"DocAD"

Project Report

Submitted in partial fulfillment of the requirements for the degree of **Master of Computer Application**

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DECLARATION

I Ayush Tripathi & Madhuri Singh students of **MCA**, **session 2019-20 Galgotias University, Gr Noida**, hereby declare that the work presented in this Project entitled **DocAd** is the outcome of my own work, is bona fide and correct to the best of my knowledge and this work has been carried out taking care of Ethics. The work presented does not infringe any patented work and has not been submitted to any other University or anywhere else for the award of any degree or any professional diploma.

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ACKNOWLEDGEMENT

It is not possible to prepare a project report without the assistance & encouragement of other people. This one is certainly no exception.

On the very outset of this report, we would like to extend my sincere & heartfelt obligation towards all the personages who helped us in this endeavor. Without their active guidance, help, cooperation & encouragement, we would not have made headway in this project.

We are ineffably indebted to **Mr. N. Thallaiarasu** for conscientious guidance and encouragement to accomplish this project. We extend our gratitude to **Galgotias University, Gr Noida** for giving us this opportunity.

At last but not least gratitude goes to all my friends who directly or indirectly helped me to complete this project report.

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Introduction

1.1 Objective

This application is developed to provide best treatment services to the patients. We have developed DocAd to provide a search platform where a patient scan finds their specification doctor to their choices. This system also helps to promote responsible and management treatment so that patients gets satisfaction.

DocAd is healthcare platform that connects patients with hundreds of healthcare around the Greater Noida and helps make people better healthcare decision. The idea came about when realized there was a need to centre healthcare on the people it was serving: the patients. DocAd is the healthcare start up to provide the full array of information and services a patient would require. Now a patient can search for a doctor, channel the doctor, find a pharmacist, purchase medicine, find diagnostic lab tests and even read health related articles by leading specialist doctors.

But DocAd first started with doctors. “We realized that in order to improve patient’s healthcare experience, we had to begin with the doctors. So, we took it on ourselves DocAd - a software product that was designed from the ground up for doctors.” It helps simplify scheduling, calendaring as well as billing and inventory management for doctors. This allows doctors to focus on what is important – their patients. “Today it is used by doctors across the globe to manage patients and their healthcare records every month.

The goal of this application is:

- To develop an easy to use web-based interface where patient’s scan finds their specification doctor to their choices.
- User can view the complete specification of the treatment.
- An admin can view the details of booked appointment patients.

1.2 What is DocAd?

DocAd Search is a patient focused, unbiased, independent medical website with over 100 doctor profiles from across Greater Noida. Patients can book confirmed appointments with doctors listed on DocAd website. This is a free service for both the patient and the doctor.

DocAd Instant - Book is the appointment booking system which allows patients to view real-time availability and book instant appointments with doctors & practices, using DocAd's website and Smartphone apps.

This guide's purpose is to help you understand DocAd systems a little better, how they can help your business, how to choose the one that's right for you and even how to get started. Today many organizations are conducting DocAd worldwide successfully and issue results online.

There are advantages and disadvantages in DocAd. The main advantages are:

Advantages for Patients:

- The physician or an assistant typing the prescription takes lesser time than writing the prescription with paper and pen. This also ensures minimal wait at the pharmacies. This allows the pharmacy, some time to acquire the drug in case of unavailability, before the patient reaches the pharmacy.
- E-prescriptions are not sent via internet or email id, but via secure, private networks. Patients can see their prescription on smart phones or personal computers.
- The treating physician can check the medicines under insurance cover for the given patient and hence prescribe cost effective medication for the patient.

Advantages for Physicians:

- It saves time. Lesser calls from pharmacies for illegible prescriptions, etc.
- Time saved in writing prescriptions can be devoted to patients.
- Easy access to patient's entire current and past drug history, which is helpful in changing prescriptions.
- Reminders from the electronic system can help the physician prevent mistakes in prescribing medicines with similar names.

Advantages for Pharmacies:

- Pharmacies can check the availability of the prescribed medicines and in case of unavailability send a request to the physician to change the prescription or refill the stock till the patient comes.
- E-Prescription Of controlled substances (EPCS) has significantly improved work flow, accuracy of prescriptions and co-ordination among pharmacists and doctors3.

Advantages for Hospitals:

- A study conducted in a public sector hospital concluded that patient information like name, age, gender, address was found in 100% of electronic prescriptions.

The disadvantages of the docAd are:

It will take time to get setup:

While it is relatively easy to get a book appointment and running, you'll still need at least 24 hours for setup. You might be eager to get things live but take the time to setup your system properly. Each business is different which means there are a ton of configuration options.

1.3 The Proposed System:

The DocAd is a web-based application. the main purpose of "DocAd" is to provide a convenient way to patients to book appointment as per the condition. The objectives of this project are to develop a system that automates the processes and operations of a treatment. we will make an easier task of searching doctors and booking appointment.

1.4 Definition of problem:

The hospital management faces a great challenge in the age of the information technology development. The traditional hospital management distribution channel faces a threat of the emerging IT environment. Throughout years the healthcare industry was dependent on the intermediaries, who enabled the interaction between the doctors and the patients. Nowadays, however, the doctors can reach the patient directly via internet having the geographical distance barriers and costs associated to them, disappeared. The internet age changed the complexity of the healthcare distribution, enabling the entry of the new virtual intermediaries characterized by a strong competitive advantage towards other players of the sector. The internet allows a wide

range of benefits for the hospital and the patients, making the information widely available, reducing the difficulties in purchasing, marketing and distribution, allowing the doctors and the patients to direct transact with each other. However, hospitals and healthcare still face the difficulties on how to capture the benefits in order to position themselves in the digital reality. The entry of the new healthcare intermediaries, known as the DocAd, introduced an innovative approach to the integration platform, collecting the doctors and integrating them into a one stop shopping place for the patients. The success of the platform depends however on the participation level of the patients. This raises the question of how to attract the various patients to join the platform.

Need

The Internet is here to stay, and many businesses have made their first leap to the Internet with a web site, and many are now moving forwards using the Internet, not only as an advertising and promotion platform, but as an active business platform.

Nowadays patients prefer online booking appointment system to search, browse and book appointment services in the comfort of their living room. So, the DocAd website agencies totally depend on online system. These systems assist in easy management of data, conduct online transactions and provide services to online users in efficient manner.

So DocAd play a key role in booking appointment due to following reasons:

1. Online 24/7 to receive appointment:

Many patients surf the Internet outside of business hours and they are more likely to make appointments on the spot that trying to remember to call back the next day. Statistics show that more and more bookings today are made during the evening at home online. The reasons for this are twofold. Firstly, many companies now monitor and control. Internet access in the workplace and secondly, nearly every home today has an internet connection and a pc or laptop.

If your normal business hours are 9 to 5 then you have no one to take bookings after 17:00, and this is when we now know most online bookings appointments occur.

A DocAd system allows you to receive bookings 24 hours a day, therefore, your booking service is always open.

2. Commission Free:

Whether you are paying for direct advertising, or paying a commission for bookings appointments through booking portals, in either case, you are paying a portion of your income to these sources. If you have an online DocAd system on your own website, you have then cut out the middleman. Another important point when using commissioned portals is that your business is promoting them as much as they are promoting you, and with the Internet, you might as well just focus on promoting your own business.

3. It's simply good patient's service:

When we speak about online bookings appointments here, we are not talking about a contact form. A contact form does not provide your patients with a clear view of your availability. A contact form does not allow your patients to book directly and pay and get confirmed automatically. A proper online booking appointment system must, at the least be able to perform these two tasks as they are core to providing good customer service.

4. Minimize your workload:

If you are not using an online booking appointment system today, then you may still be processing all your bookings manually. A good online booking system will handle all the aspects of the booking. It must, at a minimum, do the following:

- Automatically ensure that bookings can only be received when you have availability
- Get ALL the information required during the booking process so you don't have to waste time asking for more information.
- Send out an automated email to the booking party as a confirmation of the booking. Automatically update your availability when the booking has been processed. A good booking system will do all this.

Also make sure your booking appointment system doesn't just handle the online bookings, but handles email, phone and walk-in bookings as well.

5. All your patient's data in a structured system:

If you use a good online booking appointment system which also handles the walk-in, email and phone bookings, then you will have all your previous patient's data in a structured system. This is important today as it allows you to market yourself to your previous customers. This patients list is often one of your best-valued resources in a business, and you want this data both accessible and structured.

6. Clear and simple overview:

Your online booking system should have at least one screen where you can see your availability very quickly and clearly. This removes the need for the old paper book, and allows your reception staff to easily see whether you have availability or not.

Chapter 3

Feasibility Study

The feasibility study of any system is mainly intended to study and analyses the proposed system and to decide whether the system under consideration will be viable or not after implementation. That is, it determines the usability of the project after deployment. To come to result a set of queries is answered keeping the efficiency of the software and its impact on the domain for which it was developed. Its main emphasis is on the following three questions shown below as:

What are the user's requirements and how does a candidate system meet them?

What resources are available for the proposed systems? Is it worth solving the problem?

What is the likely impact of the proposed system on the organization? I.e. how does the proposed system fit within the organization?

Thus, since the feasibility study may lead to commitment of large resources, it becomes necessary that it should be conducted competently and no fundamental errors of judgment are made. Different types of feasibility study and the way we performed on our project "DocAd".

3.1 Technical Feasibility:

The technically feasibility study basically centers on alternatives for hardware, software and design approach to determine the functional aspects of system. In technical feasibility, we study all technical issues regarding the proposed system. It is mainly concerned with the specifications of the equipment's and the software, which successfully satisfies the end-user's requirement.

Evaluating the technical feasibility is the trickiest part of a feasibility study. This is because, at this point in time, not too many detailed designs of the system, making it difficult to access issues like performance, costs on (on account of the kind of technology to be deployed) etc. A number of issues have to be considered while doing a technical analysis.

3.1.1 Understand the different technologies involved in the proposed system:

Before commencing the project, we have to be very clear about what are the technologies that are to be required for the development of the new system.

3.1.2 Find out whether the organization currently possesses the required technologies:

Is the required technology available with the organization?

If so, is the capacity sufficient?

The technical issue usually raised during the feasibility stage of the investigation includes the following:

- Does the necessary technology exist to do what is suggested?
- Do the proposed equipments have the technical capacity to hold the data required to use the new system?
- Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
- Can the system be upgraded if developed?

3.2 Economical Feasibility:

Economic feasibility attempts to weights the costs of developing and implementing a new system, against the benefits that would accrue from having the new system in place. This feasibility study gives the top management the economic justification for the new system.

A simple economic analysis which gives the actual comparison of costs and benefits are much more meaningful in this case. In addition, this provides to be a useful point of reference to compare actual costs as the project progresses. There could include increased client satisfaction, improvement in product quality better decision-making timeliness of information, expediting activities, improved accuracy of operations, better documentation and record keeping, faster retrieval of information, better employee morale.

The computerized system takes care of the present existing system's data flow and procedures completely and should generate all the reports of the manual system besides a host of other management reports.

Are there sufficient benefits in creating the system to make the acceptable? Or are the costs of not creating the system so great that it is advisable to undertaken the project.

This will include three major costs as described below:

- Cost of Hardware and Software.
- Cost of Software to be acquired to build and run the product is a one-time cost.
- Buying a back and database is the major part of hardware and Software cost.

3.3 Operational Feasibility:

Proposed projects are beneficial only if they can be turned into information systems that will meet the organizations operating requirements. Simply stated, this test of feasibility asks if the system will work when it is developed and installed. Are there major barriers to implementation? Here are questions that will help test the operational feasibility of a project. Is there sufficient support for the project from management from users? If the current system is well liked and used to the extent that persons will not be able to see reasons for change, there may be resistance.

Are the current business methods acceptable to the user? If they are not, Users may welcome a change that will bring about a more operational and useful systems. Has the user been involved in the planning and development of the project? Early involvement reduces the chances of resistance to the system and in general and increases the likelihood of successful project.

Since the proposed system was to help reduce the hardships encountered. In the existing manual system, the new system was considered to be operational feasible.

3.3.1 User-friendly:

Customer will use the forms for their various transactions i.e. for adding new routes, viewing the routes details. Also, the Customer wants the reports to view the various transactions based on the constraints. These forms and reports are generated as user-friendly to the Client.

3.3.2 Reliability:

The package wills pick-up current transactions on line. Regarding the old transactions, User will enter them in to the system.

3.3.3 Security:

The web server and database server should be protected from hacking, virus etc.

3.3.4 Maintainability:

The system called the wheels uses the 2-tier architecture. The 1st tier is the GUI, which is said to be frontend and the 2nd tier is the database, which uses MySQL, which is the backend. The frontend can be run on different systems (patient's). The database will be running at the server. Users access these forms by using the user-ids and the passwords.

Chapter 4

Software Development Methodology

The establishment and use of sound engineering principles in order to obtain economically developed software that is reliable and works efficiently on real machines is called software engineering.

Software engineering is the discipline whose aim is:

• Production of quality software

• Software that is delivered on time

• Cost within the budget

• Satisfies all requirements.

Software process is the way in which we produce the software. Apart from hiring smart, knowledgeable engineers and buying the latest development tools, effective software development process is also needed, so that engineers can systematically use the best technical and managerial practices to successfully complete their projects. A software life cycle is the series of identifiable stages that a software product undergoes during its lifetime.

A **software lifecycle model** is a descriptive and diagrammatic representation of the software life cycle. A life cycle model represents all the activities required to make a software product transit through its lifecycle phases. It also captures the order in which these activities are to be taken.

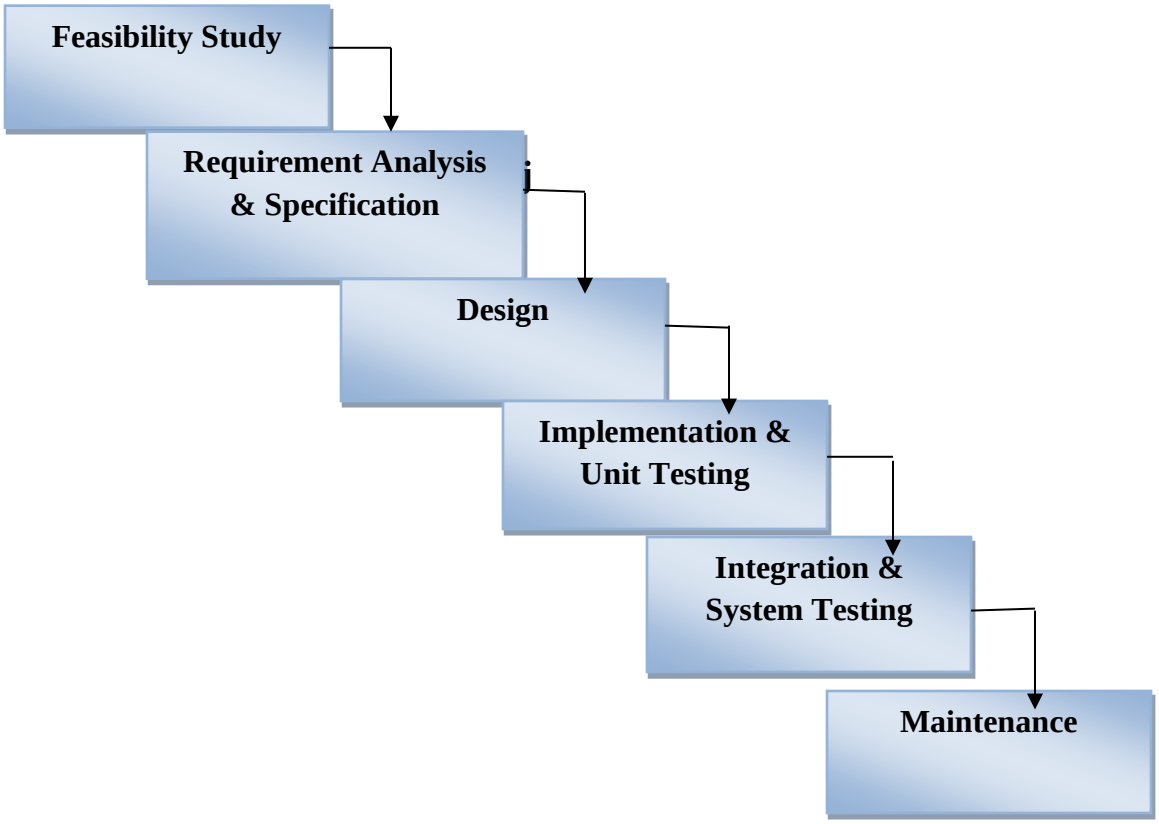
Life Cycle Models

There are various life cycle models to improve the software processes.

- Waterfall Model
- Prototype Model
- Iterative Enhancement Model
- Evolutionary Model
- Spiral Model

In this project, **Waterfall Model** is followed.

Waterfall Model



This model contains 6 phases:

- **Feasibility study:**

The feasibility study activity involves the analysis of the problem and collection of the relevant information relating to the product. The main aim of the feasibility study is to determine whether it would be financially and technically feasible to develop the product.

- **Requirement analysis and specification:**

The goal of this phase is to understand the exact requirements of the customer and to document them properly (SRS)

- **Design:**

The goal of this phase is to transform the requirement specification into a structure that is suitable for implementation in some programming language.

- **Implementation and unit testing:**

During this phase the design is implemented. Initially small modules are tested in isolation from rest of the software product.

- **Integration and system testing:**

In this all the modules are integrated and then tested altogether.

- **Operation and maintenance:**

Release of software inaugurates the operation and life cycle phase of the operation.

The phases always occur in this order and do not overlap.

Chapter 5

Software Requirement Specification

5.1 Introduction:

The following subsections of the SRS document provide an overview of the entire SRS.

5.1.1 Purpose of the Project:

The main objective of this project, DocAd is to provide a fully customized web application. This system is an automated system so that the functional working of it is effective and time saving. In this modern era time is the most precious thing, so in context of time the new system will be effective to do a group of tasks in easy and secure manner.

To book any appointment in manual system is very time-consuming process. Now the purpose of this system is to overcome the shortfall faced in the previous systems already working in the area. The website will have to be secure, and properly working on LAN. It should be speedy with good interface. It should support multiple platforms at least those used by people commonly.

5.1.2 Scope of the Project:

This system will help in making the tedious task of booking appointments a lot easier. The proposed system takes advantage of the advances made in IT to provide large-scale qualitative and quantitative improvements. The system envisaged, involves application software development, setting-up of hardware at a Central Booking Centre (CBC) and Designated Booking Centers (DBC). In general, scope of this project is very broad in terms of other manually taking exams.

5.2 The Overall Description:

In DocAd System patients can register themselves and book the appointments according to the diseases (cancer, HIV, AIDS). They can also cancel their booking in case of any issue but only 70% of the total amount is refundable.

5.2.1 Product Perspective:

i. User Interfaces

The application will have a user friendly and menu-based interface. Following screens

Will be providing:

- A login screen for entering the username, password will be provided. Access to different screens will be based upon the user.
    - There is a screen for displaying information regarding all booking appointment details.
    - There is a screen for selecting diseases and displaying the doctors of that particular diseases.
    - There is a screen for booking appointment for the patients.
    - There is a screen for displaying the confirmation message of booking of patients after final booking.

ii. Hardware Interfaces:

- Keyboard & Mouse.

iii. Software Interfaces:

- Any windows-based operating system.
- MySQL as the DBMS- for database.
- IDE (NetBeans) for developing code

iv. Memory Constraints:

At least 500 MB RAM and 20 MB space on hard disk will be required for running the application.

5.2.2 Project Features:

Some basic facilities provided by the system are listed below. They will be discussed further in greater details:

- The system allows registered users to take the full advantage of offers.
- It allows registered users to take a view of gallery.
- It sends confirmation message on final booking to the registered user through mail.
- Users can cancel their booking in case of any issue but only 70% of the total amount can be refundable.
- It shows description of the booking related information on Admin Panel.
- It generates a PDF file of user's booking details on his system.
- It deals with monitoring the information.

- Editing, adding and updating of records is improved which results in proper resource management of DocAd data.
- Integration of all records of booking.

5.2.3 User Characteristics:

The users of this system are precisely customers (Registered Users and Guest Users). Registered users need to know how to access internet and make their profiles with the system. Guest users need to know how to register themselves on the site to enjoy the unlimited services related to booking, overall users of this system do not need to have a very high technical know-how. This system is user-friendly.

5.2.4 Design and Implementation Constraints:

- The system will not contain any audio component to enable the visually impaired to use the product.
- The medium of instruction will be English only
- The internet connection used by the organization should have a speed of 1 Gbps or higher.

5.2.5 Assumptions and Dependencies

All the software and hardware products mentioned are assumed to be available with the developers. To fulfil server space constraints any freely available format converters could be used.

5.3.1 Basic Features:

- Number of Packages:

There are three packages for each place of every theme. One can differentiate between packages on the basis of number of days, number of night stays, number of tourist spots and of course the amount.

- Confirmation Message:

After final booking, customers will receive a confirmation message on their respective E-mail id by which they are registered.

- Admin Dashboard:

i. All the booking related information will be visible on Admin Dashboard.

ii. Admin Dashboard also shows the status of booking:

a. Red Color for “Cancel Booking”

b. Blue Color for “Successful Booking”

5.3.2 Advanced Features:

If booking has cancelled then only 70% of the total amount is refundable. And the tourist will receive a confirmation message of cancel booking on their E-mail.

5.4 Requirements:

5.4.1 User interface:

The external user interface forms are designed using standard tools available in Net beans.

5.4.2 Hardware Requirements:

Hardware requirements for the system to work are:

- CPU: Any CPU which can be in the form of external (CPU for PC) or internal (for laptops).
- Monitor: Any monitor which is capable of displaying the signals sent by the computer.
- Keyboard: A standard QWERTY keyboard for data entering.
- Mouse: Any standard mouse.
- Intel P4 1.5GHz or above
- 512MB RAM
- 80GB HDD minimum

5.4.3 Software Requirements:

Software requirements for the system to work are:

- Microsoft Windows (95, 98, ME, NT, XP, Vista, 7, 8and 10) - The software will work on any of the Microsoft Windows OS.
- Frontend - HTML, CSS, JavaScript & jQuery
- Backend- Servlet, JSP
- Database- MySQL
- IDE- Net beans

5.4.4 Communications Requirements:

Communications Requirements for the system to work are:

- Web Browsers: Internet Explorer, Mozilla Firefox, Safari, Opera, Chrome, UC Browser, Torch, Tor
- SMTP Server
- LAN Connection

5.5 Non-Functional Requirements:

5.5.1 Performance Requirements:

- Should be capable of giving access to concurrent users without degrading the system performance and accept answer.
- Sessions of each candidate should be synchronized with server and duration calculations should be done according to server time.

5.5.2 Safety Requirements:

- The system should be designed in as a secured system applying the safety measures.
- Special exceptional handling mechanism should be in place to avoid system errors.
- In case of scenarios where data integrity can be compromised, measures should be taken to ensure that all changes are made before system is shut down.

5.5.3 Security Requirements:

- Only registered student can able to rest.
- The test can be made available on specific dates.
- The test can be made available at specific times.
- Student can appear once for a particular test.
- The system should be synchronized with server time and should be capable of disable answer sheet automatically after time out.

5.5.4 Software Quality Attributes:

- **Availability:**

  The system should be available 24/7. It should always provide real time information.
- **Reliability:**

  The system should be robust enough to have a high degree of fault tolerance. The system should not crash and identify the invalid input and produce a suitable error message. It

should be able to recover from hardware from hardware failures, power failures and other natural catastrophes and rollback the databases to their most recent valid state.

- **Usability:**

  The system should provide an easy-to-use graphical interface similar so that the users do not have to learn a new style of interaction. The web interface should be intuitive and easily navigable. Users should be able to understand the menu and options provided by the system.

  Any notification or error messages generated should be clear, succinct, polite and free of jargon.

- **Integrity :**

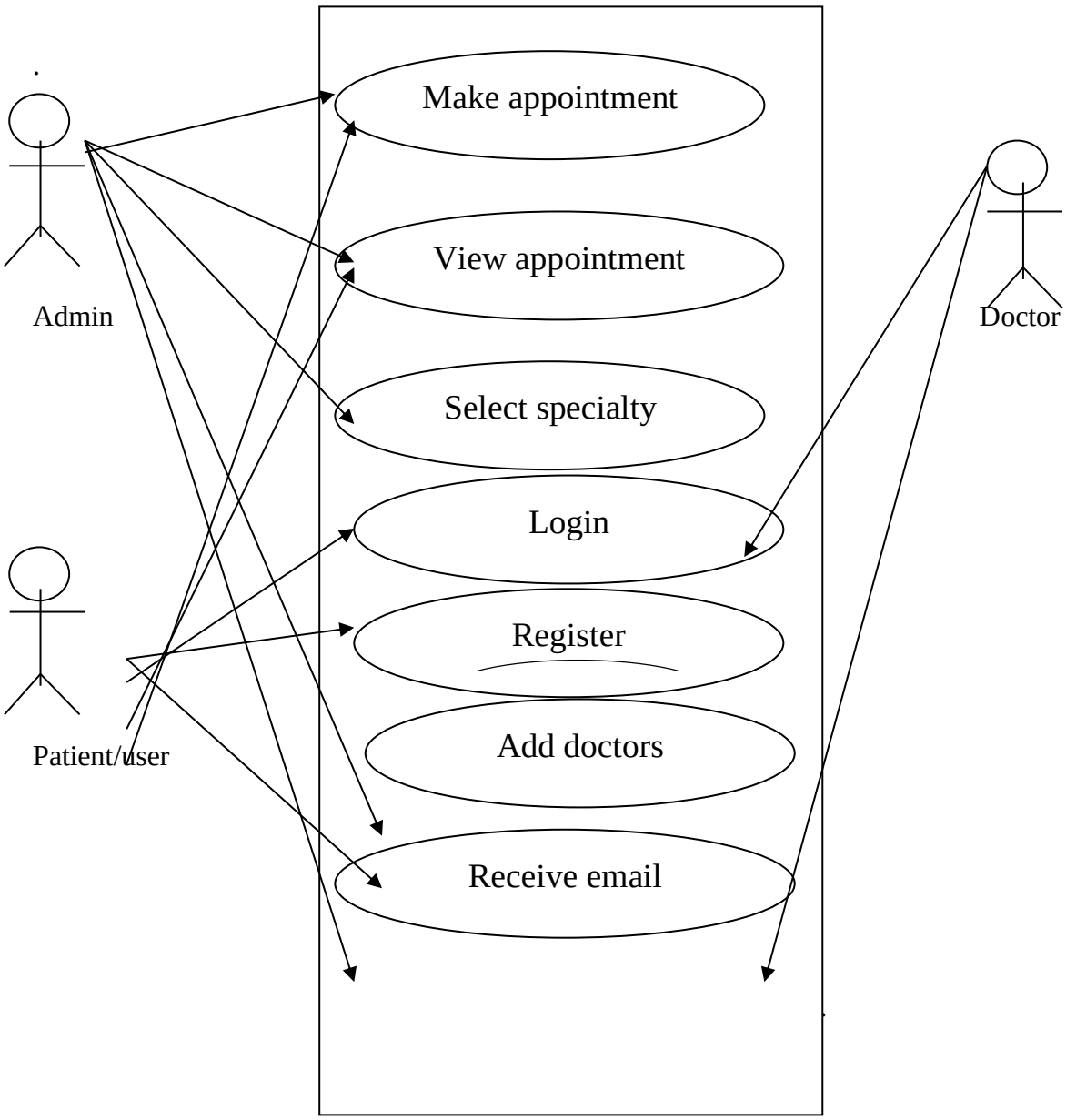
  Only system administrator has rights to change the system parameters, such as policy etc. The system should be secure and must use encryption to protect the databases. Users need to be authenticated before having access to any personal data.

UML Diagram

6.1 Use Case Diagram:

A use case diagram is a graphic depiction of the interactions among the elements of a system.

A use case is a methodology used in system analysis to identify, clarify, and organize system requirements

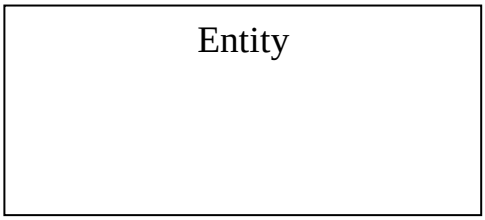


6.2 Entity-Relationship Diagram:

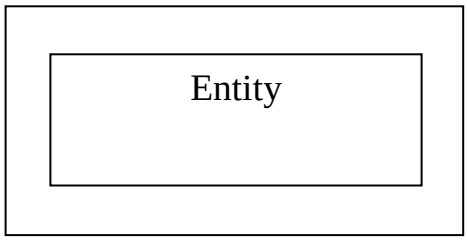
An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagrams illustrate the logical structure of databases.

An ER diagram is a means of visualizing how the information a system produces is related. There are five main components of an ERD:

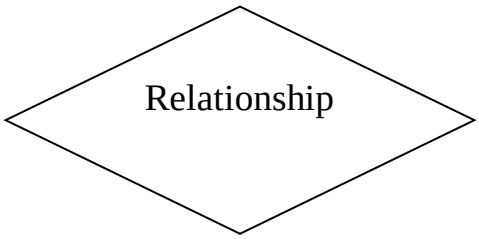
- **Entities:** which are represented by rectangles. An entity is an object or concept about which you want to store information. A weak entity is an entity that must defined by a foreign key relationship with another entity as it cannot be uniquely identified by its own attributes alone.



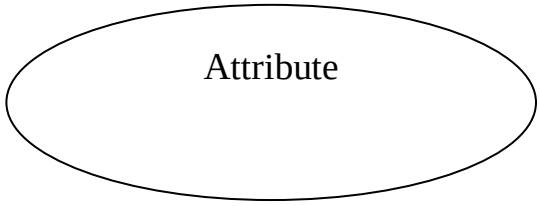
A weak entity is an entity that must defined by a foreign key relationship with another entity as it cannot be uniquely identified by its own attributes alone.



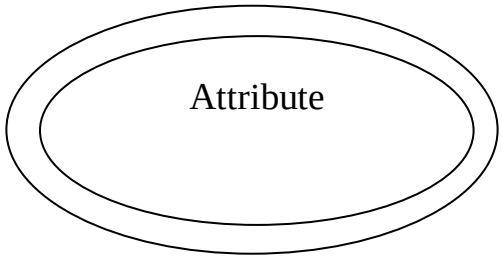
- **Action,** which are represented by diamond shapes, show how two entities share information in the database.



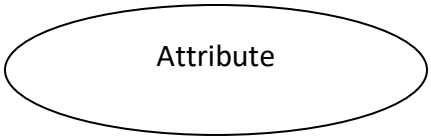
- **Attributes**, which are represented by ovals. A key attribute is the unique, distinguishing characteristic of the entity. For example, an employee's social security number might be the employee's key attribute.



- A **multivalued attribute** can have more than one value. For example, an employee entity can have multiple skill values.



- A **derived attribute** is based on another attribute. For example, an employee's monthly salary is based on the employee's annual salary.



- **Connecting lines**, solid lines that connect attributes to show the relationships of entities in the diagram.

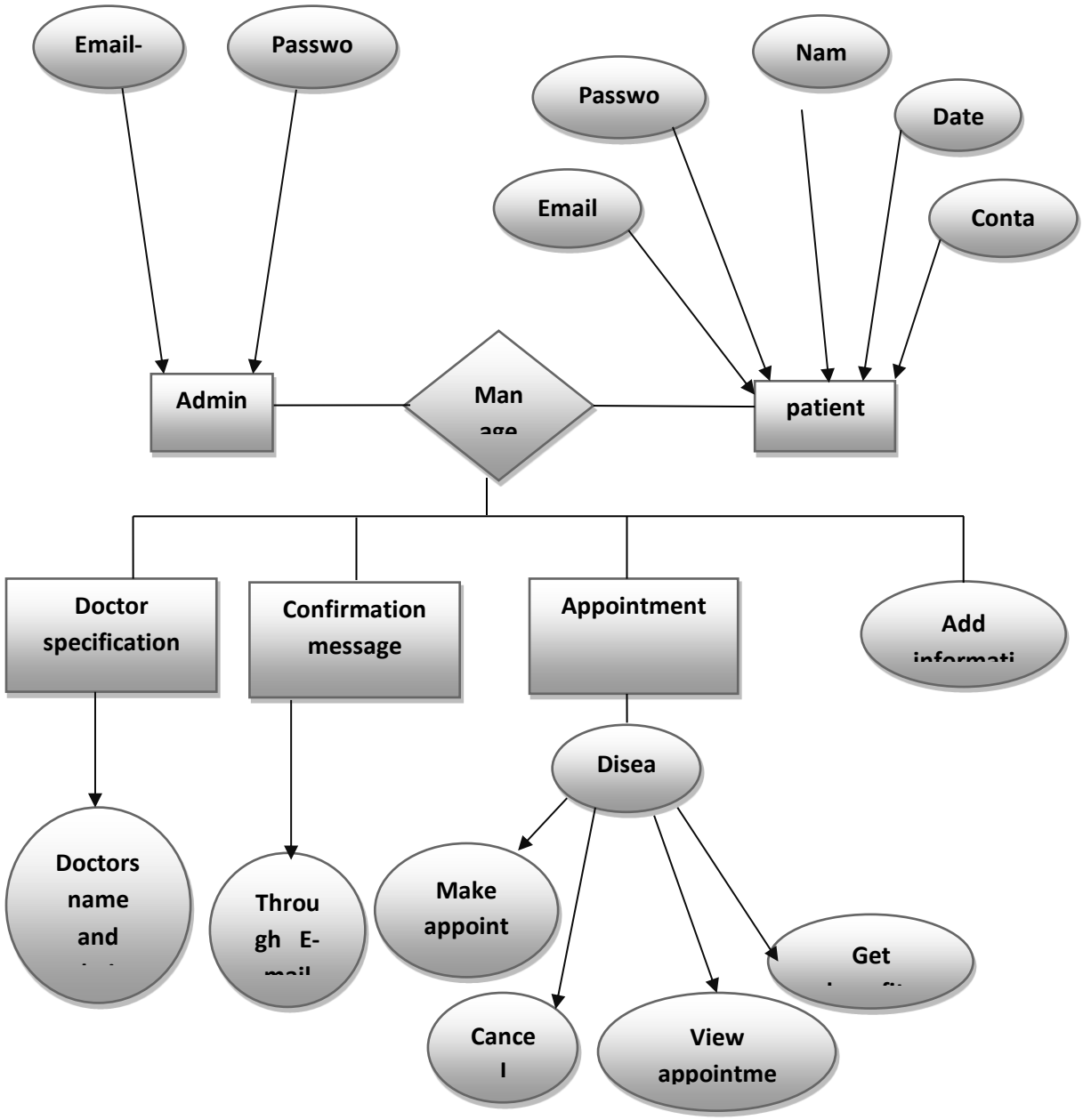


Fig 6.2 ER Diagram for DocAd

6.2.1 ER Diagram of Admin:

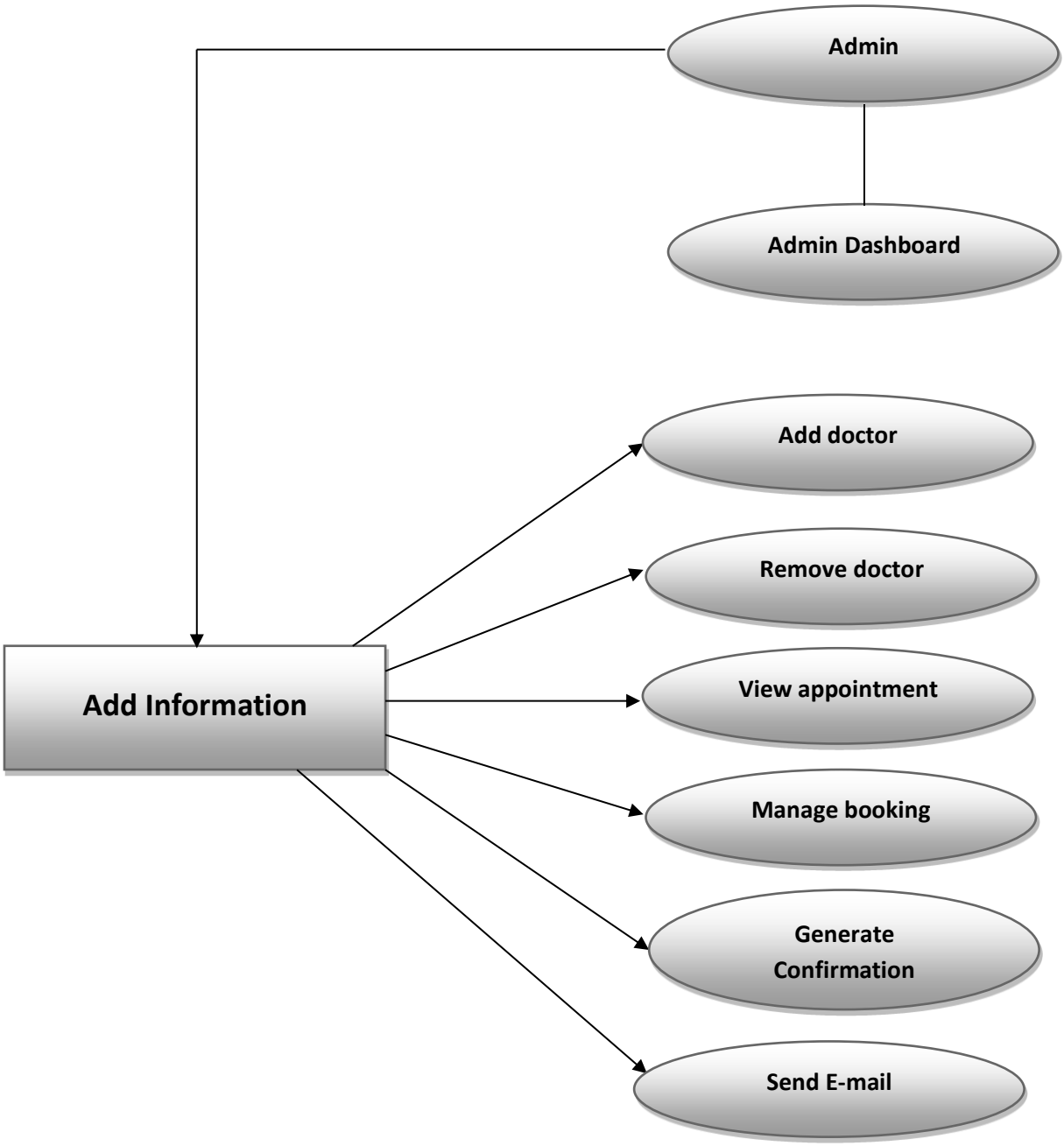


Fig 6.2.1 ER Diagram of Admin for DocAd

6.2.2 ER Diagram of User:

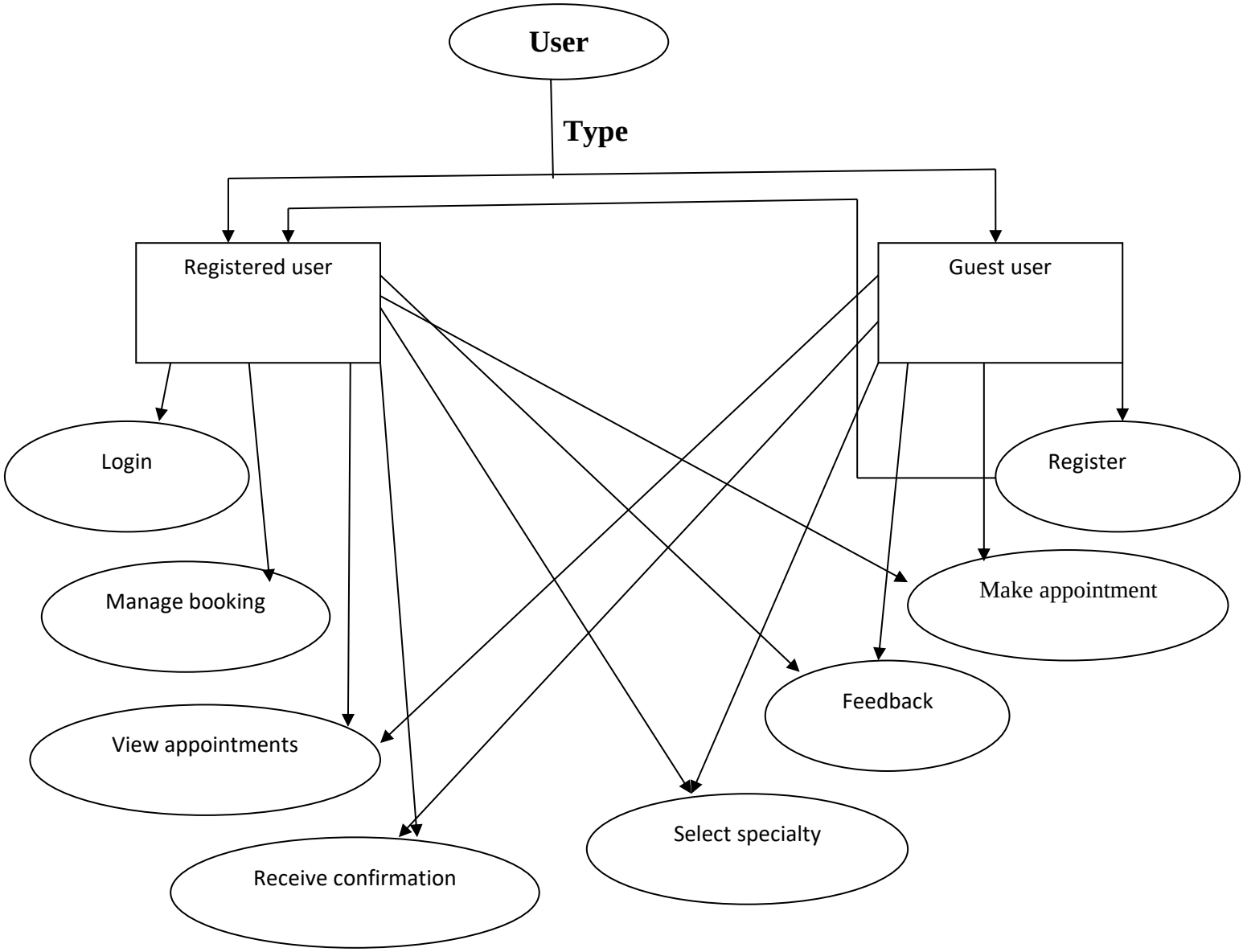
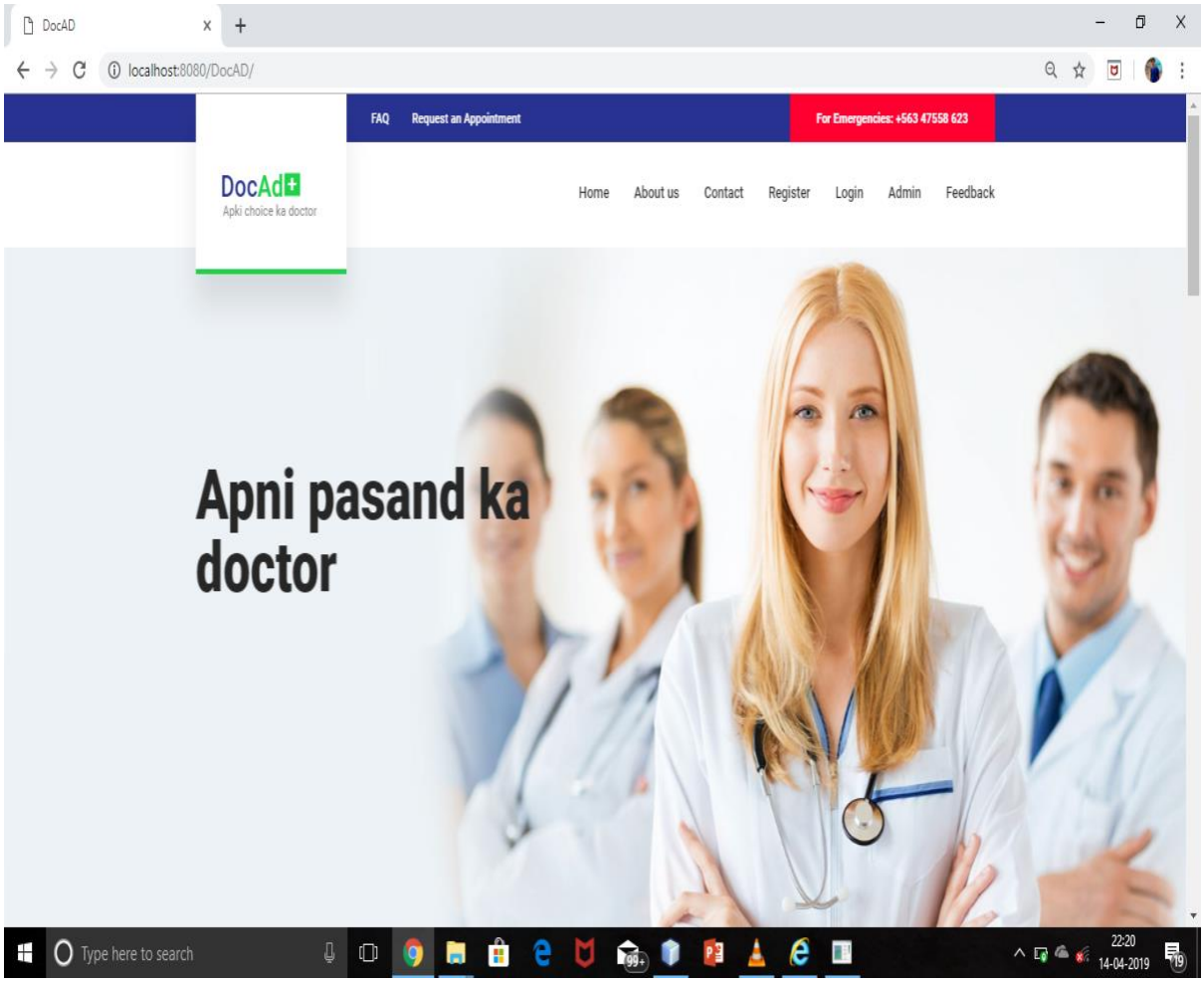


Fig 6.2.1 ER Diagram of user for DocAd

Screenshots

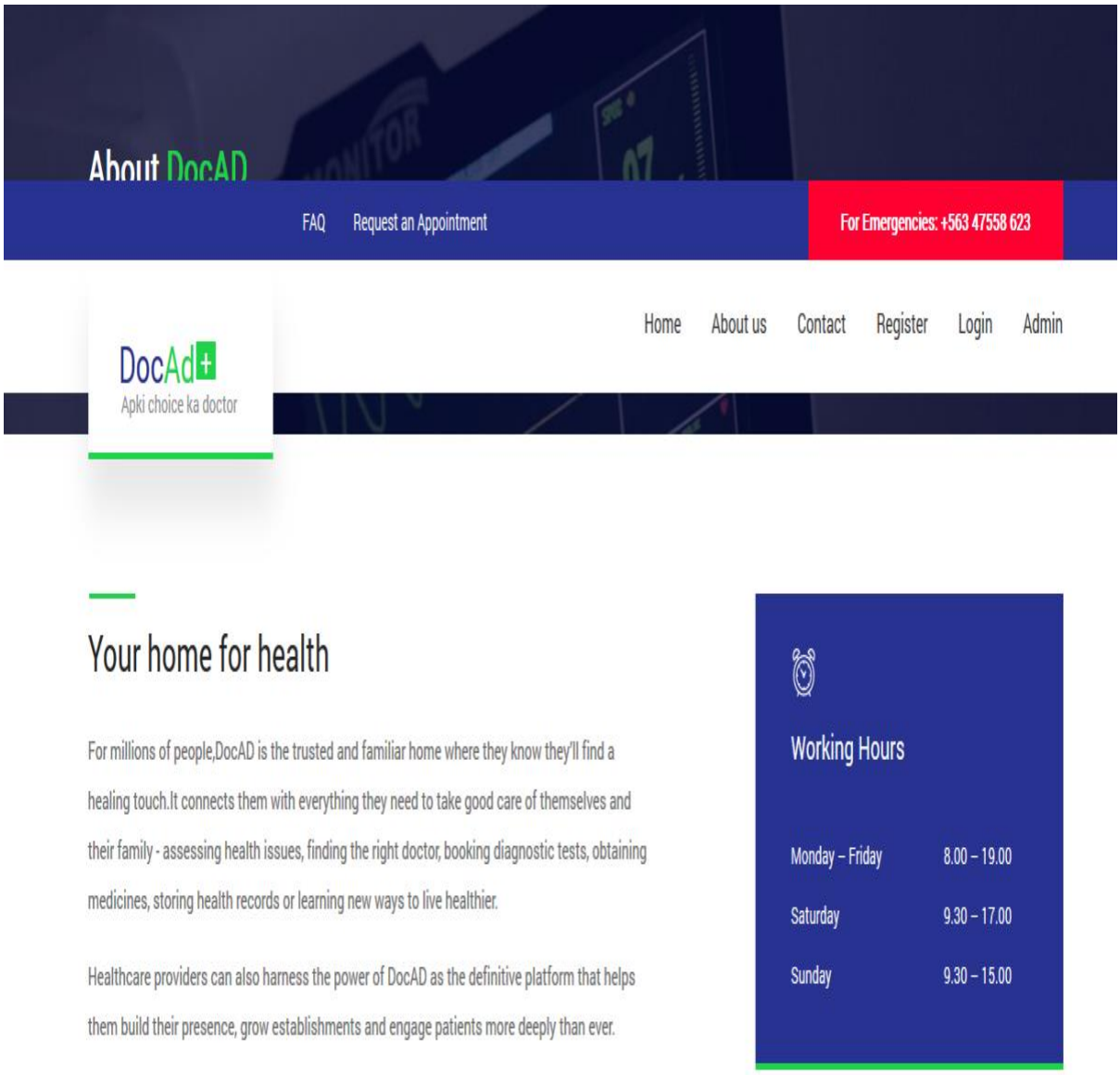
7.1 Home Screen:

This is the first screen in this project, anyone who wants to enter into this project/application. He/she must have pass through this screen as this is the home screen of DocAd.



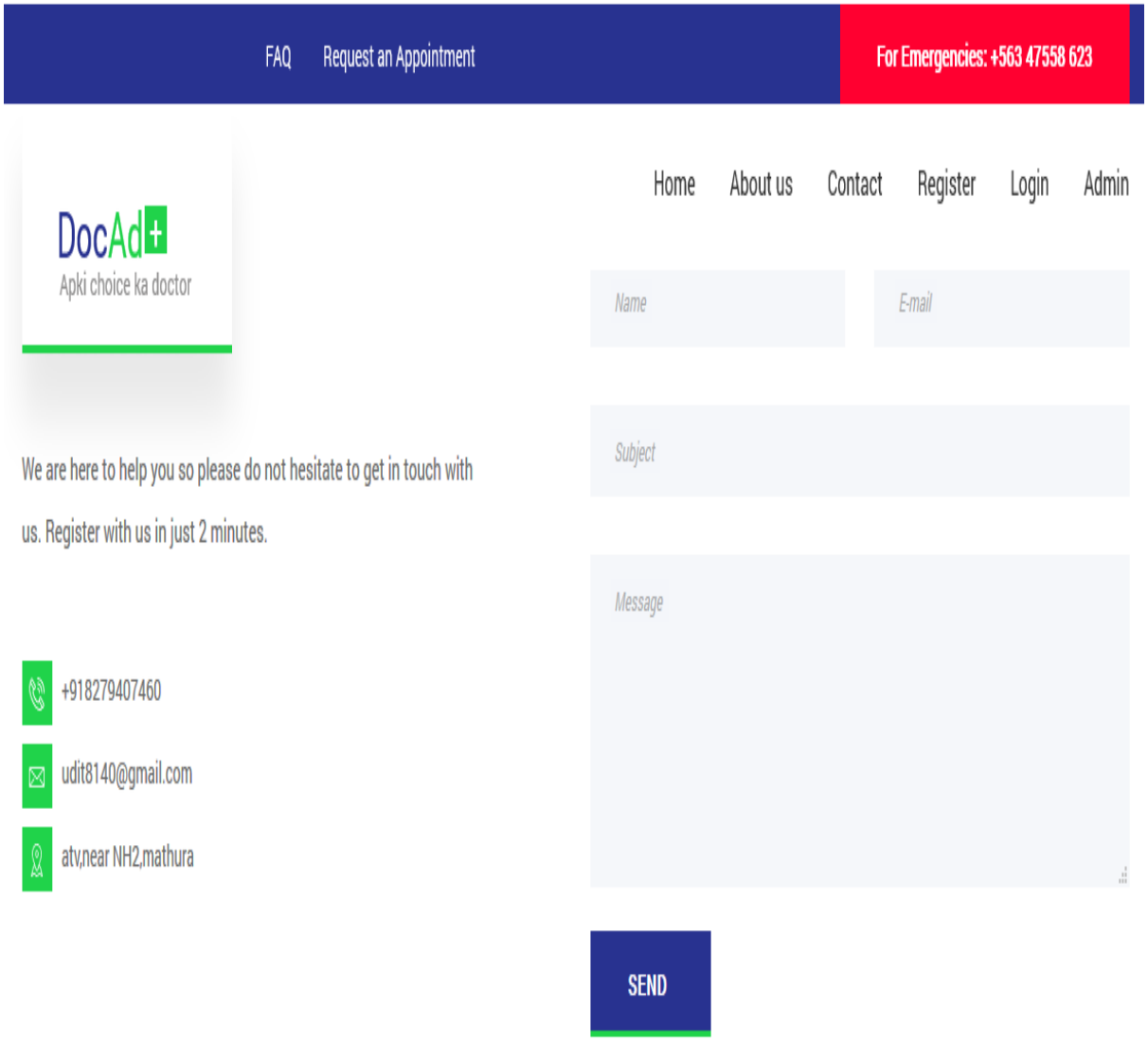
7.2 About Us:

This screen will show what we actually do, our experiences, our motto and all the information related to us.



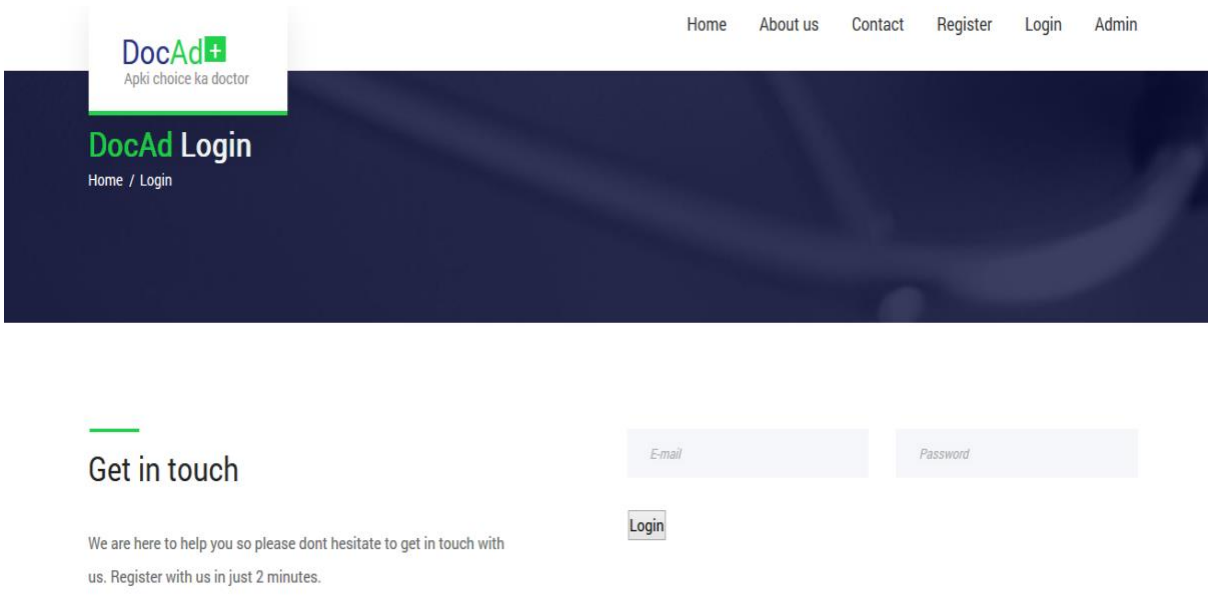
7.4 Contact Us:

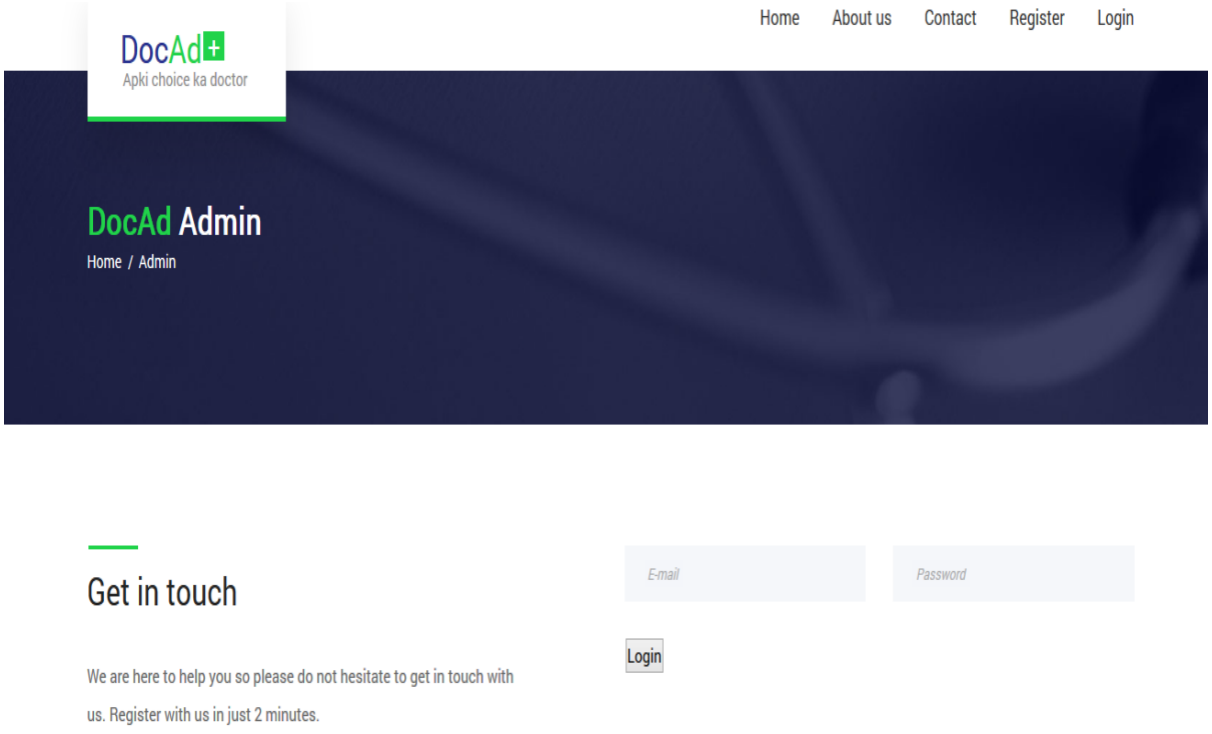
This form allows users or visitors to contact the customer care agents of the system in case of any query.



7.5 Login Form:

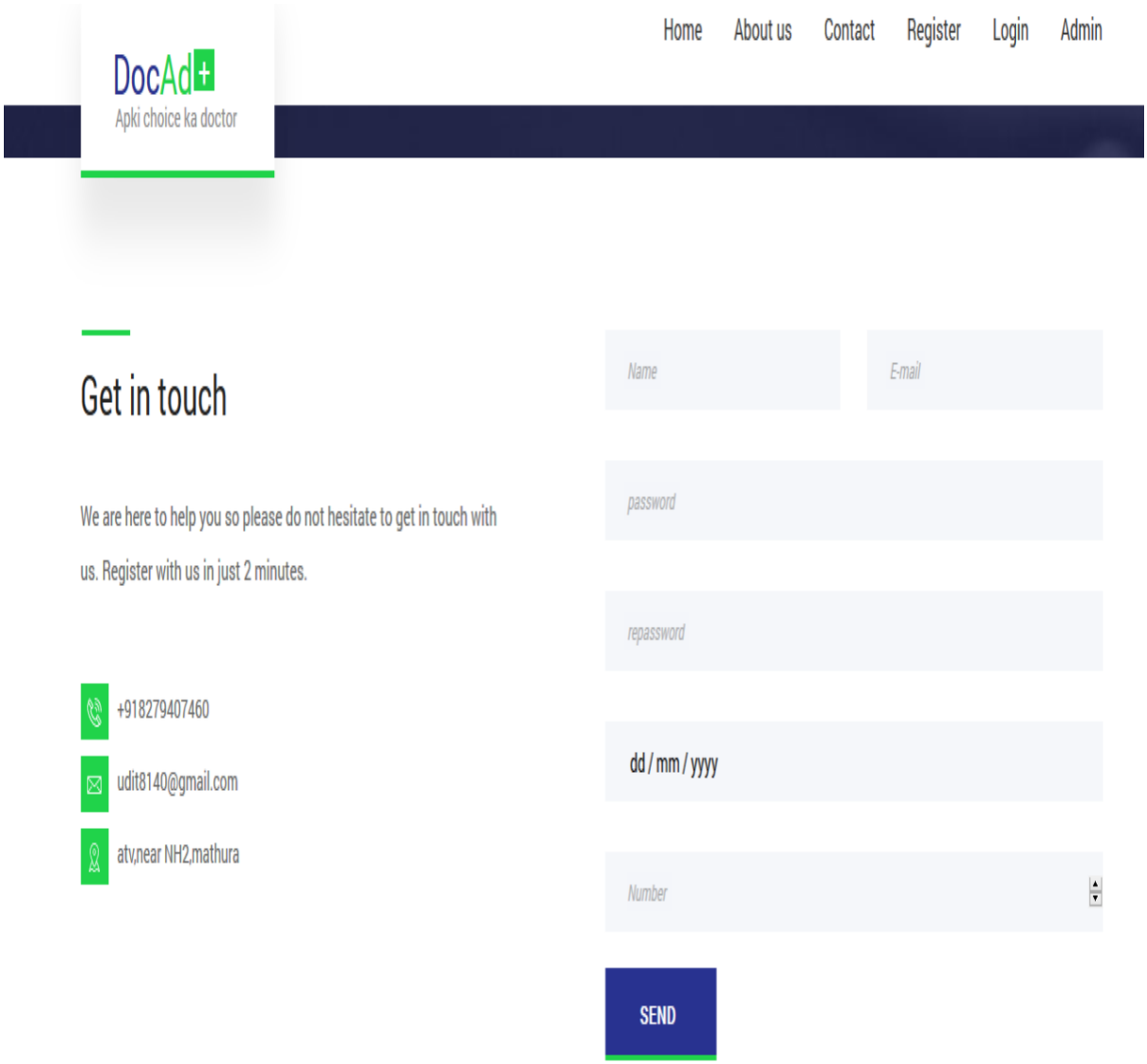
This is the form in this project where a user & admin who wants to enter into this project application. He/she must have pass through this module, in other word we can say that this is authentication module because the user authentication with his/her. And After login into system user redirect into the screen which is home screen.





7.6 Registration Form:

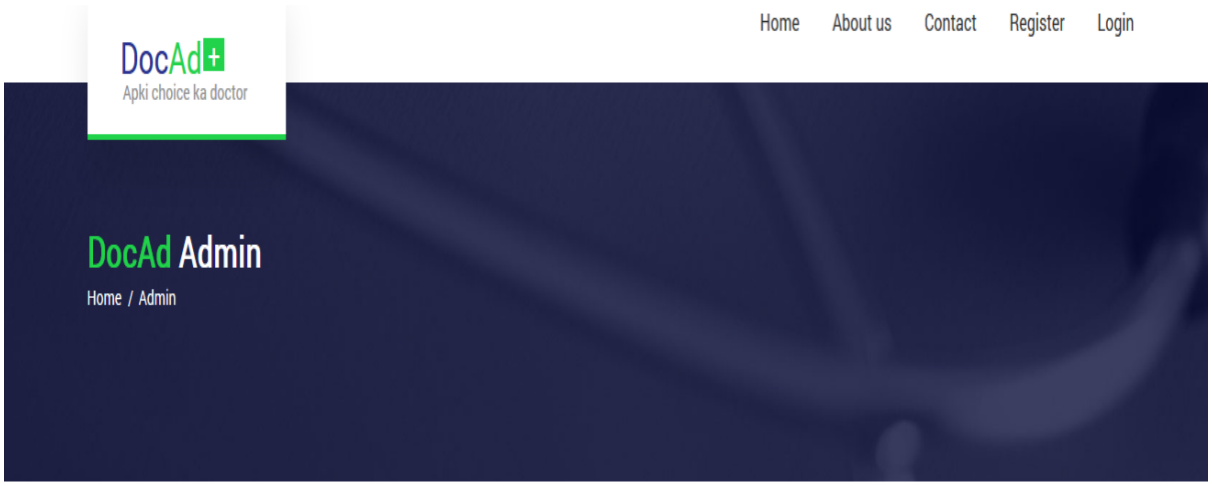
In this module user can get his/her whole information like his name, address, email, phone no., password detail. Our user table will register the student. User's email and password are used as login credentials.

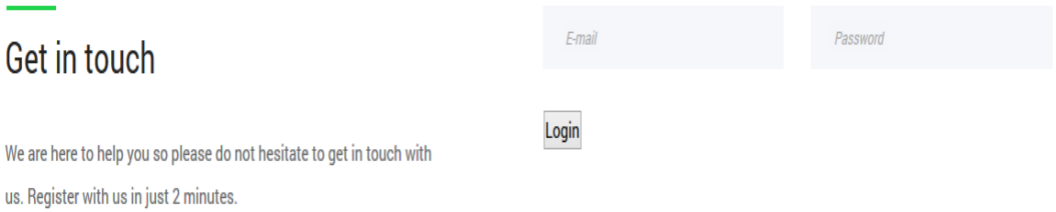

DocAd+
Apki choice ka doctor
Home
About us
Contact
Register
Login
Admin
Get in touch
We are here to help you so please do not hesitate to get in touch with us. Register with us in just 2 minutes.
+918279407460
udit8140@gmail.com
atv,near NH2,mathura
Name
E-mail
password
repassword
dd / mm / yyyy
Number
SEND

7.8 Admin Login Form:

Admin is the activity or process of organizing an institution or organization. Here the responsibility of admin is to manage whole system. Admin has all administrative rights; he/she can change any setting, information in the system.

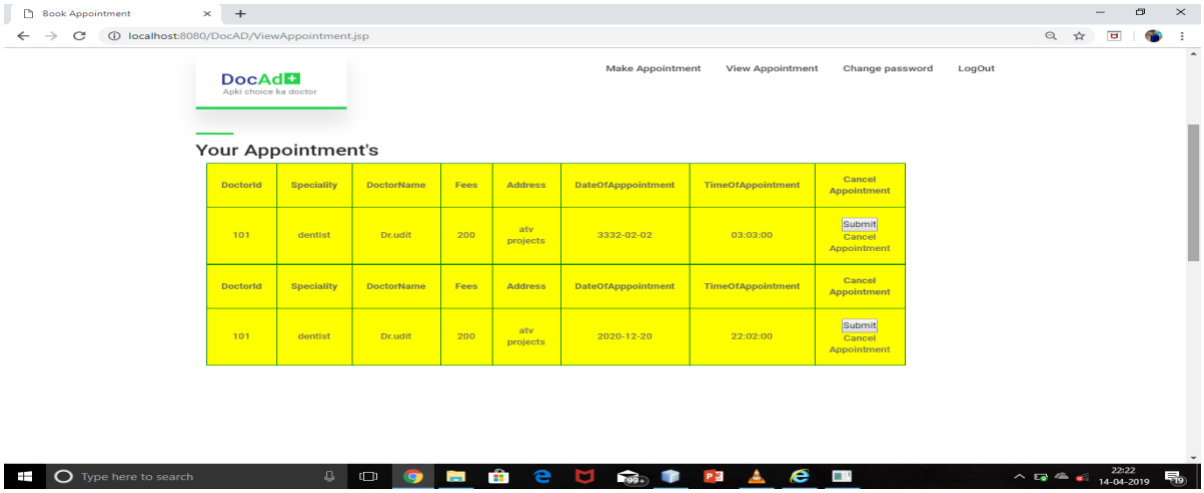
This is the form in this project by which admin can login himself to see all the booking appointment related details. Admin must have to pass through this module, in other words we can say that this is authentication module of admin and only admin can login in this. And After login into system admin redirect into the screen which is Admin Dashboard.





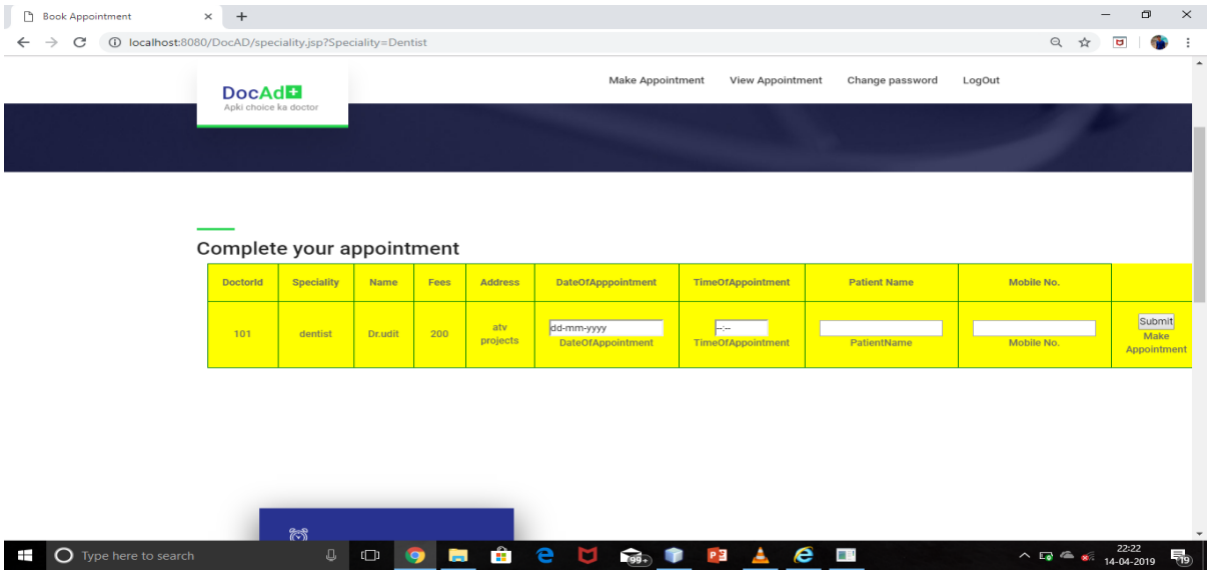
7.10 View Appointment:

In this form, patient can view their appointment.



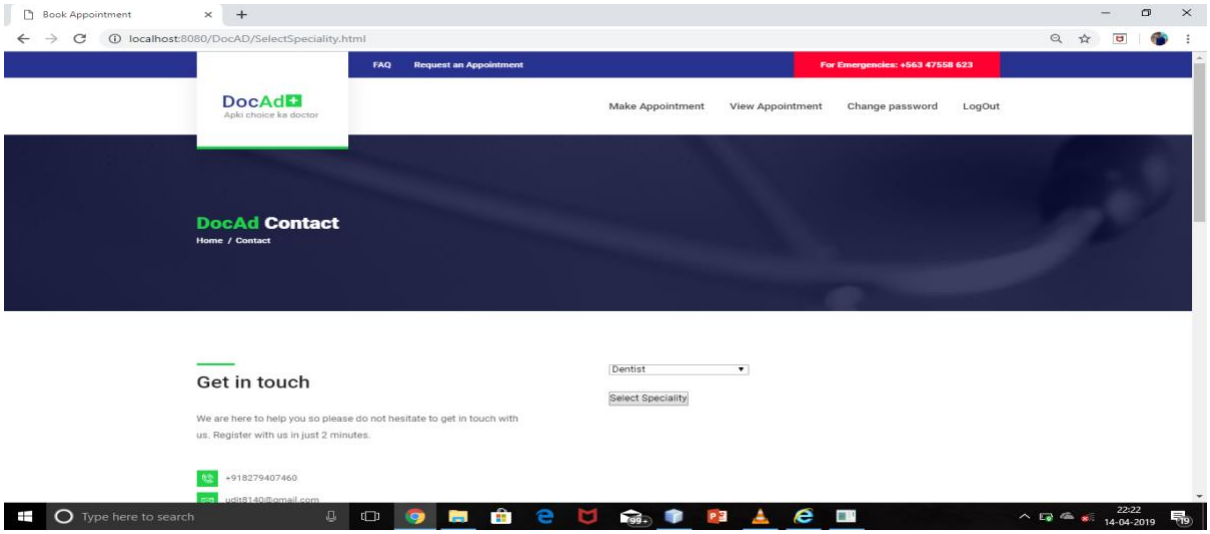
7.11 Make Appointment:

If you do not want to apply for benefits online, or you need to speak to us for any other reason, you can schedule, reschedule or cancel an appointment.its quick and easy to make an appointments for a visit to planned parenthood.



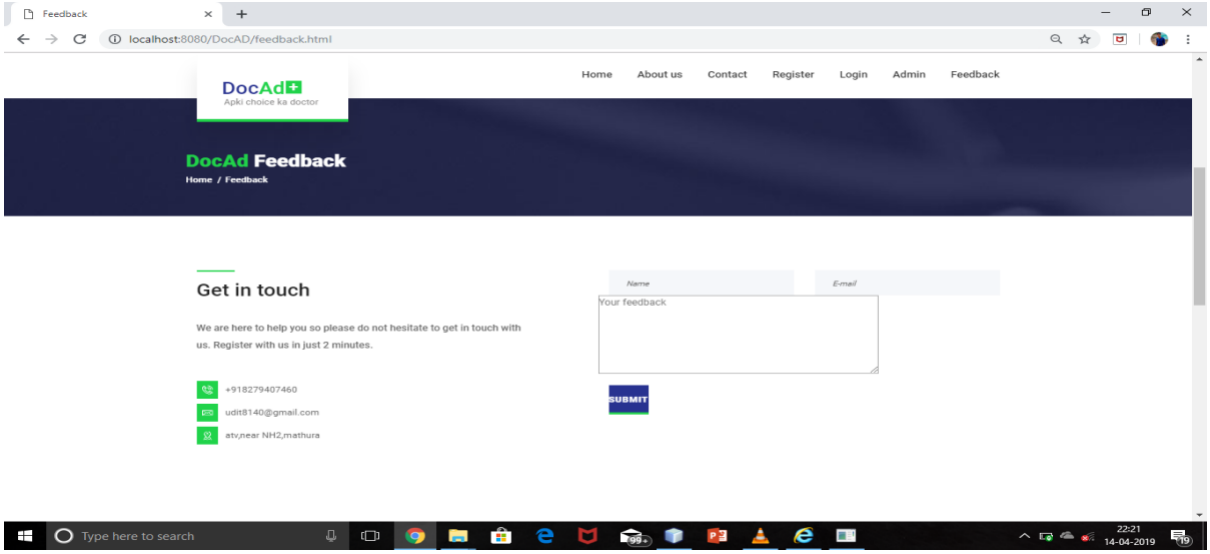
7.12 Select speciality:

In this form, patient can select speciality as per the condition of the health of the patient.



7.13 Feedback:

This form contains feedback from the patient's.



Testing

8.1 Black Box Testing:

Black-box testing is a method of software testing that examines the functionality of an application without peering into its internal structures or workings. This method of test can be applied virtually to every level of software testing: unit, integration, system and acceptance**.**

8.2 White Box Testing:

White-box testing (also known as clear box testing, glass box testing, transparent box testing and structural testing, by seeing the source code) tests internal structures or workings of a program, as opposed to the functionality exposed to the end-user. In white-box testing an internal perspective of the system, as well as programming skills, are used to design test cases.

8.3 Unit Testing:

In computer programming, unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use.

8.4 Integration Testing:

Integration testing is any type of software testing that seeks to verify the interfaces between components against a software design. Software components may be integrated in an iterative way or all together ("big bang"). Normally the former is considered a better practice since it allows interface issues to be located more quickly and fixed. Integration testing works to expose defects in the interfaces and interaction between integrated components (modules).

8.5 Functional Testing:

Functional testing refers to activities that verify a specific action or function of the code. These are usually found in the code requirements documentation, although some development methodologies work from use cases or user stories. Functional tests tend to answer the question of "can the user do this" or "does this particular feature work."

8.6 System Testing:

System testing tests a completely integrated system to verify that the system meets its requirements. For example, a system test might involve testing a logon interface, then creating and editing an entry, plus sending or printing results, followed by summary processing or deletion (or archiving) of entries, then logoff.

8.7 End-To-End Testing:

End-to-end testing is a technique used to test whether the flow of an application right from start to finish is behaving as expected. The purpose of performing end-to-end testing is to identify system dependencies and to ensure that the data integrity is maintained between various system components and systems.

8.8 Sanity Testing:

Sanity testing determines whether it is reasonable to proceed with further testing.

8.9 Regression Testing:

Regression testing focuses on finding defects after a major code change has occurred. Specifically, it seeks to uncover software regressions, as degraded or lost features, including old bugs that have come back. Such regressions occur whenever software functionality that was previously working correctly, stops working as intended.

8.10 Acceptance Testing:

Acceptance testing can mean one of two things:

- A smoke test is used as an acceptance test prior to introducing a new build to the main testing process, i.e., before integration or regression.
- Acceptance testing performed by the customer, often in their lab environment on their own hardware, is known as User Acceptance Testing (UAT). Acceptance testing may be performed as part of the hand-off process between any two phases of development.

8.11 Load Testing:

Load testing is primarily concerned with testing that the system can continue to operate under a specific load, whether that being large quantities of data or a large number of users. This is generally referred to as software scalability. The related load testing activity of when performed as a non-functional activity is often referred to as endurance testing.

8.12 Stress Testing:

Stress testing is the process of determining the ability of a computer, network, program or device to maintain a certain level of effectiveness under unfavorable conditions. The process can involve quantitative tests done in a lab, such as measuring the frequency of errors or system crashes.

8.13 Performance Testing:

Performance testing is generally executed to determine how a system or sub-system performs in terms of responsiveness and stability under a particular workload. It can also serve to investigate measure, validate or verify other quality attributes of the system, such as scalability, reliability and resource usage.

8.14 Usability Testing:

Usability testing is to check if the user interface is easy to use and understand. It is concerned mainly with the use of the application.

8.15 Install/Uninstall Testing:

An installation test assures that the system is installed correctly and working at actual customer's hardware. An uninstallation testing assures that the system is uninstalled successfully after working.

8.16 Recovery Testing:

Recovery testing is a type of non-functional testing technique performed in order to determine how quickly the system can recover after it has gone through system crash or hardware failure. Recovery testing is the forced failure of the software to verify if the recovery is successful.

8.17 Security Testing

Security testing is essential for software that processes confidential data to prevent system intrusion by hackers.

8.18 Compatibility Testing

A common cause of software failure (real or perceived) is a lack of its compatibility with other application software, operating systems (or operating system versions, old or new), or target environments that differ greatly from the original (such as a terminal or GUI application intended to be run on the desktop now being required to become a web application, which must render in a web browser).

8.19 Comparison Testing:

Comparison testing comprises of comparing the contents of files, databases, against actual results. They are capable of highlighting the differences between expected and actual results. Comparison test tools often have functions that allow specified sections of the files be ignored or masked out.

8.20 Alpha Testing:

Alpha testing is simulated or actual operational testing by potential users/customers or an independent test team at the developers' site. Alpha testing is often employed for off-the-shelf software as a form of internal acceptance testing, before the software goes to beta testing.

8.21 Beta Testing:

Beta testing comes after alpha testing and can be considered a form of external user acceptance testing. Versions of the software, known as beta versions, are released to a limited audience outside of the programming team known as beta testers.

System Security and Maintenance

9.1 System Maintenance:

Maintenance is a necessary component of any business computer system or network. Each individual desktop computer and server has needs that must be met to keep them running optimally. It's easy to overlook this maintenance and as a result, systems can perform slowly or have issues that seem to come out of nowhere. By regularly addressing the many items that need attention on every computer, performance and reliability can be counted on over the life of each system.

We can create a schedule of maintenance tasks and implement them to keep you as efficient with your computer systems as possible.

9.2 Security System:

Security covers a lot of areas, the most important of which is protecting your office systems from internet born attacks. They can come in many forms, and many believe that "hackers" are the primary problem. While hacking certainly exists and is quite common - many small business networks having hundreds of hack attempts per day that you may not even know are happening - the more common form of infiltration is from the actions of inside employees. These can come in the form of simply visiting web sites, downloading files, or viewing movies and jokes emailed from family, friends, or co-workers.

We can examine your systems, deploy protective software, and educate you on the ways that you can protect your business, computers, and data from prying eyes and modern-day vandals.

Chapter 10

Future Scope

The development of this project surely prompts many new areas of investigation. This project has wide scope to implement it in any Hospital Management. This project covers all functionalities related to On-Line Booking appointment. Hence it can be implemented any-where else after minute organization level customization.

Moreover, some parts of the project have remained uncompleted due to some reasons. First of all, limitations of our project, make place for future enhancements. Though that was not the part of objective of our project but it would have great to implement that provided we'd enough time.

Some of the modules that will be added in future are:

- Online Payment Module
- Search Module

Bibliography

These are few links which help us at each & every step in completing this project:

• Stack Overflow - www.stackoverflow.com

• LinkedIn Slide Share - www.slideshare.net

• W3 Schools - www.w3schools.com

• Wikipedia - www.wikipedia.com

• Java point - www.javatpoint.com