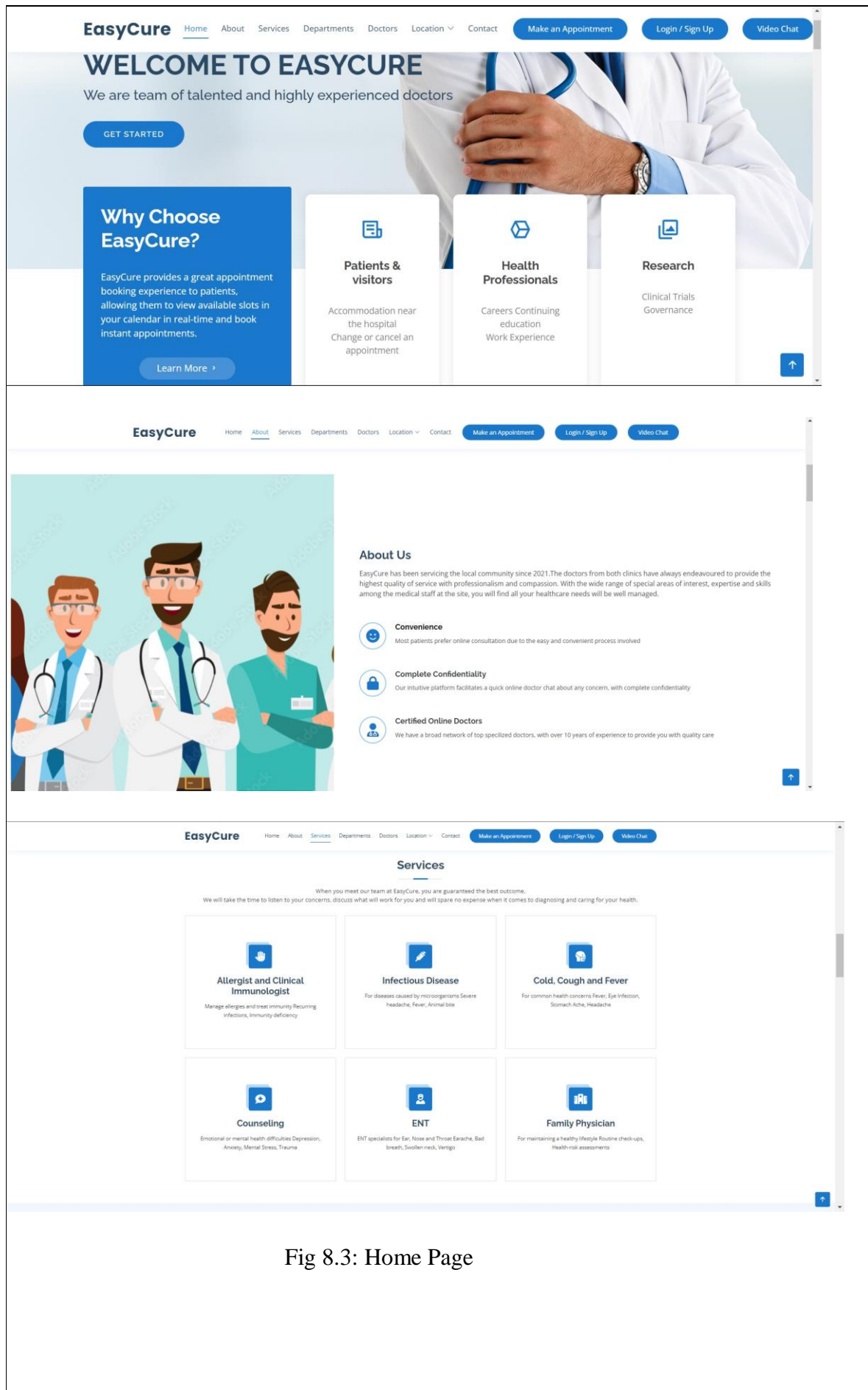







Fig 8.3: Home Page


Doctors



Dr. Vivek Jawali
Chief Medical Officer/ Cardiology





Dr. Vivek Jawali is an Interventional cardiologist with experience of more than 6000 cases and 15 years of experience.









Dr. Hitesh Pant
Pediatrician





Dr. Hitesh Pant is one of the top most pediatrician in United States. She has an experience of 8 years.









Dr. Vivek Garg
Ophthalmologists

Dr. Vivek Garg is a well known ophthalmologists who holds an experience of more than 9 years.



Dr. Mukul Varma
Neurosurgeon

Dr. Mukul Varma is one of the best nuerology doctor in the United States. She has an experience of 4 years.











Fig 8.4: Doctors information

Contact



Location:
Andheri West, IN 400000

Email:
aryanarshi209@gmail.com

Call:
+91 8369292919

Send Message

Fig 8.5: Contact Page

Chapter 9

Results & Challenges

The application can be used for any online doctor consultation. It is easy to use, since it uses the GUI provided in the user dialog. User friendly screens are provided. The application is easy to use and interactive making online consultation easy for patients. It has been thoroughly tested and implemented.

Challenges

- Compatibility with browsers like Mozilla Firefox, Internet explorer, Google Chrome etc.
- Using a layered approach in developing the application which would make the application maintainable.

The overall idea of doing this project is to get a real time experience. Learn modern technologies.

Chapter 10

Conclusions

The 'Online Medical Consultation is designed to provide a web-based application that would make consultations and emergency situation easier for the patient. The graphical user interface provides an easy and convenient way to search for products where a user can Search for a doctor and can get information regarding his medical condition. The doctor can view the medical records of the patient. They can also view the reviews. Its drag and drop feature would make it easy to use.

References

[1] Kathleen Gray ; Online Medical Consultation Department of Computing and Information Systems, Health and Biomedical Informatics Centre. The University of Melbourne ialmahdi@student.unimelb.edu.au

[2] Arun Singh ; Online Medical Consultation Department of Community Medicine, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India; https://www.researchgate.net/publication/323973550_Online_medical_consultation_a_review