Design and Implementation of an Online Hospital Management System

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

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APPROVAL

This Project/internship titled "Online Hospital Management System", submitted by Safayet Hossain, ID: 162-15-7815, Md. Mahmodul Hasan, ID:162-15-8073, Md.Abdullah All Azmi, ID:162-15-7721 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 08th July,2020.

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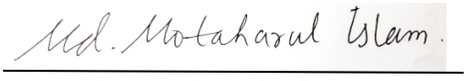

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mr. Abdus Sattar, Assistant Professor of CSE Department,** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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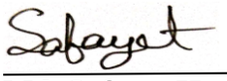

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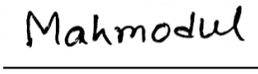

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We really grateful and wish our profound our indebtedness to **Mr. Abdus Sattar, Assistant Professor of CSE Department, Daffodil International University.** Deep Knowledge & keen interest of our supervisor in the field of "*Web Development*" to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to Prof. Dr. Syed Akhter Hossain and Head**,** Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

Our main focus is development a unique Hospital Management System that will improve hospital experience for both patients and the hospital authorities. This project mainly based on database. The whole system is written in Laravel, jQuery, Java Script, Bootstrap, HTML and CSS. Users will have to the website in any place with internet connection. They see the valuable information for the Hospital & get online Appointment. Hospital Management System is custom built to meet the specific requirement of the mid and large size hospitals across the globe. It covers all the required modules right from Patient Appointment, Medicine details, Doctor Details, Admin, Employee details, pharmacy, bill payment, record modification, birth certificate, death certificate, lab test details, bed details etc. They can get various types of payment option to pay their bill. We hope user will be get very much advantages with our project and don't have to waste their valuable time anymore.

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CHAPTER 1

INTODUCTION

1.1 Introduction

Online hospital management system is a unique hospital management system for both patients and hospital stuffs (Doctors, Nurse, and Management). The primary target of this design is to make hospital experience better than we currently have. Hospital is a place where no one willingly wants to visit but there are times when we need to. The old system of hospital are not very user friendly. So our main focus is to make peoples life easier in the hour of need. We are working to design such a system that will reduce a lot of paperwork and save peoples time.

Let's discuss about the system in details and see how it will help us. There are no such things that comes out without any limitations but we focused to overcome the best we could do. Our main focus was to determine the features for the patients. They are the large community of this system and they deserve to get the most out of this system. There is no doubt that our existing systems does not provide us the facility to check for our information related to our hospital documents and other important documents for example prescriptions and test reports. If this documents are close to us then we can at least be in some peace. We no longer have to worry about carrying those reports and of course it will help us the best in terms of losing those precious documents and get into trouble. The relief will be huge and so will be the benefit. Hopefully this will give us the benefit that we are expecting.

To overcome those limitation we are trying to build a social networking like site for hospitals that will help everyone working in the hospital and their patients.

1.2 Objective

1. Define hospital
2. Recording information about the Patients that come.
3. Generating bills.
4. Recording information related to diagnosis given to Patients.
5. Keeping record of the Immunization provided to children/patients.
6. Keeping information about various diseases and medicines available to cure them. These are the various jobs that need to be done in a Hospital by the operational staff and Doctors. All these works are done on papers.

1.3 Motivation

We do not usually visit hospitals unless we need to but this visit does not always gives us good experience. We face various problems there. There are automated hospital management system but they do not provide any functionality for us. Even the doctors do not have access to their patient's data while they are at home. It will be great for the patients to have an application that will keep them close to their personal data like: prescriptions, test reports and other important materials. Patients will be able to browse through all the doctors available and ask for appointment for their desired doctor. A doctor will also experience the similar benefits. This will reduce a lot of paper works and make things easy for everyone associated with it. I have some personal experience visiting the hospital and I also have gathered experience from other people by asking them and observing them for some time. People experience their worst nightmare while they need to visit the hospital. No body visits the hospital unless it is extremely necessary. People get mad but they do not have anything to do then. This gave me the perfect motivation to build something for them and offer them some help at their most needed time. I am confident that this product can and will help them.

1.4 Scope of the Project

1. Information about Patients is done by just writing the Patients name, age and gender. Whenever the Patient comes up his information is stored freshly,
2. Bills are generated by recording price for each facility provided to Patient on a separate sheet and at last they all are summed up.
3. Diagnosis information to patients is generally recorded on the document, which contains Patient information. It is destroyed after some time period to decrease the paper load in the office.
4. Immunization records of children are maintained in pre-formatted sheets, which are kept in a file.
5. Information about various diseases is not kept as any document. Doctors themselves do this job by remembering various medicines. All this work is done manually by the receptionist and other operational staff and lot of papers are needed to be handled and taken care of. Doctors have to remember various medicines available for diagnosis and sometimes miss better alternatives as they can’t remember them
6. Patient gets easily death certificate and birth certificate from our website.

1.5 Report Layout

Chapter 1: Introduction

There we have examined the target, inspiration and anticipated result of our undertaking. Next pursues is report format.

Chapter 2: Background

There we additionally examine the condition of our venture, similar work, similitude the different competitor frameworks and the difficulties of this task.

Chapter 3: Requirement specification

This chapter represents the useful necessity and non-useful prerequisite that was utilized in our task.

Chapter 4: Design Specification

This chapter talks pretty much about the full structure of our tasks such as front-end configuration, back-end plan, Interaction plan and the usage of our prerequisite.

Chapter 5: Implementation and Testing

This section examines the database and its usage, front-end structure and communications, test consequence of the venture.

Chapter 6: Conclusion and Future Scope

The development process is examined in the area that is progressively imperative to build state duty to the vision "Digital BANGLADESH"

CHAPTER 2

BACKROUND

2.1 Background Analysis

Various management program for management are present out there but there any not too many which provides the patients any functionality. The hospital system has been automated but the benefit is not for all. In such a situation I have figured out that there should be something for the patients. Some simple features for checking appointment, asking for appointment, prescription and test reports can reduce the hassle up to 70-80%. Because those are the sector where we face a lot of trouble and can find a way out. So this will allow us something that we were waiting for so long. The world is moving to internet so this is the right time to think about this. I have checked some hospital management system on internet and some local programs that the hospital stuffs are using near me. They are also very well designed and have rich features too but nothing for the patients to be happy about is there. If we compare the benefits and the satisfaction form every point of view then we cannot conclude things beneficial for all. If a system does not provide help for every user group then it cannot be perfect system

2.2 Related Work

Some of the works we discovered are made based on the task yet not similar to our work. A few models are Labaid Specialized Hospital and Ibn Sina Specialized Hospital. Here are the front perspectives on their sites.

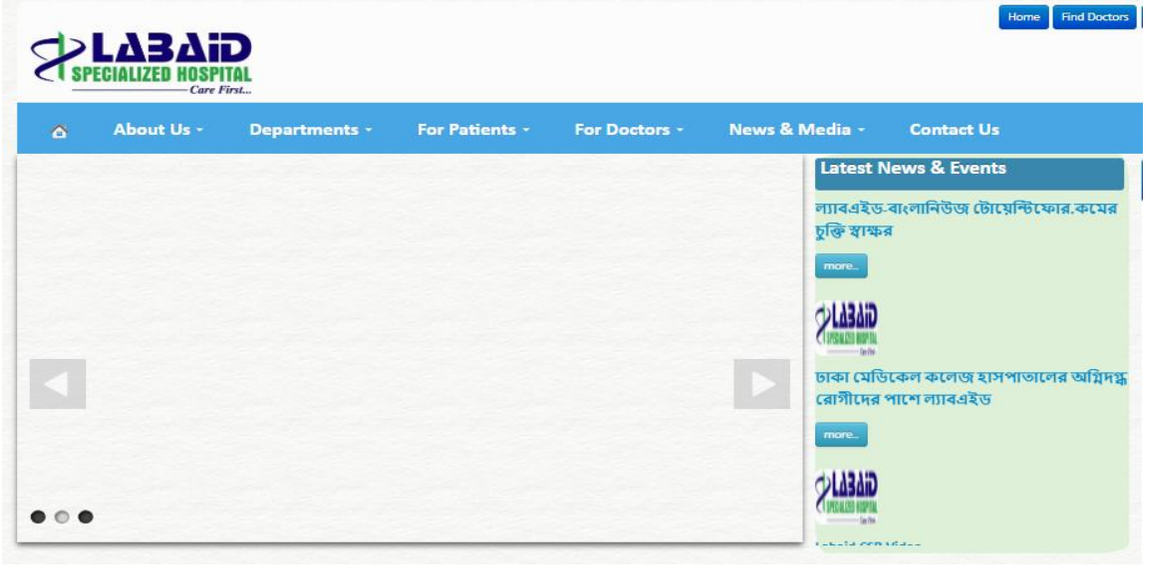

Figure 2.2 1: Labaid Specialized Hospital

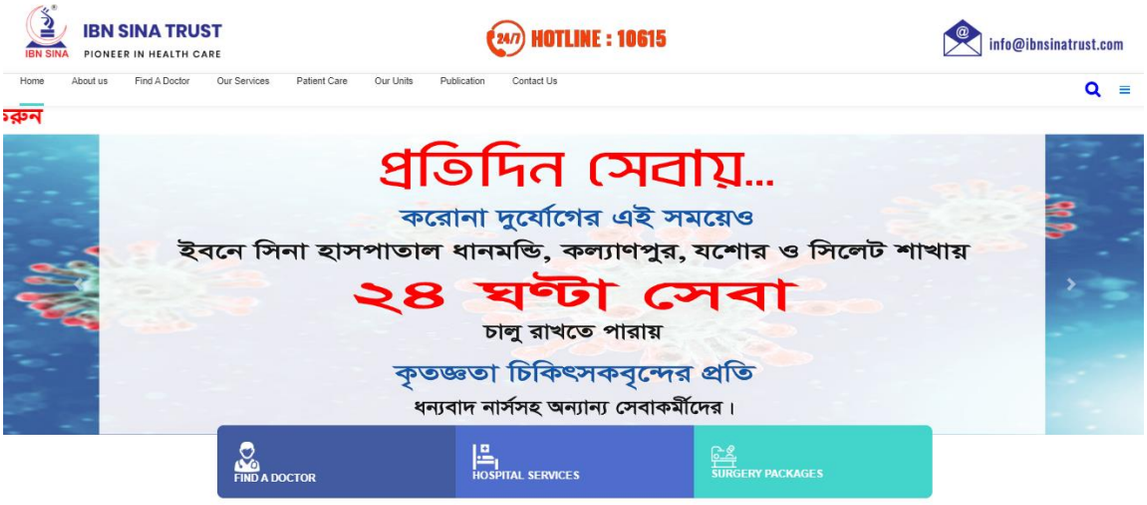

Figure 2.2 2: Ibn Sina Hospital

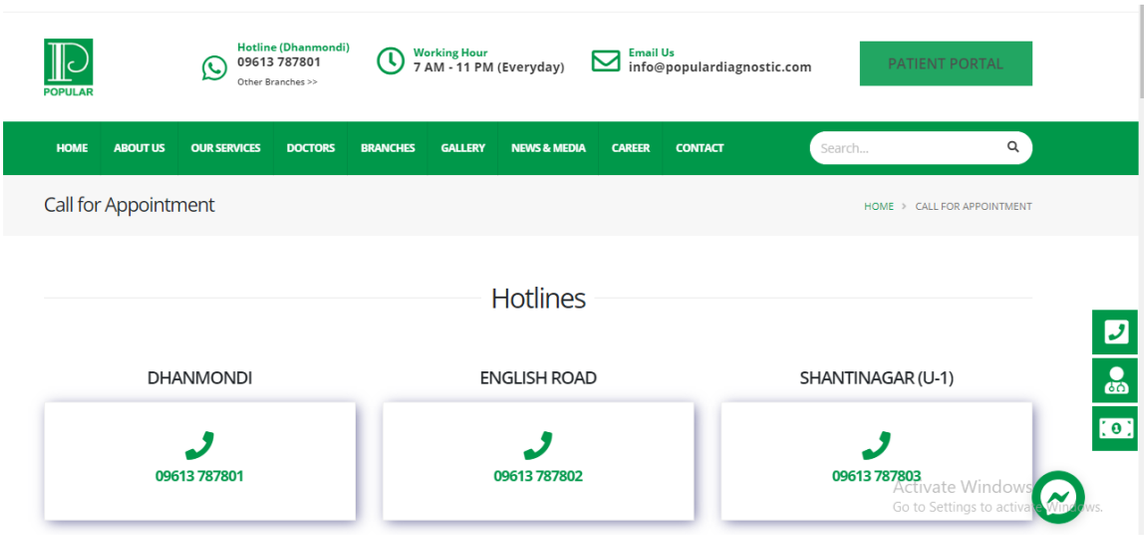

Figure 2.2 3: Popular hospital

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Entity – Relationship Diagram

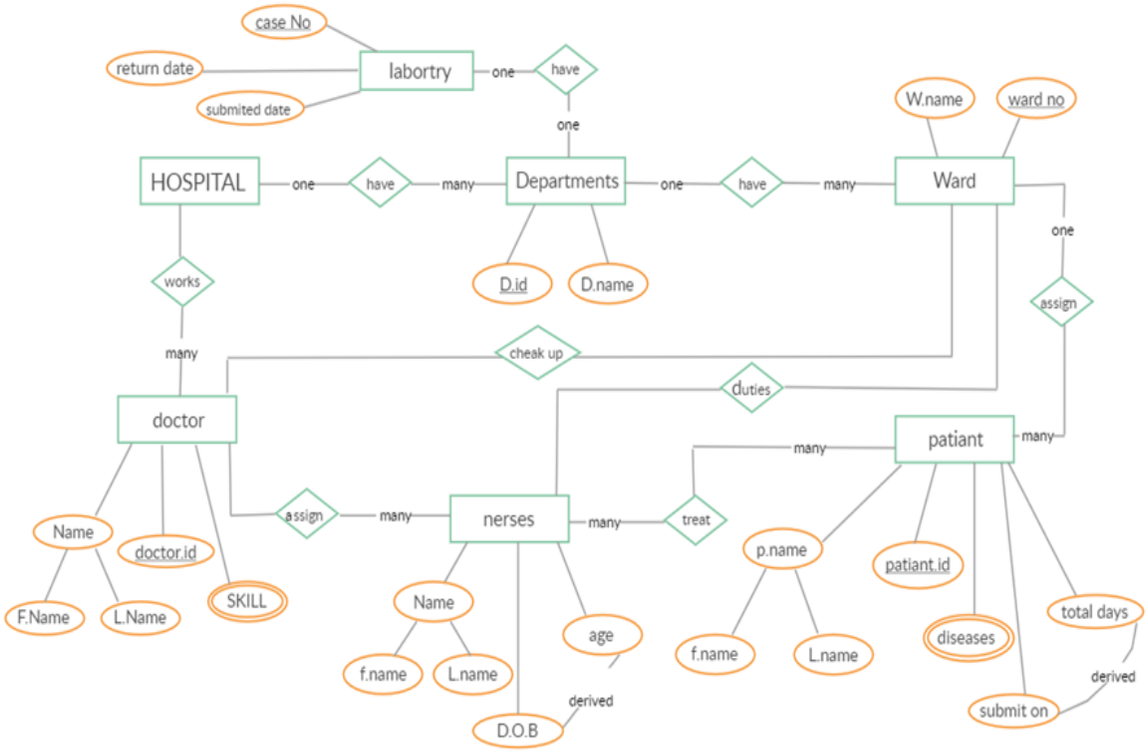

Figure 3.1 1: ERD Diagram

Entity Relationship Diagram also is known as ERD is a type of structural diagram for use in database design. An ERD contains different symbols and connectors that visualizes the relationship between entities. ERD diagram is helpful to illustrate how “entities” such as people, objects or concepts relate to each other within a system.

3.2 Data - Flow Diagram (level 0):

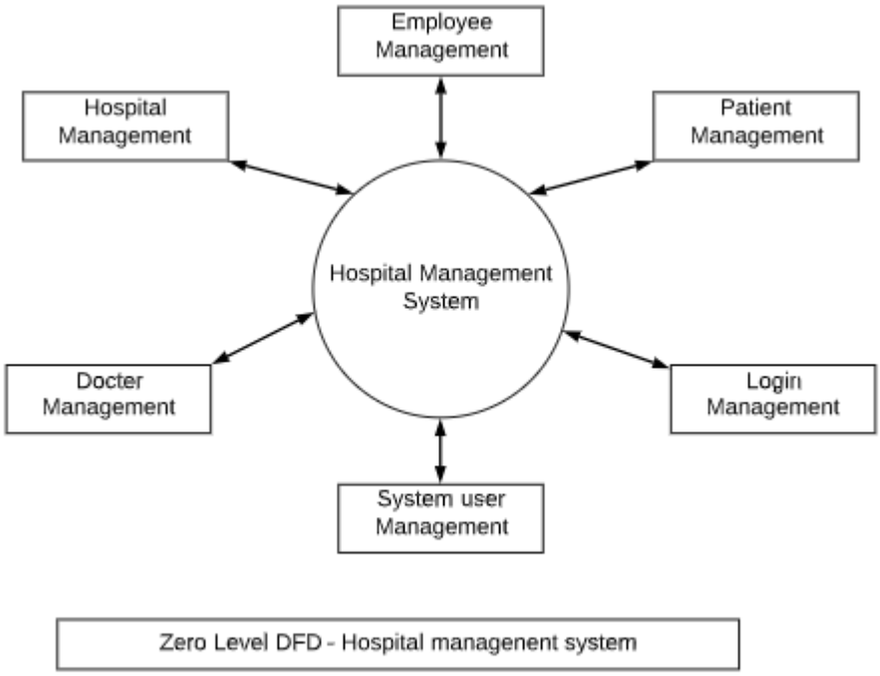

Figure 3.2 1: Zero level DFD

3.3 Data - Flow Diagram (level 1):

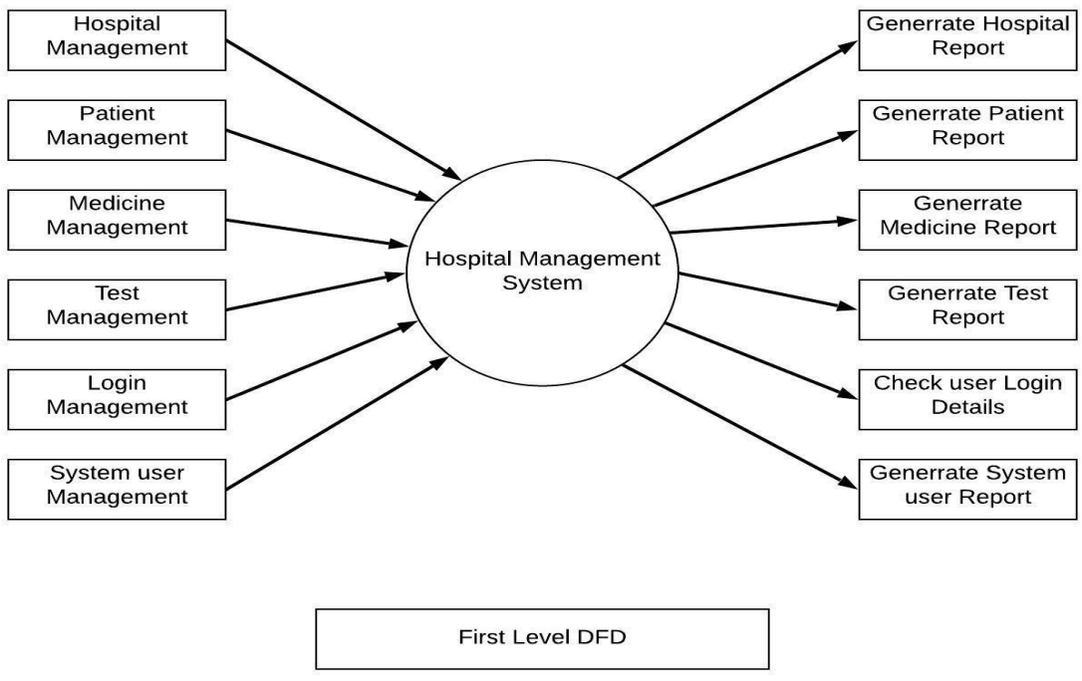

Figure 3.3 1: 1st level DFD

3.4 Data - Flow Diagram (level 2):

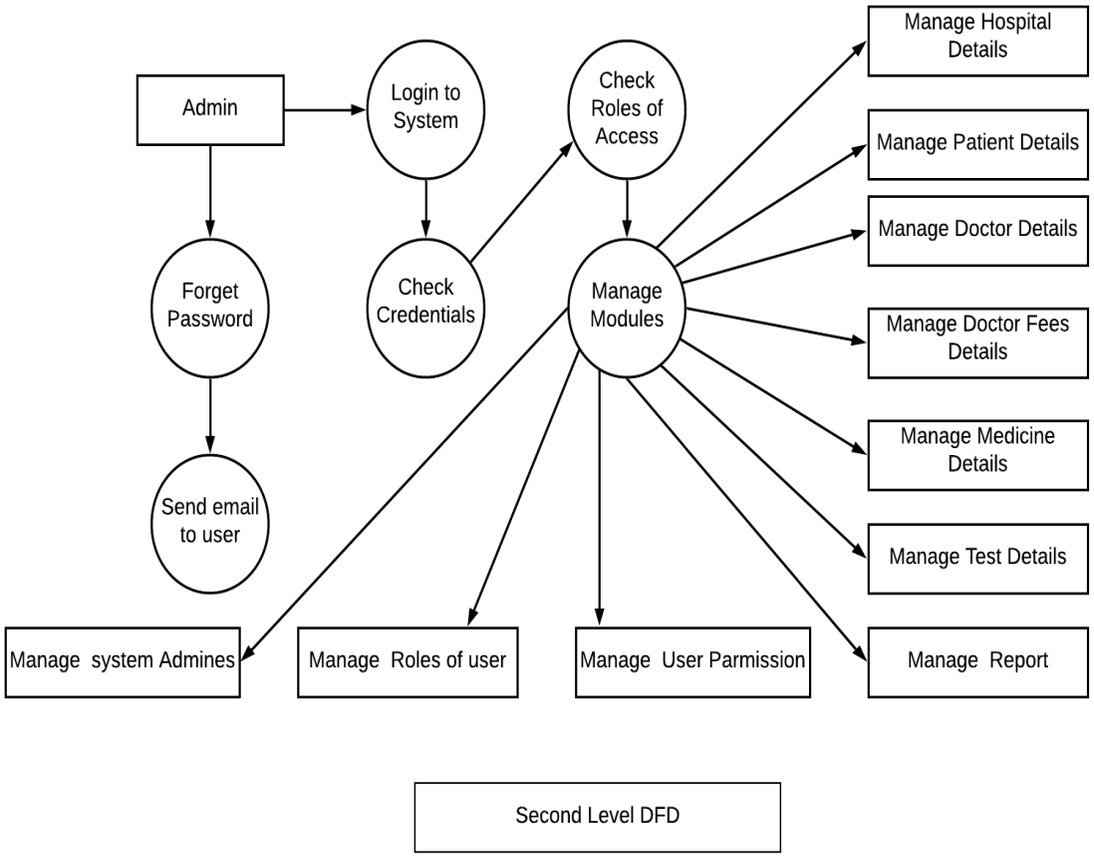

Figure3.4 1: 2nd level DFD

CHAPTER 4

SYSTEM DESIGN

4.1 Login

Same page for every group of users.

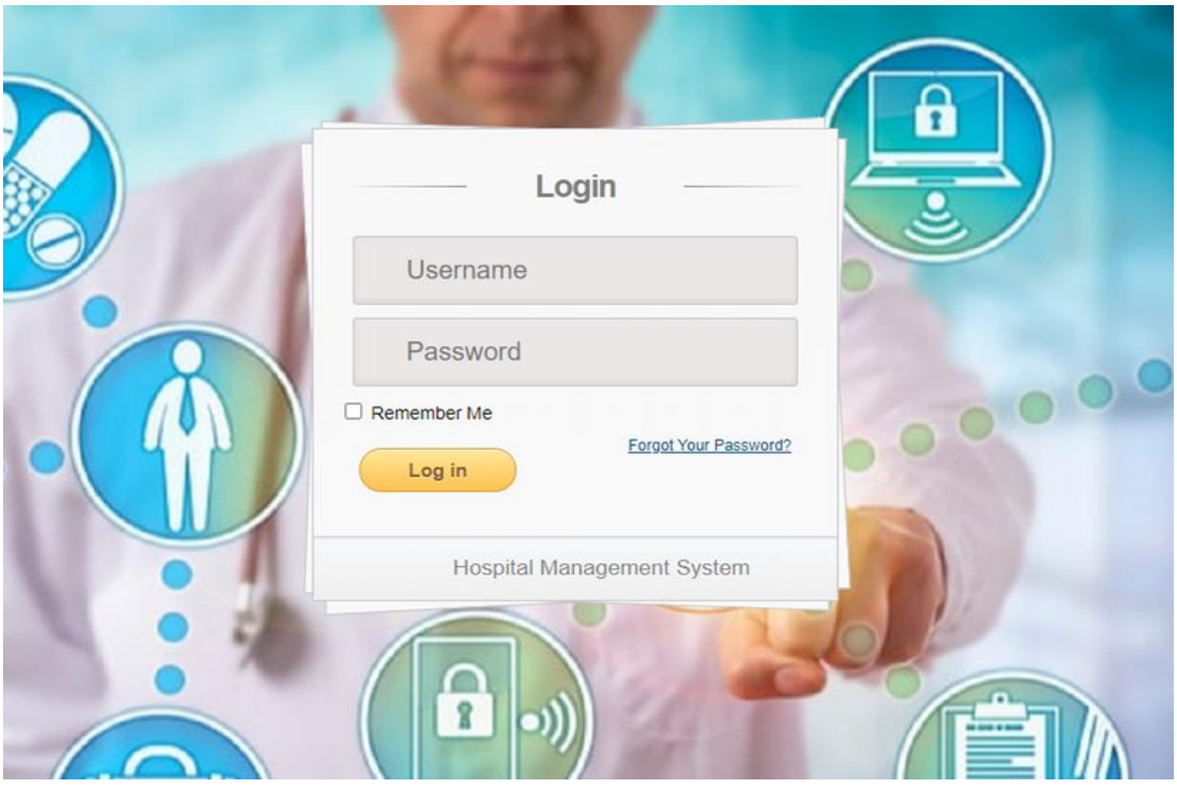

Figure 4.1 1: Login Page

A simple login page for users, three category users login this system, they are Admin, Doctor & Patient. After providing the proper user name and password you will be able to log in and enjoy specific features that are designed for specific users. This is a single interface for all groups of people associated with the system.

4.2 User Groups

There are three categories for users. The features will vary depending on your user Type. You will be able to perform certain task in a category which may not be necessary for other categories.

4.2.1 Doctor

Doctors can check appointments and also set appointment by their own. They can start prescribing their patients by clicking the appointment list. It will directly lean them for the prescription page. The prescription page has a lot of automated features for the doctor to set things and assign to their patients. Every field that is necessary for a doctor to make a perfect prescription is available. Which will obviously reduce the workload of doctors and they can give proper time to patients. There will be few clicks for them to make a proper prescriptions.

4.2.2 Management

Management has the power to create user profile both for patients and doctors. They will be responsible for approving appointments and monitor through pending test reports. They will have the most important things to do. As many important things will depend on their action.

4.2.3Patient

Patients are normal users like us. We will be able to browse through available doctors and ask for appointments. We can also check our previous history. The patient's functionality is limited based on their need. They will only be able to change their personal information and other things. Obviously they can look for their desired doctors to request an appointment.

4.3 Patient Feature

Management will add patients to the database by this page. They have to take full details of the patient and then add their name, gender, age, address, blood group. For every patient generate a unique id. Id is the tracking key for the user. It has been assigned as the primary key. The responsibility of management is always high. They have to make sure that they enter the every field correctly so the patient does not get into any trouble. If they make any mistake then it will become hard for us to reach our goal. This process is use for indoor patient.

Add Indoor Patient

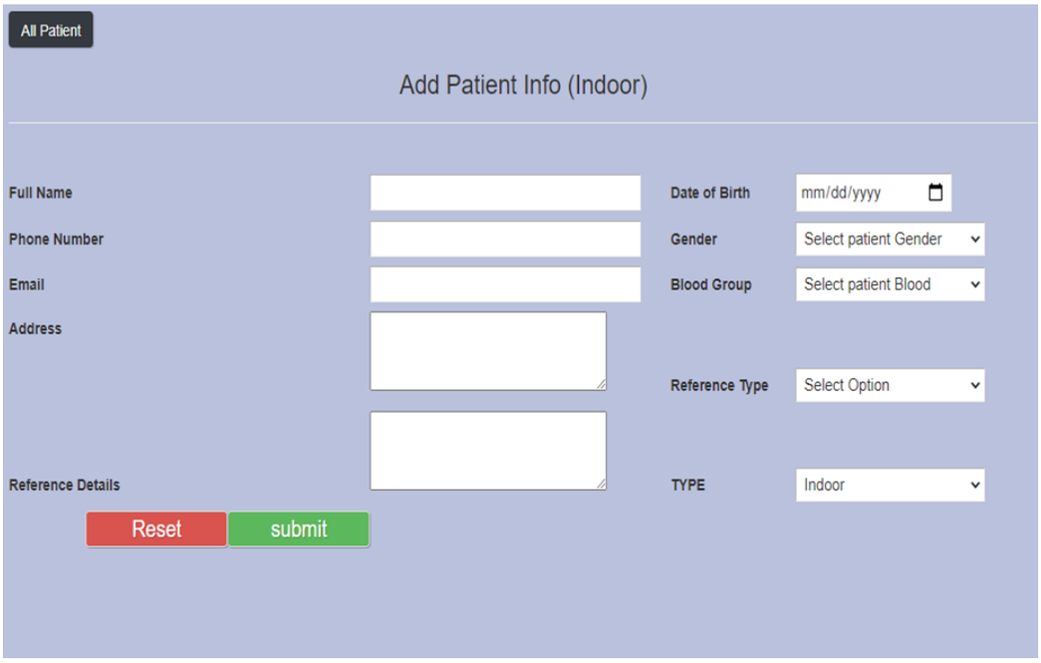

Figure 4.3 1: Add Patient

4.3.1Outdoor Patient

Management will add patients to the database by this page. They have to take full details of the patient and then add their name, gender, age, address, blood group. For every patient generate a unique id. It is the tracking key for the user. It has been assigned as the primary key. The responsibility of management is always high. They have to make sure that they enter the every field correctly so the patient does not get into any trouble. If they make any mistake then it will become hard for us to reach our goal. This process is use for outdoor patient.

Figure 4.3 2: Add Patient (Outdoor)

4.4 Doctor Feature

Add Doctor

This is another important responsibility for the management. They have to add doctor account in details. There is various things for a doctor. Under personal details, doctor information, chamber information, settings there are several details for the doctor to be added. After successful insertion of a doctor the management can assign them patients and appoint them for requests. All those information from every tab needs to be inserted carefully as it will show up with the doctors details. If they insert less information then the patients will not be able to see all information of the doctor. This can lead to a situation where the system may not provide the promised benefit for us. So the management needs to be careful about this.

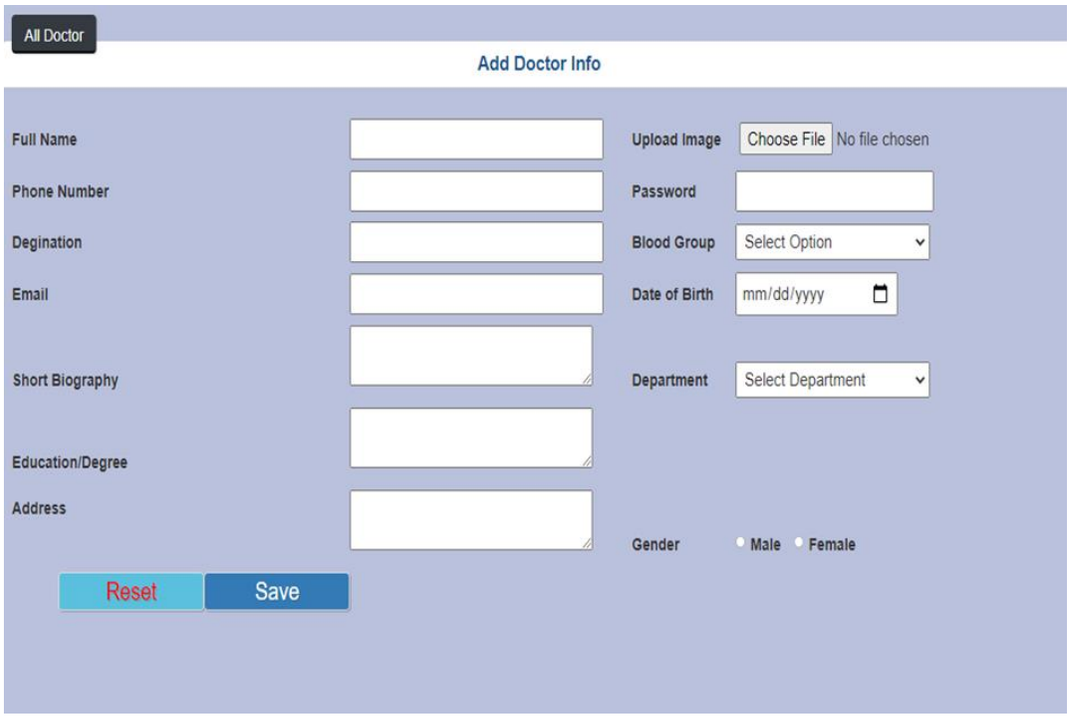

Figure 4.4 1: Doctor Add

Doctor List

Admin can see doctor list.

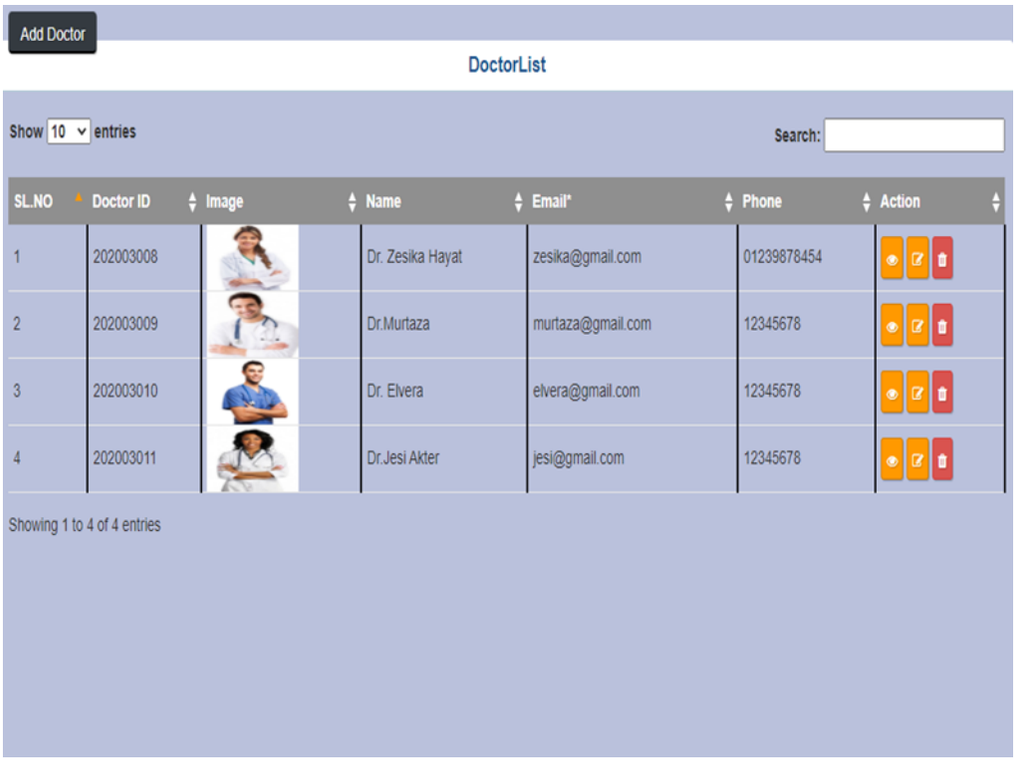

Figure 4.4 2: Doctor List for Admin

Visitor and patient can see this list.

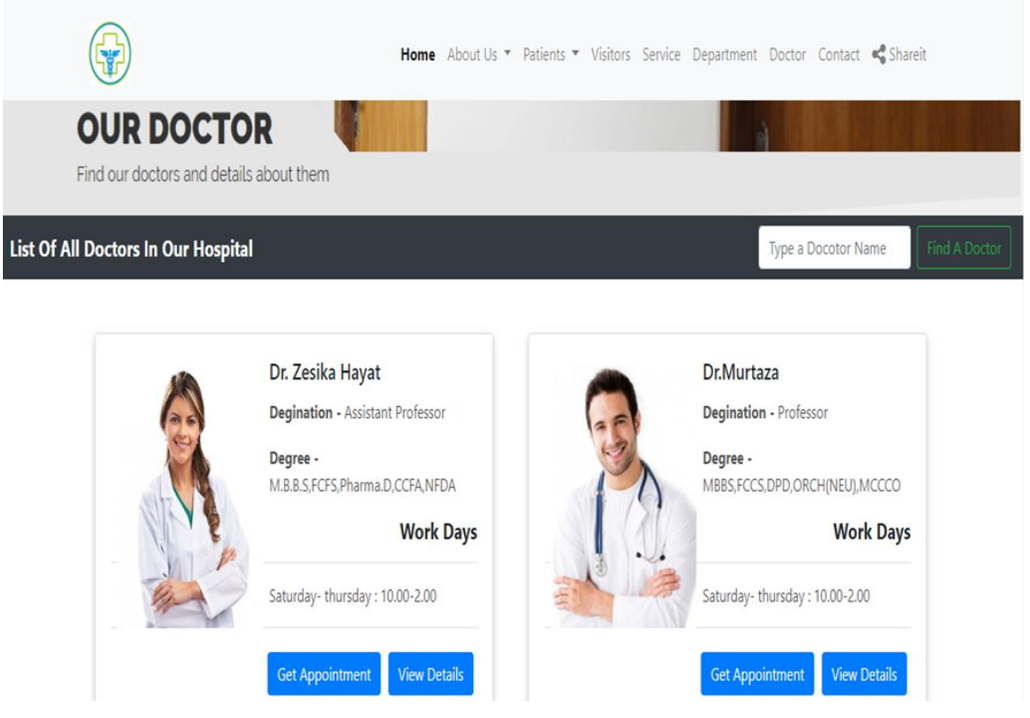

Figure 4.4 3: Doctor List for Visitor

4.5 Appointment

Management can manually set an appointment for any user, if they ask so. They will have to select the doctor's name, patients name and date to add an appointment. This will add appointment for the doctor and patient both. The appointment section also have great importance. This gives the power for all to save time and reduce hassle. A patient can only ask for appointment but the management needs to set the appointment for them. The management has some important duty here. They have to check whether the doctor is free or not. This will reduce the chance of getting multiple appointment for one doctor at a time. The doctors can also set appointment for them when they need to. This will be directly assigned for them and the management will not have anything to do with this.

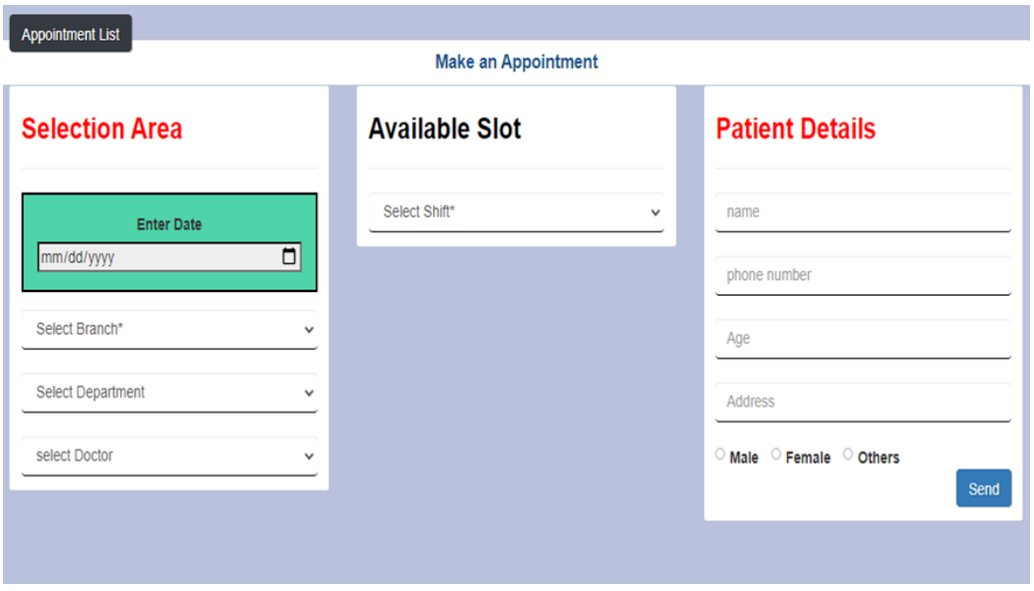

Figure 4.5 1: Appointment Add

Appointment List

This is another very important responsibility for the management to approve appointments. Patients can request for an appointment form home but to get that appointment management has to approve it. They will find pending appointments and depending on the availability of doctors the can set those appointments or discard them. All those pending appointments appears here for the management and they can take appropriate actions. This will be first thing for the management to check at the beginning of the day and take proper actions. After their action the people associated with it will be notified. Both party doctor and patient will get information about their appointment after it is set. This proves the importance of this step. Those appointments that are directly set by doctors does not require any of this step to set those appointment.

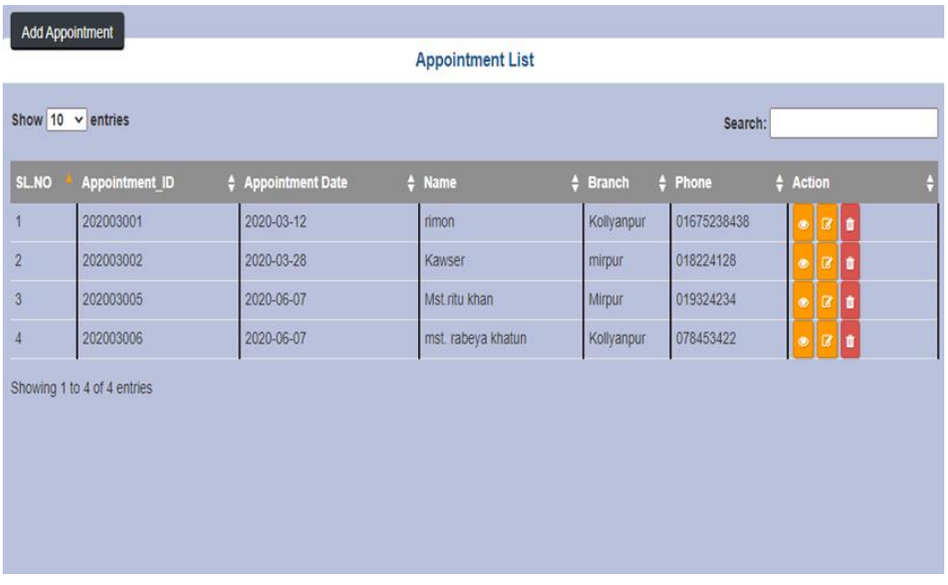

Figure 4.5 2: Appointment List

4.6 Hospital Activates

Birth Add

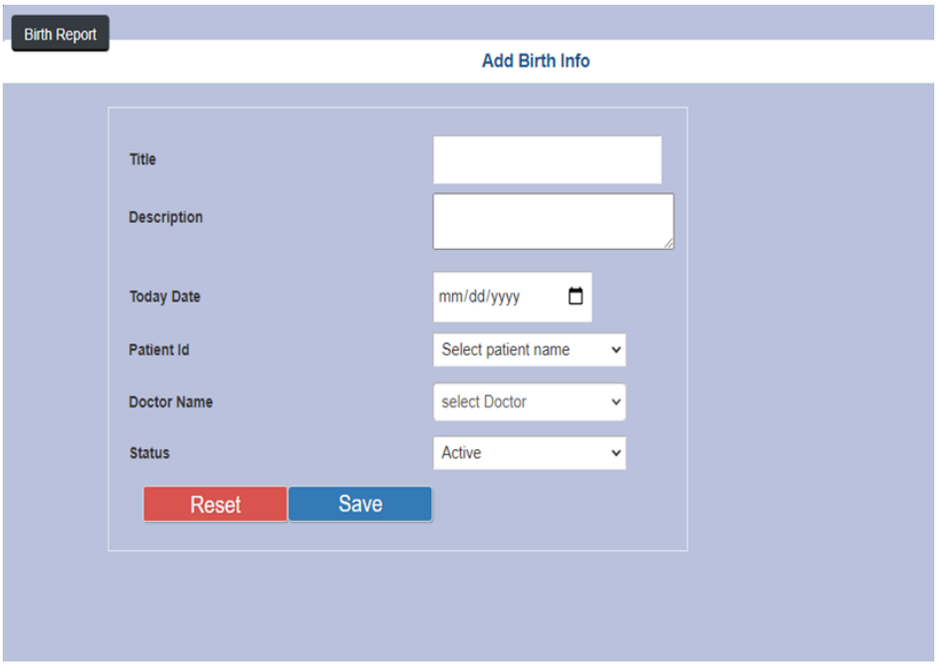

Figure 4.6 1: Birth Add

Death Add

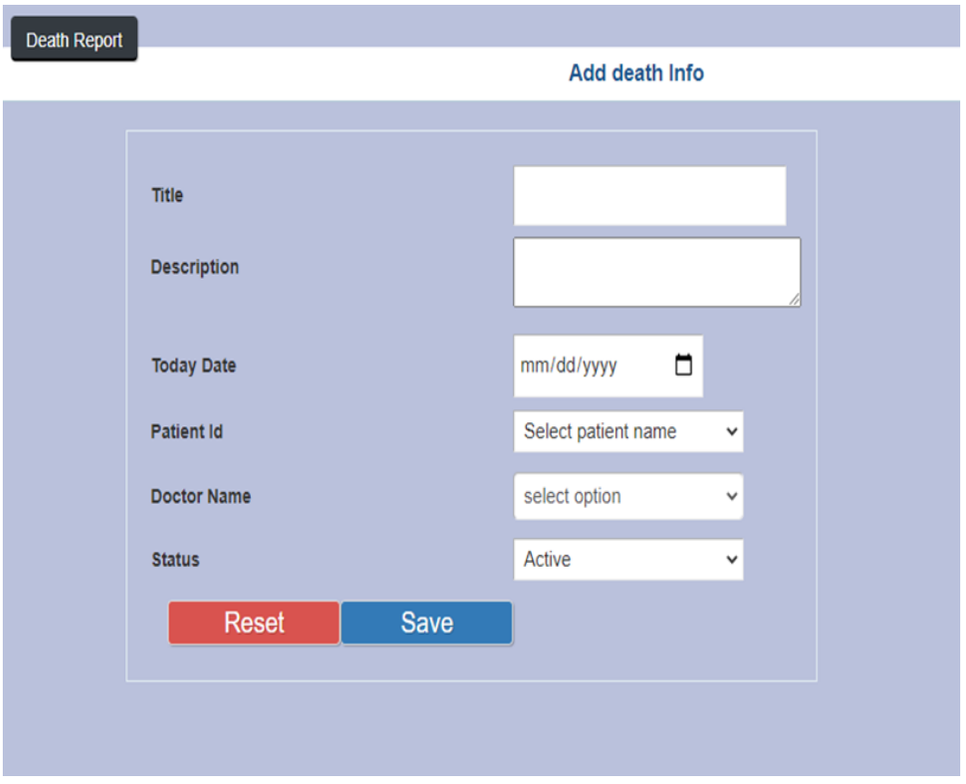

Figure 4.6 2: Death Add

Bed Manager

Bed Add

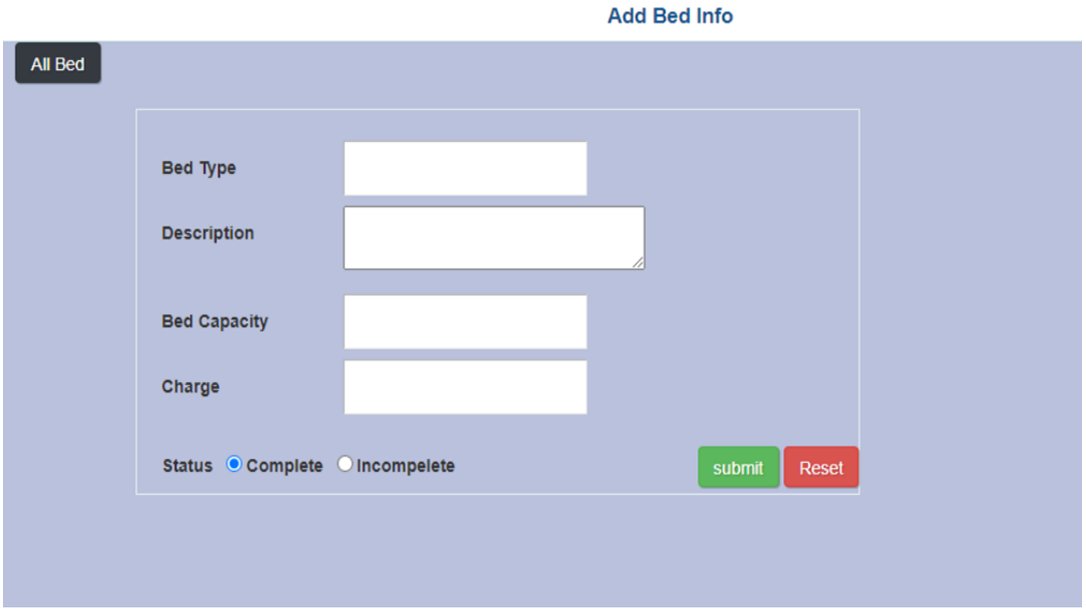

Figure 4.6 3: Bed Add

4.7 Human Resources

Employee Add

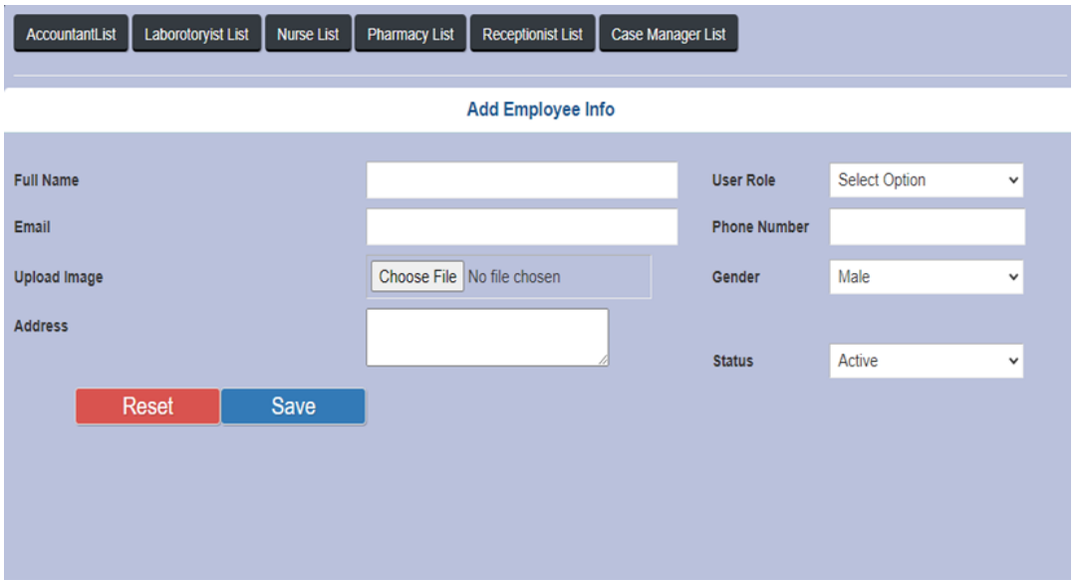

Figure 4.7 1: Employee Add

Employee List

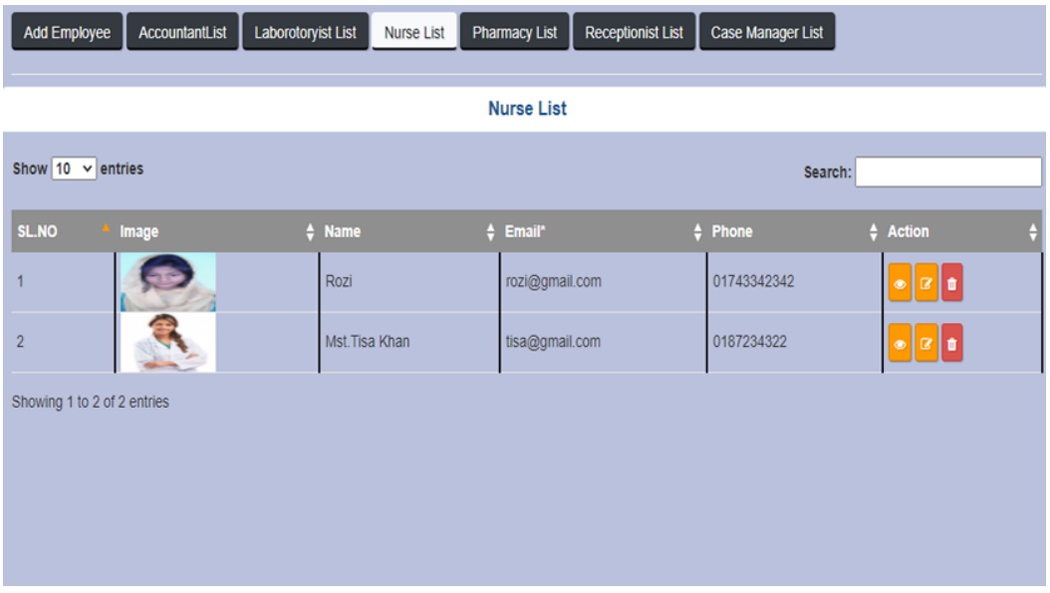

Figure 4.7 2: Employee List

4.8 Prescription Details

This is another very important responsibility for the management to approve appointments. Patients can request for an appointment form home but to get that appointment management has to approve it. They will find pending appointments and depending on the availability of doctors the can set those appointments or discard them. All those pending appointments appears here for the management and they can take appropriate actions. This will be first thing for the management to check at the beginning of the day and take proper actions. After their action the people associated with it will be notified. Both party doctor and patient will get information about their appointment after it is set. This proves the importance of this step. Those appointments that are directly set by doctors does not require any of this step to set those appointment.

Add Prescription

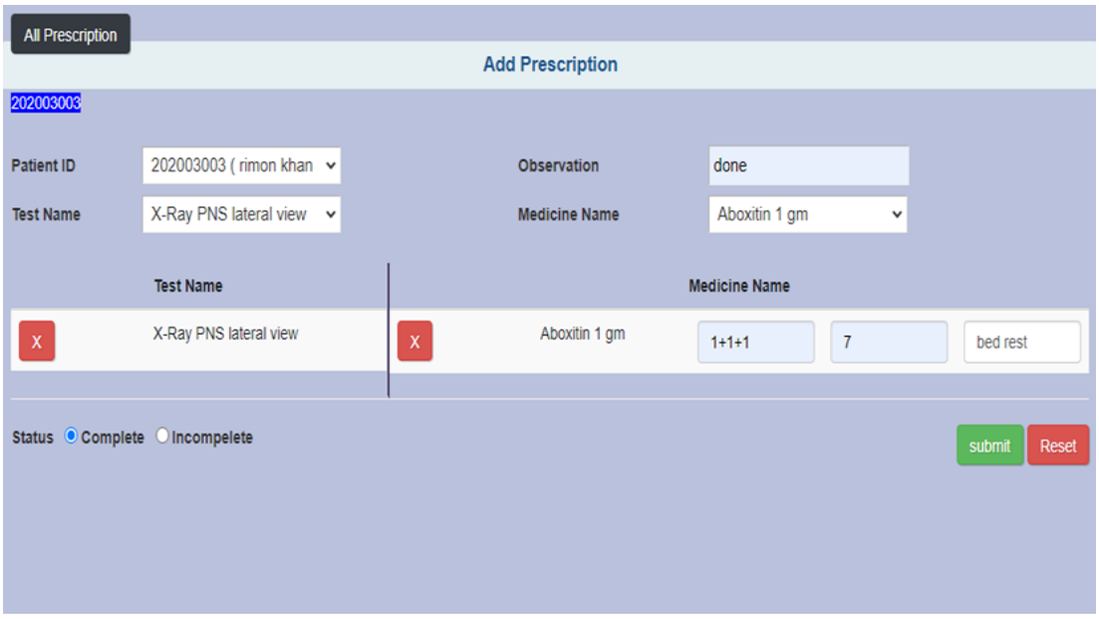

Figure 4.8 1: Prescription Add

4.9 Medicine:

Add Medicine

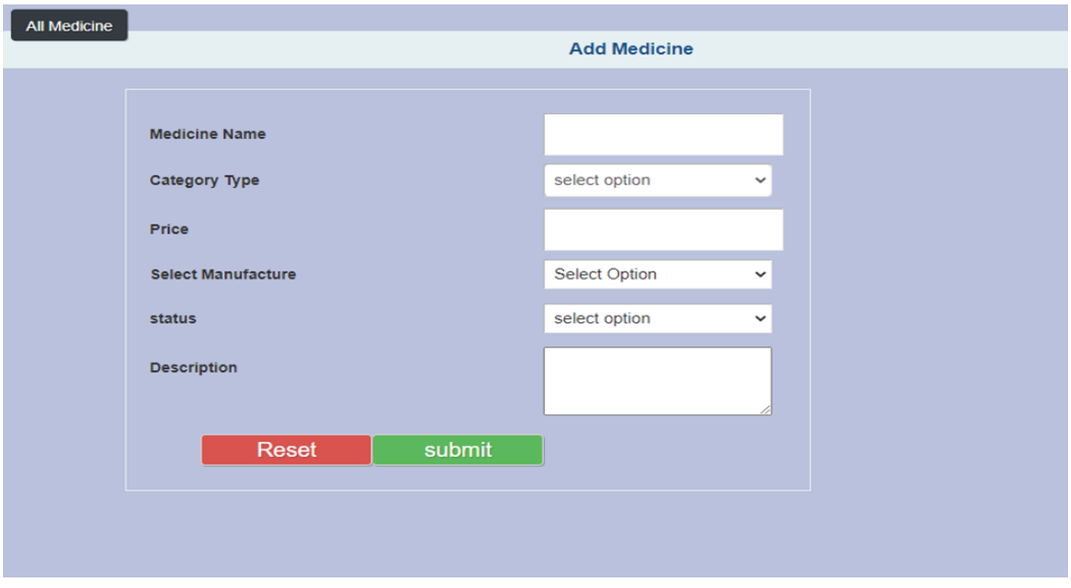

Figure 4.9 1: Add Medicine

Medicine List

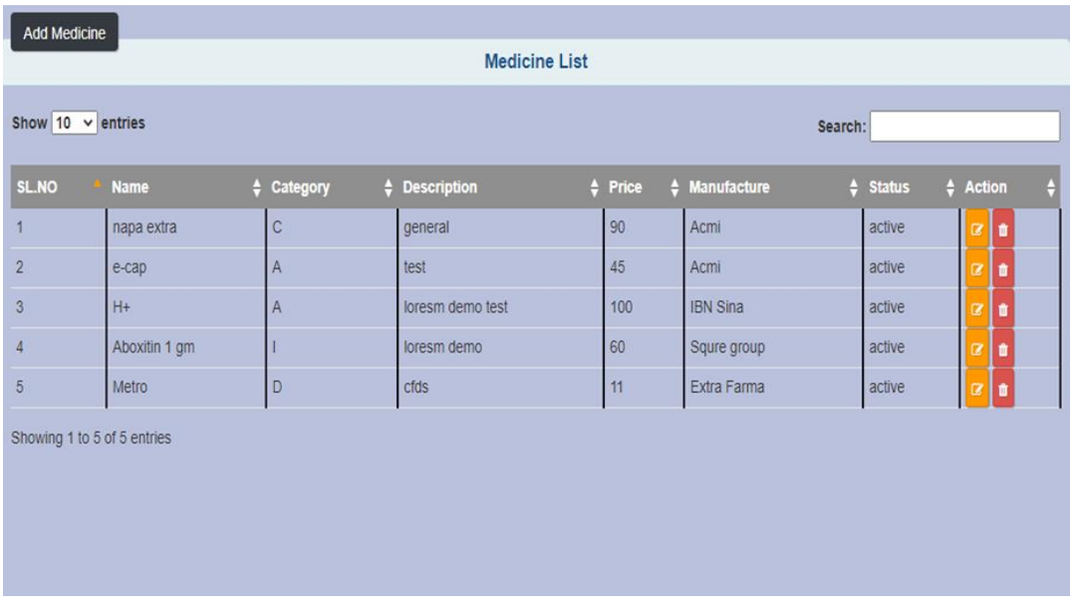

Figure 4.9 2: Medicine List

Medicine Invoice

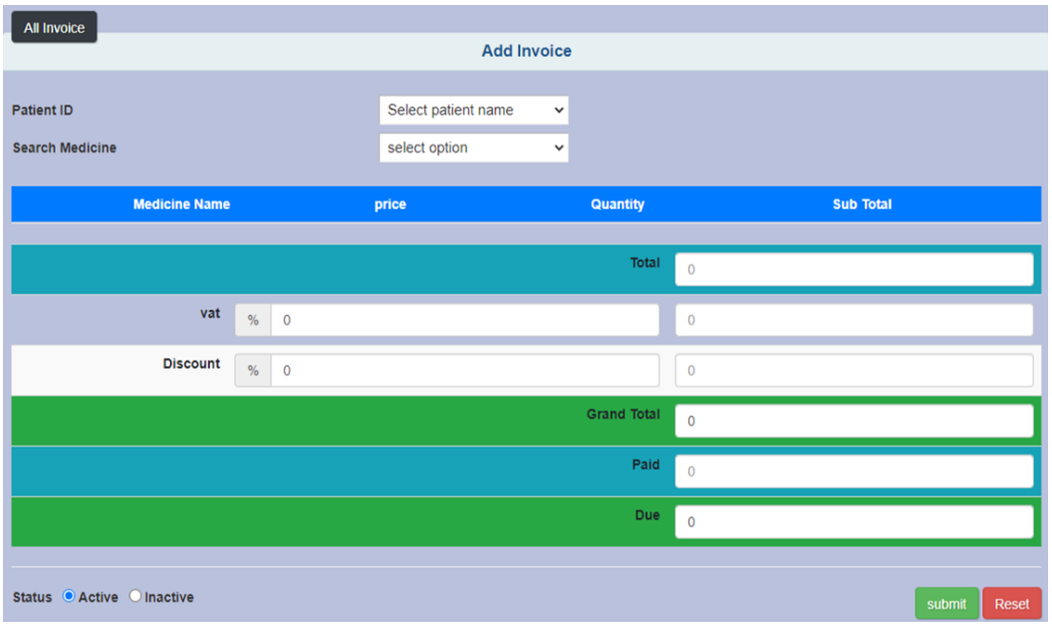

Figure 4.9 3: Medicine Invoice Add

Invoice List

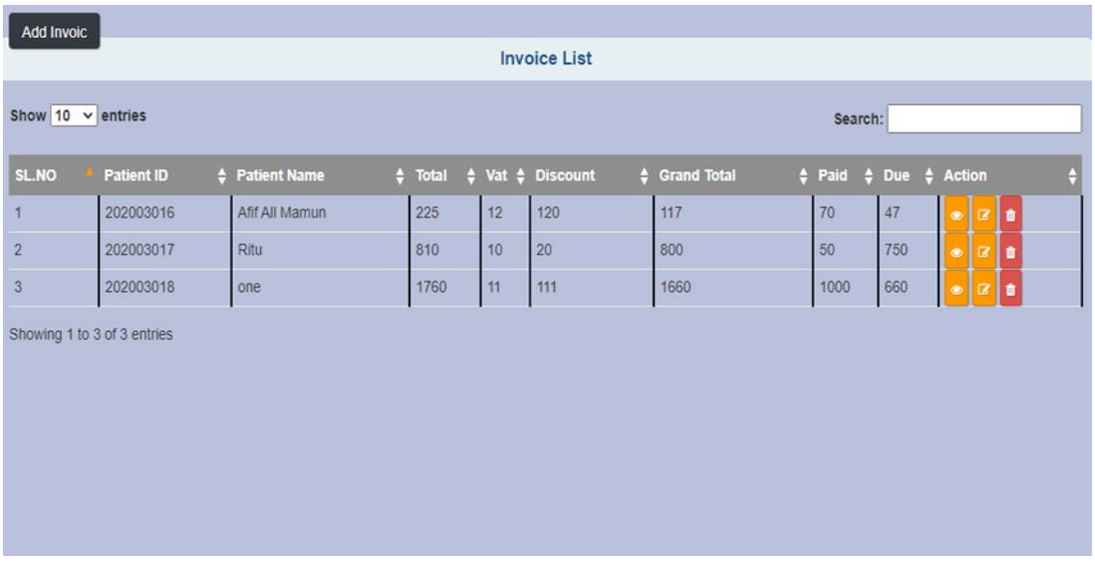

Figure 4.9 4: Invoice List

4.10 Test

Test Add

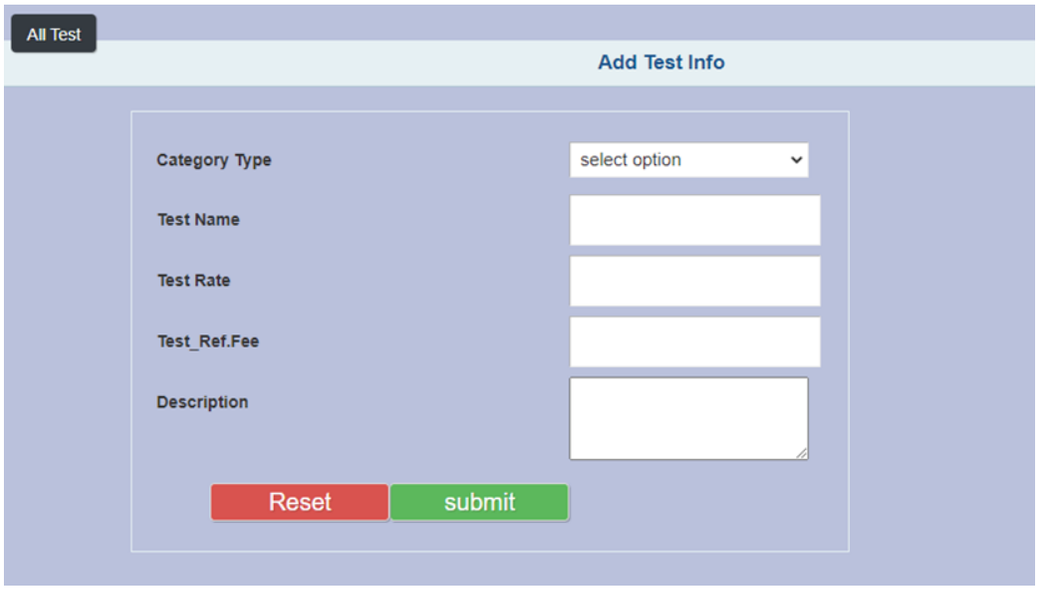

Figure 4.10 1: Test Add

Test List

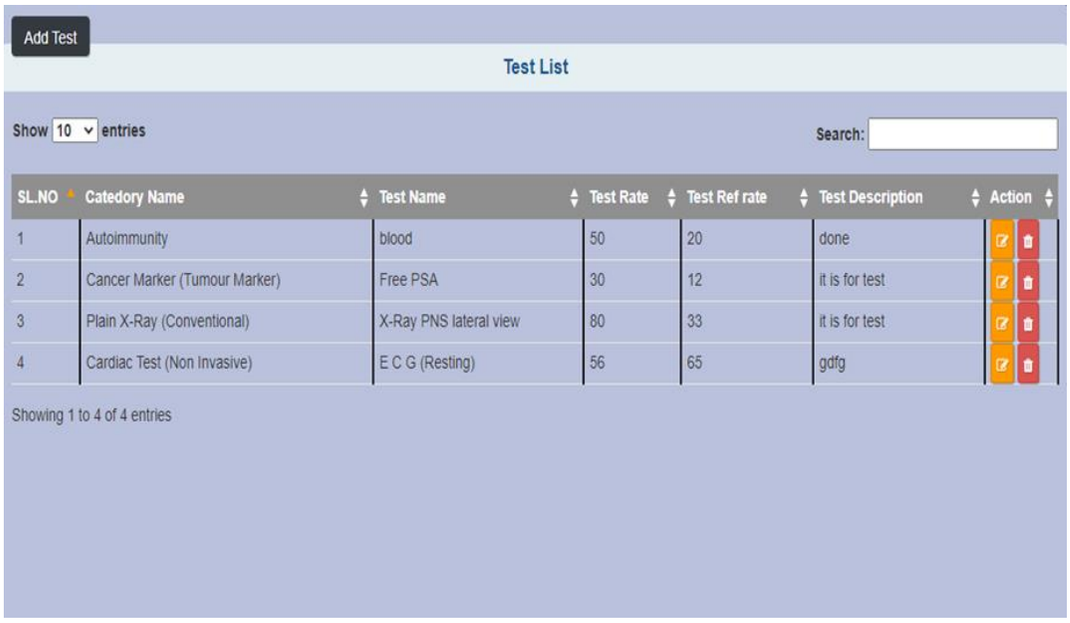

Figure 4.10 2: Test List

4.11 Lab Invoice

Add Invoice

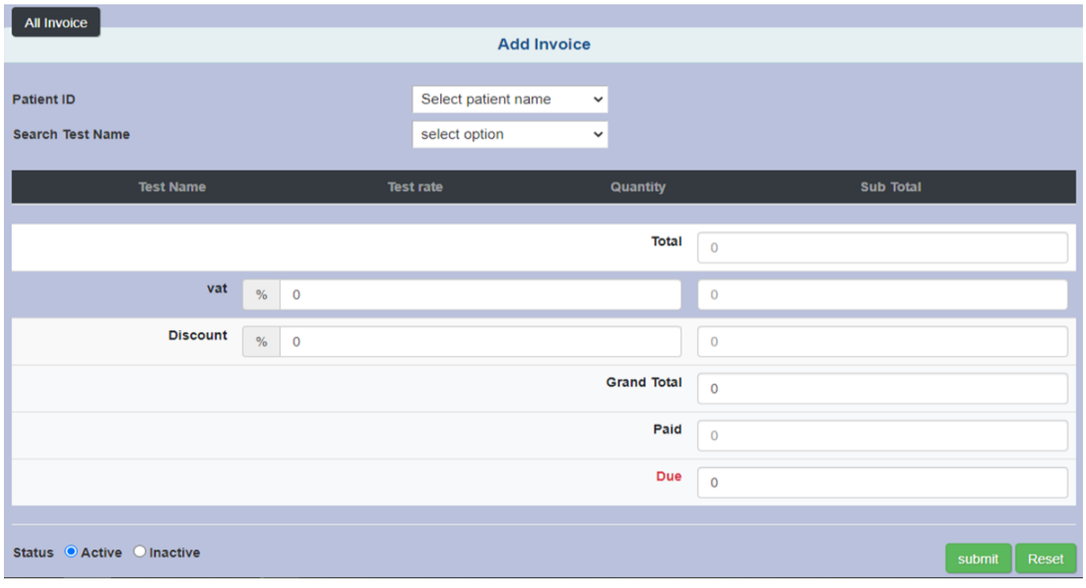

Figure 4.11 1: Lab Invoice Add

Lab Invoice List

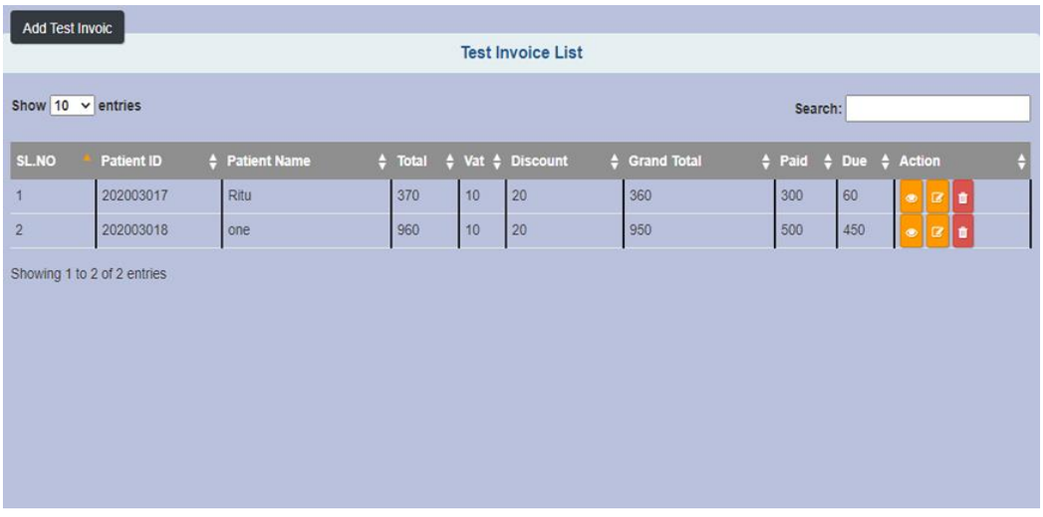

Figure 4.11 2: Lab Invoice List

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Programing Language:

- **PHP**
    - PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language.

- **Laravel Framework**
    - Laravel is a web application framework with expressive, elegant syntax. We've already laid the foundation — freeing you to create without sweating the small things.
- **jQuery**
    - jQuery is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML. Used by over 60% of the 10,000 most visited websites.

- **JavaScript**
    - JavaScript is a dynamic computer programming language. It is most commonly used as part of web browsers.

- **CSS**
    - Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language.

- **HTML**
    - HTML or Hyper Text Markup Language is the standard markup language used to create Web pages. HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>

- **XAMPP**

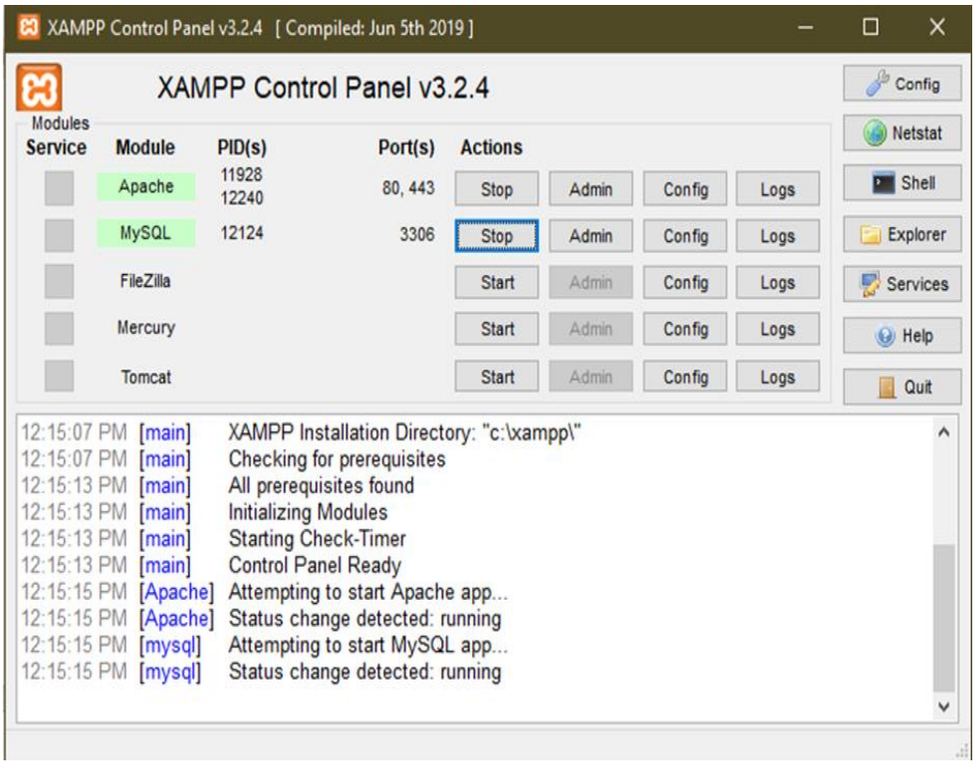

Figure 5.1 1: XAMPP Control Panel

5.2 Database

The database has a lot of tables and other relations. Person's mobile number is used as the primary key. As the mobile number is supposed to be unique so there will not be any clash between any two people on the database.

MySQL workbench was used to design most part of the database. This tool has a very nice Graphical User Interface to help people build their database management system (DBMS) is a computer software application that interacts with the user, other applications, and the database itself to capture and analyze data. A general-purpose DBMS is designed to allow the definition, creation, querying, update, and administration of databases. Well-known DBMSs include MySQL, PostgreSQL, Mongo DB, Microsoft SQL Server, Oracle, Sybase, SAP HANA, and IBM DB2. A database is not generally portable across different DBMSs, but different DBMS can interoperate by using standards such as SQL and ODBC or JDBC to allow a single application to work with more than one DBMS. Database management systems are often classified according to the database model that they support; the most popular database systems since the 1980s have all supported the relational model as represented by the SQL language. Sometimes a DBMS is loosely referred to as a 'database'.

Snap for database

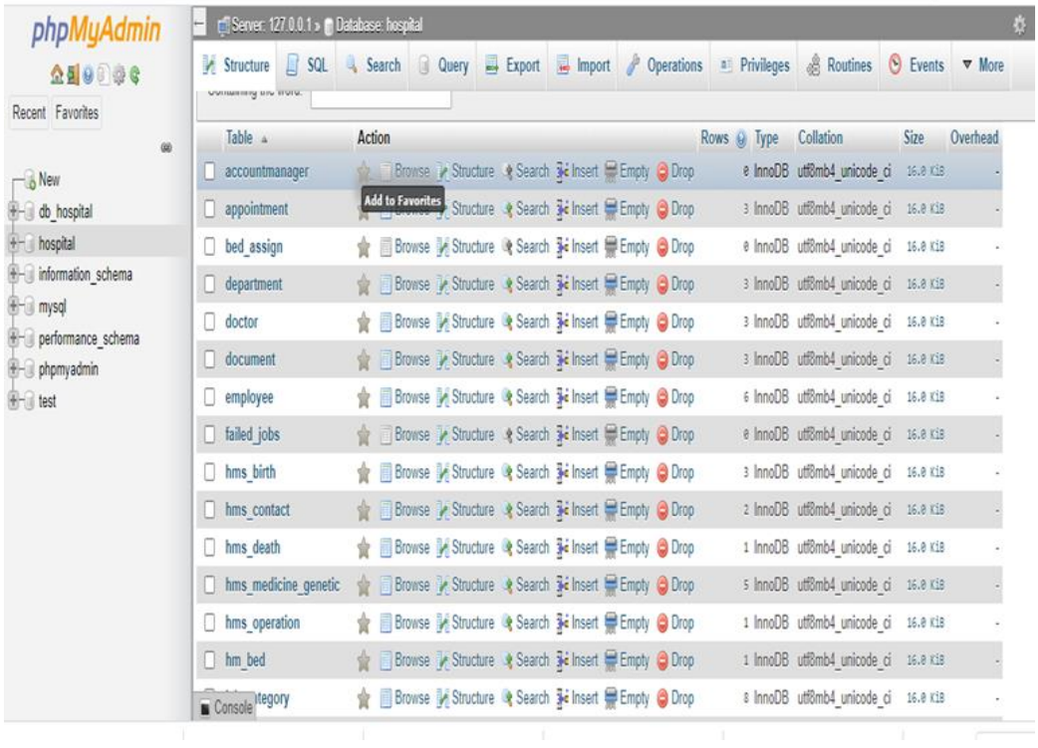

Figure 5.2 1: Database

5.3Analysis:

Benefit for Doctors:

- They will be able to check appointment any time and work accordingly.
- They will have long history of their patients.
- Will not be dependent on patient for any information after the first visit.
- Reduce paper work and working time.

The doctor patient relationship that we know is going to change dramatically with this simple step. People will not be able to chat with a doctor as they can with their friends with many web applications and platforms but the distance between the will certainly come much shorter. While the medical ethics will be very important factor. The doctor–patient relationship is central to the practice of healthcare and is essential for the delivery of high-quality health care in the diagnosis and treatment of disease. The doctor–patient relationship forms one of the foundations of contemporary medical ethics. Most universities teach students from the beginning, even before they set foot in hospitals, to maintain a professional rapport with patients, uphold patients' dignity, and respect their privacy.

Benefit for Patient:

- No waiting no queue.
- Will be able to perform activities from home.
- Can check their details, prescriptions and test reports any time.

5.4 Importance:

A patient must have confidence in the competence of their physician and must feel that they can confide in him or her. For most physicians, the establishment of good rapport with a patient is important. Some medical specialties, such as psychiatry and family medicine, emphasize the physician–patient relationship more than others, such as pathology or radiology.

The quality of the patient–physician relationship is important to both parties. The better the relationship in terms of mutual respect, knowledge, trust, shared values and

perspectives about disease and life, and time available, the better will be the amount and quality of information about the patient's disease transferred in both directions, enhancing accuracy of diagnosis and increasing the patient's knowledge about the disease. Where such a relationship is poor the physician's ability to make a full assessment is compromised and the patient is more likely to distrust the diagnosis and proposed treatment, causing decreased compliance to actually follow the medical advice. In these circumstances and also in cases where there is genuine divergence of medical opinions, a second opinion from another physician may be sought or the patient may choose to go to another physician. Additionally, the benefits of any placebo effect are also based upon the patient's subjective assessment (conscious or unconscious) of the physician's credibility.

In addition, a Canadian physician known as Sir William Osler strongly influenced the behavior of how a doctor should act during bedside with his or her patients. Osler was known as one of the "Big Four" professors at the time that the Johns Hopkins Hospital was first founded. At the Johns Hopkins Hospital, Osler had invented the clinical teaching system where he had taught medical students how to act during bedside or how to tend to the care of the patients in different departments of the hospital

Aspects of relationship:

The following aspects of the doctor–patient relationship are the subject of commentary and discussion.

5.5 Informed Consent:

The default medical practice for showing respect to patients is for the doctor to be truthful in informing the patient of their health and to be direct in asking for the patient's consent before giving treatment. Historically in many cultures there has been a shift from paternalism, the view that the "doctor always knows best," to the idea that patients must have a choice in the provision of their care and be given the right to provide informed consent to medical procedures. There can be issues with how to handle informed consent in a doctor–patient relationship; for instance, with patients who do not want to know the truth about their condition. Furthermore, there are ethical concerns regarding the use of placebo.

5.6 Shared decision making:

Health advocacy messages such as this one encourage patients to talk with their doctors about their healthcare.

Shared decision making is the idea that as a patient gives informed consent to treatment, that person also is given an opportunity to choose among the treatment options according to their own treatment goals and wishes. A practice which is an alternative to this is for the doctor to make a person's health decisions without considering that person's treatment goals or having that person's input into the decision-making process.

The spectrum of a physician’s inclusion of a patient into treatment decisions is well represented in Ulrich Beck’s World at Risk. At one end of this spectrum is Beck’s Negotiated Approach to risk communication, in which the communicator maintains an open dialogue with the patient and settles on a compromise on which both patient and physician agree. A majority of physicians employ a variation of this communication model to some degree, as it is only with this technique that a doctor can maintain the open cooperation of his or her patient. At the opposite end of this spectrum is the Technocratic Approach to risk communication, in which the physician exerts authoritarian control over the patient’s treatment and pushes the patient to accept the treatment plan with which they are presented. This communication model places the physician in a position of omniscience and omnipotence over the patient and leaves little room for patient contribution to a treatment plan.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Future Work

- Modify as a web application targeting all doctors.
- A doctor will get 250mb initial space.
- They have to pay for additional cloud storage to save details of their patients (Example: Prescriptions, Test Reports).
- A mobile application to make things easy and bring them closer.

Cloud implementation is a hard work but the benefit of it cannot be measured. We used to say that everything is moving towards internet. The time has ended for such statement. I believe that we have moved to internet completely. Every major application has something to do with cloud and there are even special versions targeted only for cloud. Every new development has some part directly related to cloud. Cloud is nothing new for us and we have already started to enjoy the fruits of cloud. Clouds can hold major data for our future use and it does not matter which device you are on right now. We did really become very device oriented and the loss of devices would mean a lot of thing for people. Now the picture is completely different. We have adapted to the new machine world where our devices are just mean of our work and clouds provide them the much needed portability.

The introduction of cloud to medical section has already become very popular in many developed countries but we are still behind on this like thousands of other sections. This will bring a new era for our medical services. We have a very different set of people in our country. Our computer knowledge is not enough. We still have a strong group of people who are very good with computers. These day are meant to change and the change will come with our hands. While the whole world is enjoying the benefits of the computer world we cannot simply sit back.Smart phones have become a part of our lives. They provide us thousands of assistive features and we have gladly become depended on this device. Phones are powered by many applications. Which are generally downloaded by users and some default applications preloaded by the company of that smartphone. An application that helps people to carry and check their complete medical record will give people more power. They will be able to check everything on the go while their ability to change or modify any data to make things up to date will always be there. We’re entering a new world of patient-centric healthcare, one in which patients

can be better informed, collect endless data related to their condition, and more fully participate in medical decision making. Patients are now receiving full access to their digital personal medical records which helps in medical patient education about their condition. As a result of these changes, it's natural that patients will also want to use medical algorithms which until now had only been used by medical professionals. In any event, it will be almost impossible to exclude them from access.

6.2 Benefits to Patients Using Medical Algorithms:

There are potential benefits for the patient. Algorithms that collect tractable data can be valuable and are already being used for patients enrolled in clinical trials. When capturing data it is important that it be organized and used and not just simply collected as busy work. A program that analyzes and finds trends in the data is more valuable to clinicians and patients than volumes of raw data.

Algorithms can help to inform patients so that they can make better decisions and give informed consent. They can get a trusted second opinion in seconds or find out why they need to be treated. Algorithms can also give patients a higher level of comfort as they take charge of their own healthcare. Armed with more knowledge, they may also gain a sense of control that will help them better cope with illness.

6.3 Conclusion

This was an excellent project to work on and I have learned a lot of things to complete this project. A lot of new idea and several problems that may happen to a system like this is quite clear for me now. I am not going to claim that this program offers you 100% functionality. It has mind blowing features but while working I have figured out how we can make this more beneficial for us. I have enjoyed this project and I want to keep working on it to give it a better shape. I believe that I can do make this different in a way that people will love the final output. Our creativity makes us different from every other species on this planet. We build tools and machines to make our lives easy and more comfortable. This has begun at a very early age and since then we have never stopped to build or design new things. Due to this creativity our planet has become very something totally different than our ancestors experienced. AI – artificial intelligence is an old concept but our current approach has taken it to a different height. We have been able to build things that has changed the entire thinking process of human civilization. Medical technology has also improved along with other sectors of science. Once people used to die of different diseases but we have overcome those by our advancement in

various sectors. We are now able to perform surgery that people could not even think about a decade ago. Automation in medical sector is still quite new but the question is for how long this will remain new. Researches are advancing to perform diagnosis and prescribe medicine for people without a doctor. Of course there are doctors for supervisions. We are building intelligent tools to take things at a new height. This project is a tiny step towards the vast possibilities that science and computers can make to the medical sector. We have different approaches towards new things. Some people jump towards new things while others just sit back. This has been the case for human and it will continue. But new tools are coming every now and then. Science will keep on its journey and so will our human society. I am very proud to be a part of this work and very hopeful that someday this will be the reality of your hospital experience.

REFERENCES

[1]. PHP Tutorials, Visited date: 07-07-2020, http://php.net/,
[2]. http://en.wikipedia.org/wiki/PHP
[3]. http://codecanyon.net/item/bayanno-hospital-management-system/5814621
[4]. http://en.wikipedia.org/wiki/JQuery
[5]. http://en.wikipedia.org/wiki/JavaScript
[6]. http://en.wikipedia.org/wiki/Firebug_(software)
[7]. https://netbeans.org/
[8]. http://en.wikipedia.org/wiki/NetBeans
[9]. http://www.wampserver.com/en/
[10]. http://stackoverflow.com/
[11]. http://en.wikipedia.org/wiki/HTML
[12]. http://en.wikipedia.org/wiki/Cascading_Style_Sheets
[13]. https://en.wikipedia.org/wiki/Database
[14]. https://en.wikipedia.org/wiki/Doctor%E2%80%93patinterrelationship
[15]. http://blog.medicalalgorithms.com/how-algorithms-help-with-medical-patient-education/

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