

“A Software For Managing Smart Diagnostic Center”

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**This Report Presented in Partial Fulfillment of the Requirements for the Degree of
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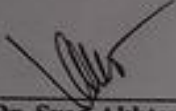
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APPROVAL

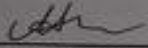
This Project titled "A SOFTWARE FOR MANAGING SMART DIAGNOSTIC CENTER", submitted by ARIF HASAN ID: 152-15-5941 AND MAHABUBUL HASAN ID: 141-15-3129 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering (BSC) and approved as to its style and contents. The presentation has been held on APRIL 2019.

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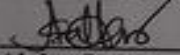
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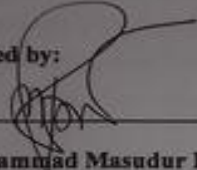
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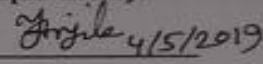
We hereby declare that, this project has done by us under the supervision of **Mr. Mohammad Masudur Rahman**, Lecturer, Department of CSE, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or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

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I also want to thank all my faculties and friends for their constant help throughout the whole time. I could not have done it without their help.

I want to thank god for helping me to complete this work in every single step.

ABSTRACT

Our main objective is to plan and smart diagnostic system that will improve emergency diagnostic center experience for patients and medical specialist. The entire framework will keep running internet through websites. Clients will have felicity to sign in form wherever with web association. After that they will almost certainly different undertakings that are intended for them. Clients are classified in their three gatherings patients' doctors and management. The essential target is to concentrate on each client who can get our administration and get profit. A specialist can distinctive shorts of patients and the quantity of patients additionally change from specialist to specialist. A specialist can have different number of patients and admin can accept that specialist will require major of distributive storage. Admin can designate a fixed distributed storage for every specialist. They can request additional capacity agreeing their interest and they will be search for their interest. The patients will have some apportioned space which they can use to keep their data.

Remembering the objective, the framework we created fells is as an interpersonal organization where data's are the more close and pertinent for each client. This report contains the full subtleties of the framework

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The activities of smart diagnostic center are including patient and doctors. The administration wants to store Patient record. Diagnostic center store worker information. This website stores all information of patient, doctors, and employer staff. An employer can know about their all activities from this software. Using this software, doctors can access all information of patients including previous treatment record. This is maintaining by admin and hospital administration. Admin can add or update data in this website database. This website is very user friendly. By using this website and user can easily collect all information of doctors and their treatment. Patient can see doctor schedule and appoint they're for treatment at their required time. Patient can also booked specific doctor and give payment to clinic administration through this website.

Appropriate guidelines and destination are set down for each procedure and area of the clinic which result guaranteeing satisfaction of the patient.

1.2 Objectives

The software is used in computerization way of clinic.

This software is maintained by an admin and user.

Software functions:

- Patient's details maintain.
- Provides all kind of test details for patients.
- Providing billing and report generation.
- The record and result of all test will store in database.
- Admin can search patient's records by input patient's id.
- Admin can search doctor's information by input specific doctor id.

1.3 Problem Definition

Lack of quick recovery: if doctor want to update any information of patient's doctors have to go administration panel.

Quick information stock peeling: data has been made in various exchanges and it should be investing important and accurate spots.

Calculation error: when admin will input in that system the server can take long time to response.

1.4 Project Report Layout

Login module: in that module admin can just input their id and then login in systems.

Doctor's module: In that module admin can add doctor's name, email, address, phone number, doctors' qualifications, profile pictures. This information will be store in list of doctor's page. If admin input some information wrongly then admin can edit that information. If any doctor left from this diagnostic center, then admin can remove all information from this software

Patient's module: In that section admin can add patients deatails.when admin adds patients then patients can can see the dortors list and decide the doctors which they want to appoint. Then admin finally input the patients name,email,phone number and address, sex,blood group,brith of date. After input all of these information this will store in patients database.admin can also edit and delete information if they needed.

Appointment module: Admin can crete 2 types of appoinmant. There are toaday and upcoming appainment. For fix todays appainment admin can input patients name,doctor name,date,start time and end time. Admin can also input types diseases. This information will store in all options in appainments. Admin can delete patients information if they needed.

Test module: In that module admin can input test category name, description of that test details, and the price of test category. They can also input doctor's commission rate and test type. After input all that information this will store in list of all tests. Admin can edit, delete and print this document if needed.

My dashboard module: In that module there all option will show for my software including doctos, patients, appointments and tests informations. besides toadays sales,todays expenses, today reagents purchases and reagents stock will show in this dashboard.

1.5 Expected Outcome

We designed this smart diagnostic to replacing the previous manual system and it was just paper-based. It helps to provide patients information and doctor information. This software will also provide all test report and treatment for every patient and it will store in that website database for further use. This service will be provided in efficient, cost effective ways to reduce more time and paper work.

CHAPTER 2

BACKGROUND

2.1 Introduction

There is many diagnostic related software now a days but there are not too many which provides the patients functionality. Though the hospital system has been automated but the benefits are not all. For solve this problem I have figured out there should be some activities for patients through admin of diagnostic. There should some features for checking appointment, asking for appointment, prescription and test reports so that they can reduce the hassle up to 70 to 80 percent. This is the sector we thought we have many things to do. We know that the world is changing very firstly with internet so we have thought we can something taking help of internet. Patient's functions related work is very important for a clinic because if a clinic organization cannot provide much functionality for patients it will not the proper website. As I known all of this factor by visit many hospitals related website. So, we have come out a long way with maximizing benefit for all. I think this website will very helpful and effective for patients and users.

Least Hardware Required:-

Processor – Intel® Atom™ Processor N2600 (1M Cache, 1.6 GHz) of RAM –4 GB o HDD - 1 GB (For introducing)

Programming Required:-

1. Html
2. CSS
3. JavaScript
4. JQuery
5. Bootstrap
6. PHP

2.2 Related Work

www.squarehospital.com is a web application where patient can easily take their treatment.

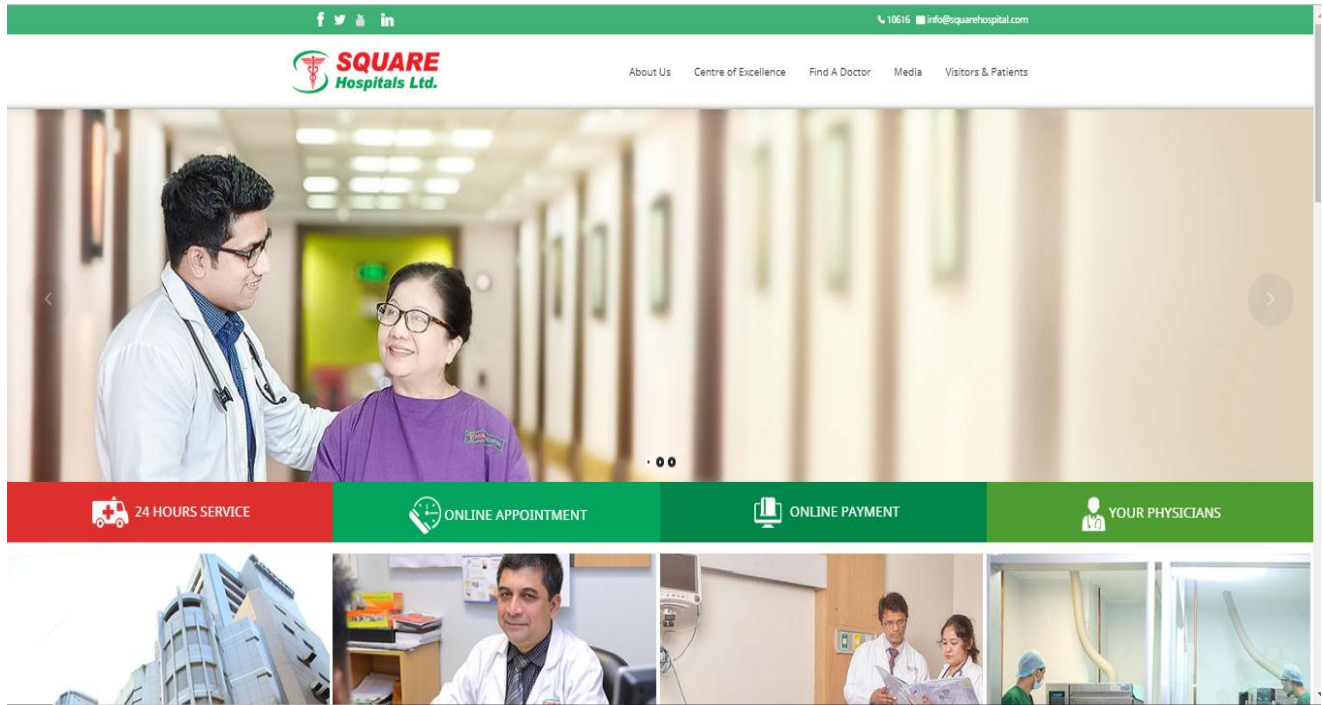



Fig: 2.2.1 squarehospital.com

Online Payment 

Admission Number : *

Registration Number : *

Check Status

Amount : * (Max 5,00,000.00 BDT)

Online Charge : 2.25%

Net Payable Amount :

I agree with the [Terms & Conditions](#)

PAY BILL

Fig 2.2.2: online payment

Comparative studies: All of these software are useful to patients. They have lacking in time diagnostic center. But in our project we have an advantages .patient can easily take their treatment.

Scope of project:

We tried our best to make smart diagnostic center. It is part and parcel in our day to life, everyman want to do easily if we use this software, and we can easily save our time .but we have been able to overcome of this problem.

2.3 Feasibility Study

"Amplitude studio" is provided with a trial of its effectiveness, the impact of the organization, the ability to deal with issues and effective use of resources. It centers on these real problems:

How do the client's verifiable demand and how does one applicant's framework fill them? What is hopeful for hopeful structures? What is the potential impact of the competitive structure of the Association? What is the value of tackling it? During the investigation of achievement for this.

Initiative, the required areas of premium should be considered. This work related to investigation and other framework related discoveries. Venture of the Executive Investigation: The following are the steps of the appropriate Creator:

- 1) Name an assignment group and name a task head.
- 2) Framework ready flowcharts.
- 3) Count the possible proposed structures.
- 4) Define and define the proposed structure.
- 5) Assessment and evaluation of each proposed framework financially and evaluation.
- 6) Weight framework execution and cost information.
- 7) Select the best suggested structure.
- 8) The latest initiative to prepare the Mandate on the Board and report.

Front-end choice:

- 1) It should have a graphical UI that helps the IT Foundation employees.
- 2) Scalability and Extensibility.
- 3) Flexibility
- 4) Strength.
- 5) According to the needs of the association and the way of life.
- 6) Great publisher with great print support must be decorated highlights.
- 7) Platform Free.
- 8) Easy to solve the problem and keep up.
- 9) Event-driven programming office.
- 10) Front end will help to some common back end like MS Access. According to the above highlighted highlights, we chose VB6.0 as the front-end for our task.

2.4 Functional Requirement

Enrollment

Add Patients - Clinic Board Structure Framework will allow workers in front work area to add new patients. Employment ID-Emergency Emergency Clinics will allow workers in front-of-work workers to give an ID to each patient and to add a patient record. This ID will be used by the patient in his clinical clinic. The clinical executive structure will create a report on the patient with the patient's name, such as' telephone number and specialist name.

Patient's compulsory information-Each patient will have the necessary information, including the required name, last name, telephone number, address, city, understanding number.

2.5 Non Functional Requirement

Performance

Response time - This system will respond to sometime after verifying patient information. User Interface - The user interface screen will be reported in some time. Similarity - The system is compatible with Microsoft Accessibility.

2.6 Challenges

Challenges is part of our day to life .It is part and parcel in our day to life. We have faced many difficult problems in our project. We need to make numerous filters, which is extremely hard to compute. Additional difficult undertaking was making channel of the conceivable outcomes of students, dropout utilizing choice tree. Keeping good Quality of the web app was the most challenging part.

CHAPTER 3:

REQUERMENT SPECIFICATION

3.1 Requirement Analysis and Collection

I have general composition requirements.

Given them bellow:

- ❖ Create Doctors and details information.
- ❖ Create Patients and details information.
- ❖ Appointment System and details information.
- ❖ Sales details.
- ❖ Test details.
- ❖ Details all the cost and expense of any diagnostic center.
- ❖ Details all achievement of any diagnostics center, Etc.

3.2 Use case modeling and design

Use case model diagram is very important for a project. It is important to draw a use case diagram before starting a project. Here is our project Use case model.

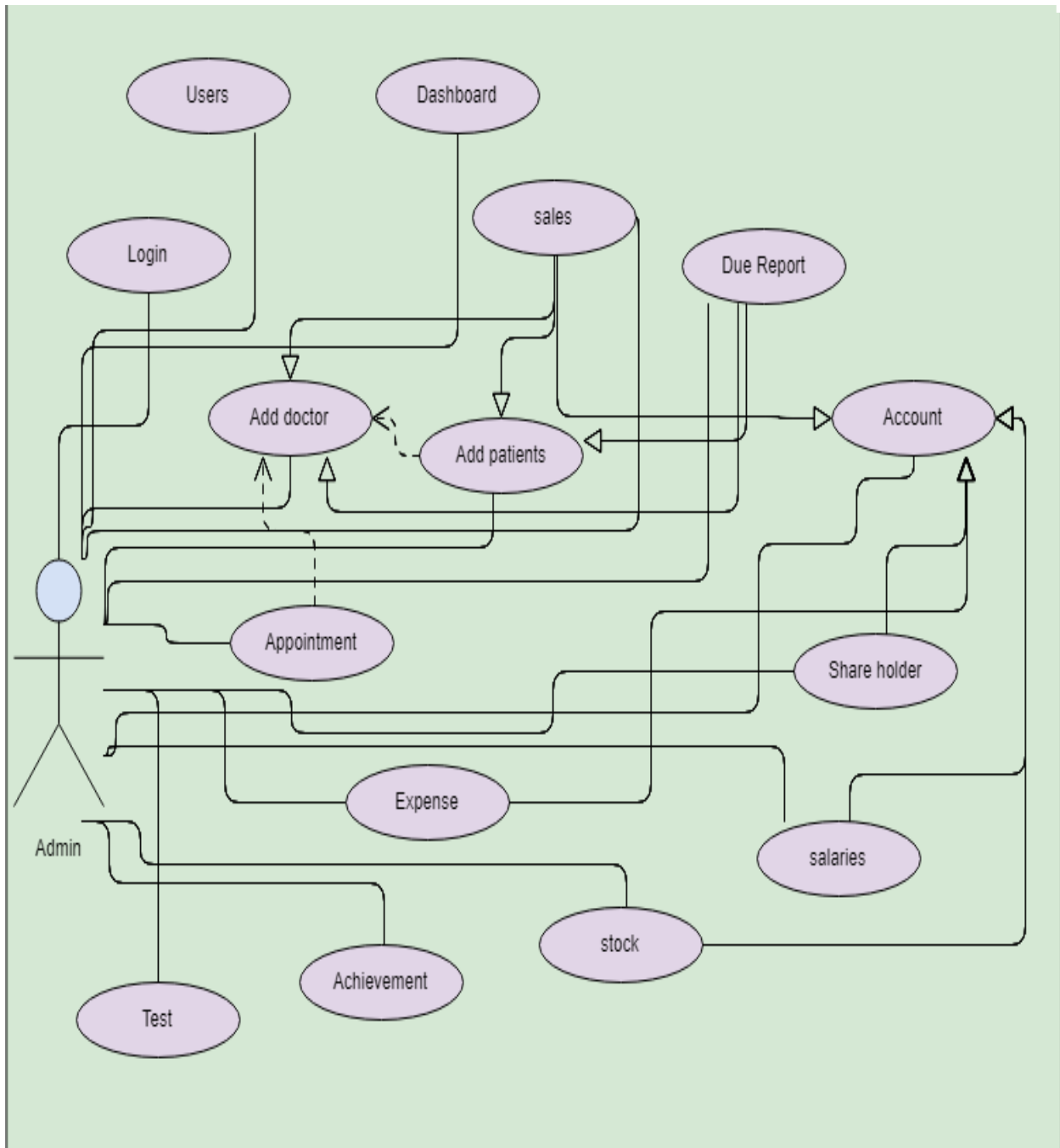


Fig 3.1: use case diagram

3.3 DFD process Model

DFD model diagram is very important for a project. It is important to draw a DFD model diagram before starting a project. Here is our project DFD model.

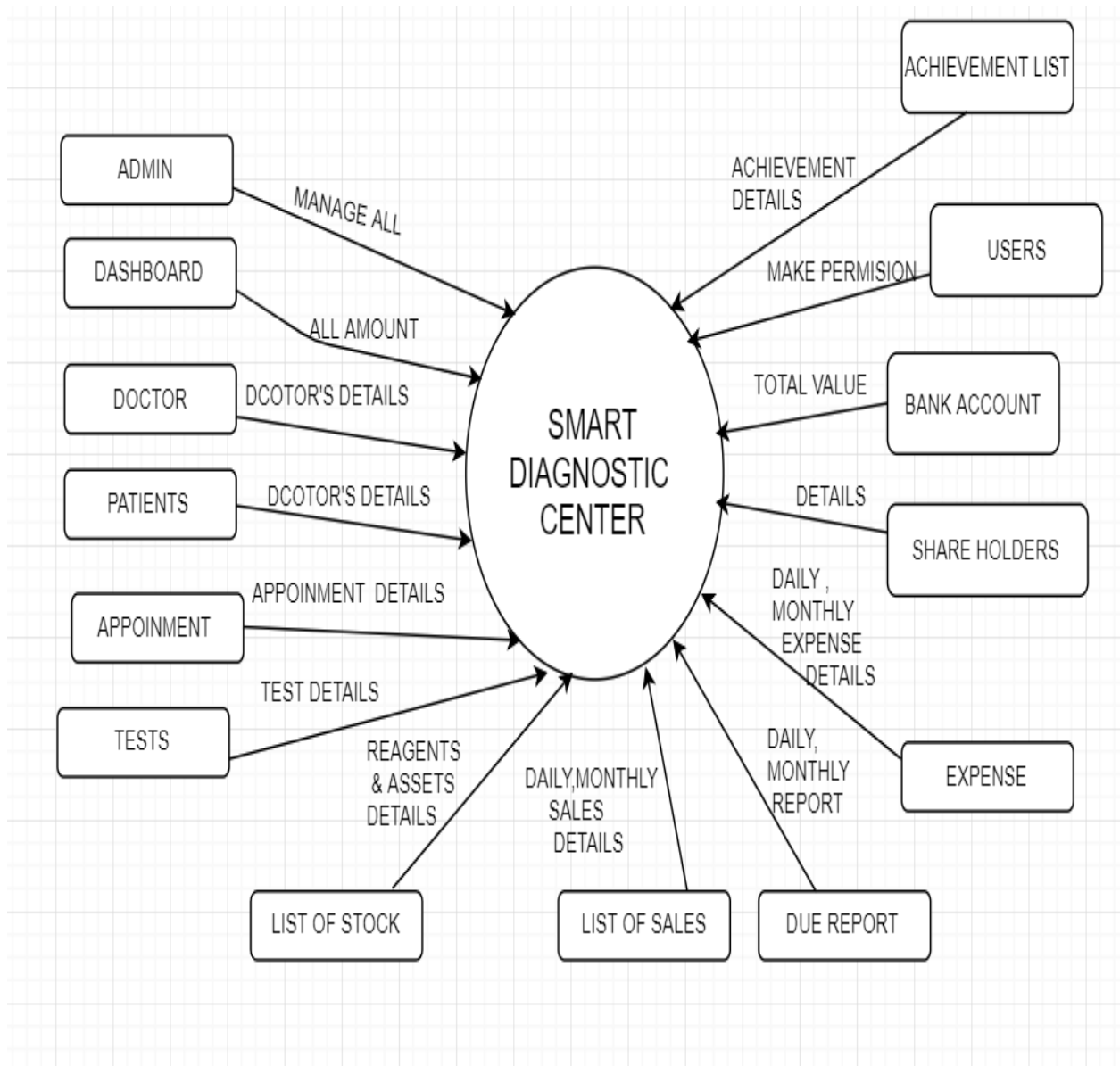


Fig 3.2: Data flow diagram

3.4 ER-diagram

ER -diagram is very important for a project. It is important to draw an ER-diagram before starting a project. Here is our project ER diagram.

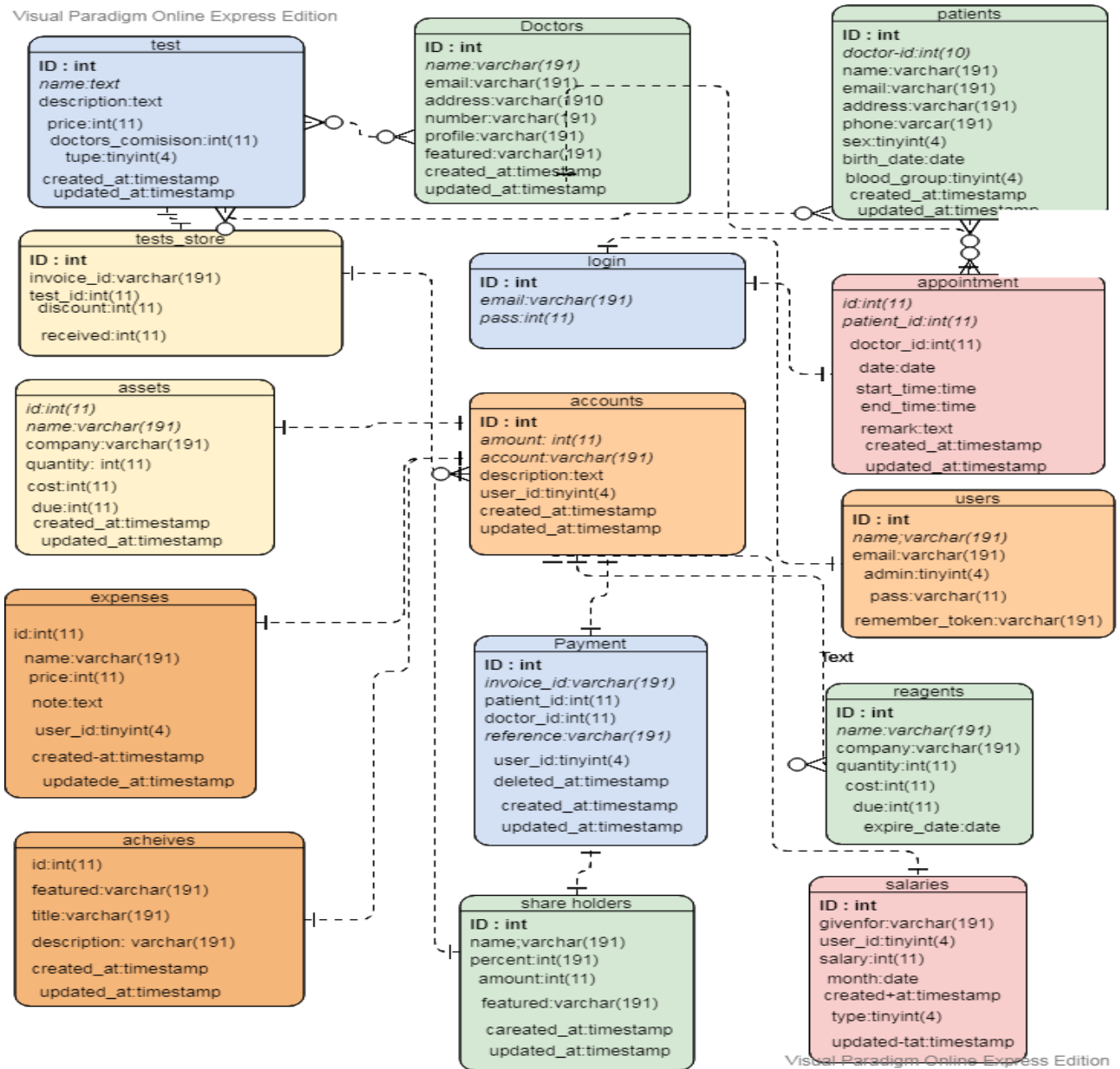


Fig 3.3: ER-Diagram

CHAPTER 4

IMPLEMENTATION AND TESTING

4.1 Implementation of database

- ❖ Structure wise SQL queries set by follow with a single deal to serve the principle
- ❖ Necessary to produce Database user by the position.
- ❖ DBMS system implemented structural process to utilize a data base request. Explain this process:
 - From SQL request goes to SQL server and saved it into the code cache.
 - The parsed code move to SQL enforcer
 - After that the request checks the user agreement for specific table.
 - After that settlement being start.
 - Until finish the settlement respected table's stores in cache.
 - Once settlement done, the updated information of table being stores in Disks.

Directory:

Server: 127.0.0.1 » Database: Invt_diagnostic

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
accounts	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16 KiB	-
achieves	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	16 KiB	-
appointments	★ Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_unicode_ci	16 KiB	-
assets	★ Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_unicode_ci	16 KiB	-
doctors	★ Browse Structure Search Insert Empty Drop	10	InnoDB	utf8mb4_unicode_ci	16 KiB	-
expenses	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	16 KiB	-
migrations	★ Browse Structure Search Insert Empty Drop	18	InnoDB	utf8mb4_unicode_ci	16 KiB	-
password_resets	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16 KiB	-
password_resets	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16 KiB	-
patients	★ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	16 KiB	-
payments	★ Browse Structure Search Insert Empty Drop	15	InnoDB	utf8mb4_unicode_ci	16 KiB	-
profiles	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16 KiB	-
reagents	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	16 KiB	-
salaries	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16 KiB	-
settings	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16 KiB	-
share_holders	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	16 KiB	-
tests	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	16 KiB	-
test_stores	★ Browse Structure Search Insert Empty Drop	8	InnoDB	utf8mb4_unicode_ci	16 KiB	-
users	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	32 KiB	-
18 tables	Sum	90	InnoDB	latin1_swedish_ci	304 KiB	0 B

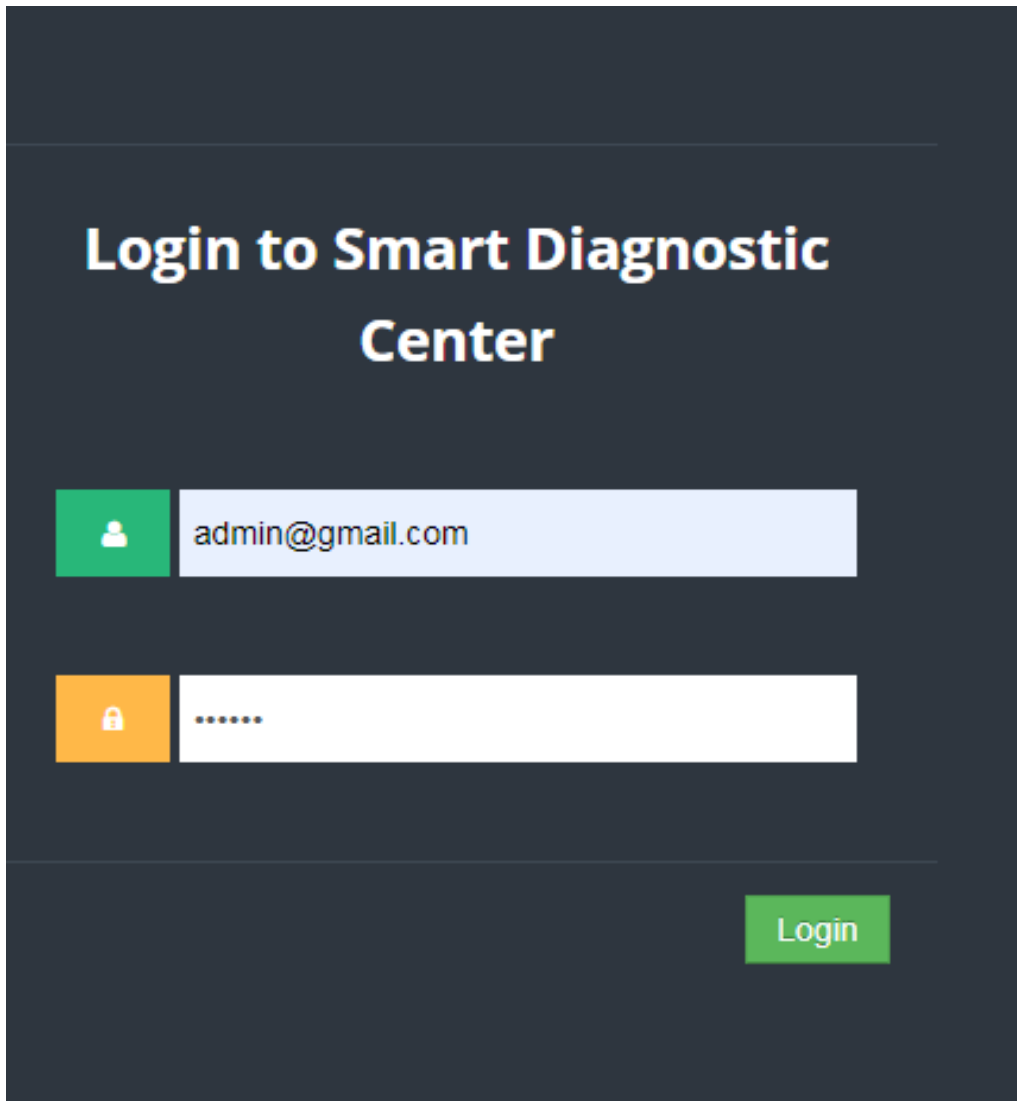
Console Check all With selected:

Fig 4.1: Directory

4.2 Implementation and interaction

Admin Login

Here is our login option. When admin login that he start all the work in this software.



The image shows a login page with a dark blue background. At the top, the text "Login to Smart Diagnostic Center" is displayed in white. Below this, there are two input fields. The first field has a green icon of a person and contains the text "admin@gmail.com". The second field has an orange icon of a padlock and contains six dots. At the bottom right, there is a green button labeled "Login".

Fig4.2: Login page

Home Page

This is my dashboard page. there all option will show for my software including doctos, patients, appointments and tests informations. besides todays sales,todays expenses, today reagents purchases and reagents stock will show in this dashboard.

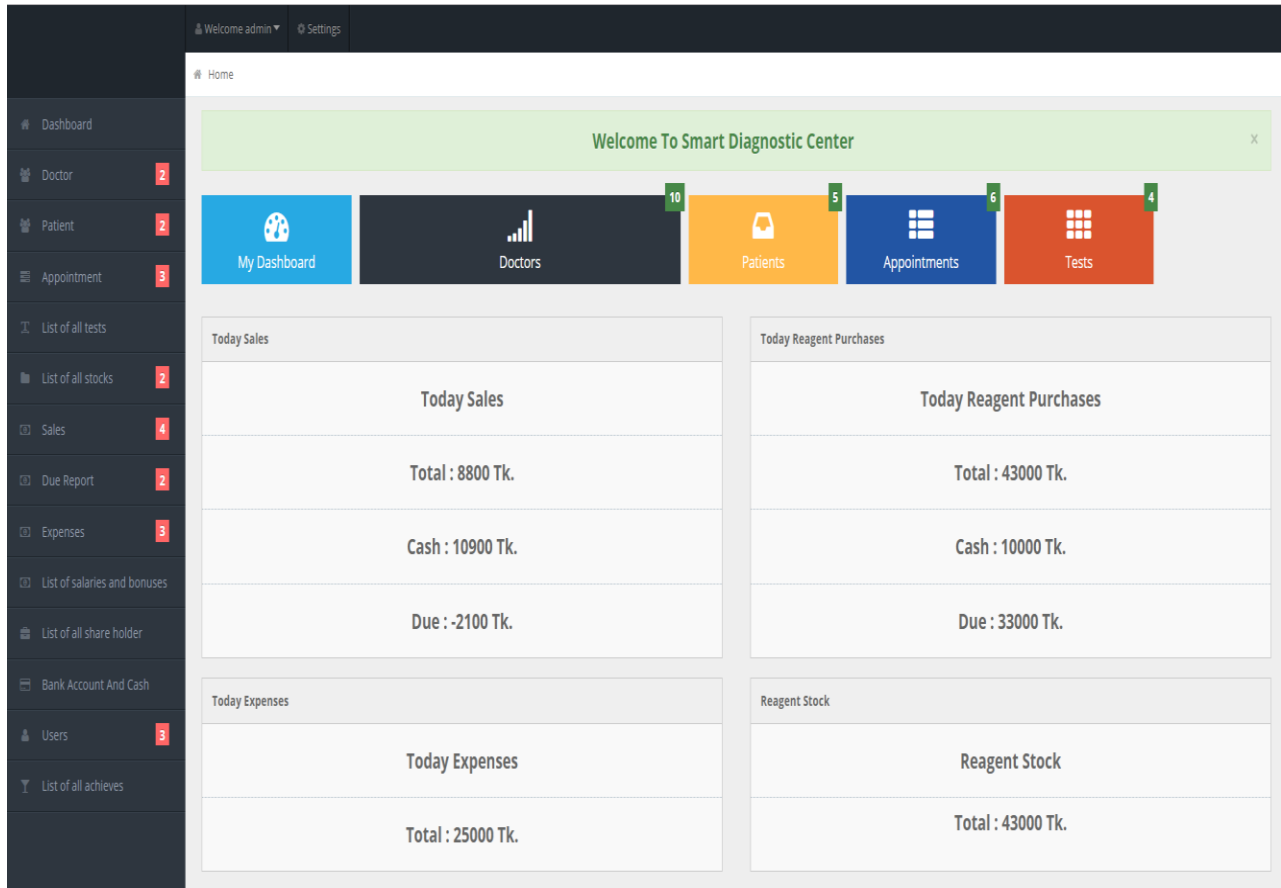


Fig 4.3: Home page

Doctor Page

In that section we can add doctors name, email, Address, phone number, doctor's qualifications, profile pictures. This information will be store in list of doctor's page. If admin input some information wrongly then admin can edit that information. If any doctor left from this diagnostic center then admin can remove all information from this software.

The screenshot displays the 'List of Doctors' page. The page header includes 'Welcome admin' and 'Settings'. The sidebar on the left lists various navigation options with red notification badges: Dashboard, Doctor (2), Patient (2), Appointment (3), List of all tests, List of all stocks (2), Sales (4), Due Report (2), Expenses (3), List of salaries and bonuses, List of all share holder, Bank Account And Cash, Users (3), and List of all achieves. The main content area is titled 'List of Doctors' and features an 'Add New' button and a 'Print' button. Below these is a table with 8 columns: Doctor Id, Name, Email, Address, Phone, Profile, and Options. The Options column contains 'Edit' and 'Delete' buttons for each doctor. The table contains 8 rows of doctor information.

Doctor Id	Name	Email	Address	Phone	Profile	Options
1.	Dr. ATM Mowladad Chowdhury	Mowladad11@gmail.com	Dhanmondi 32	01740306738	Consultant - Urology, MBBS	Edit Delete
2.	Prof. Dr. Sheikh-M.-Abu-Zafar	AbuZafa10@gmail.com	mirpur10	01723456371	Senior Consultant Surgeon, MBBS	Edit Delete
3.	Dr. Tahera Nazrin	tahera90@gmail.com	mirpur11	01722364790	Cardiology, MBBS	Edit Delete
4.	Prof. Fazila-Tun-Nesa Malik	Nesamalik33@gmail.com	mirpur10	01919887654	Professor & Chief Consultant Cardiology	Edit Delete
5.	Dr. Jesmin Hossain	Jesminhossain11@gmail.com	mirpur 2	01670809875	Assistant Professor & Consultant Pediatric Cardiology	Edit Delete
6.	Professor Dr. (Rtd) N.I. Khan	khanrtd@gmail.com	mirpur 1	01867987643	Medicine Specialist, MBBS	Edit Delete
7.	Lt. Col. Dr. AKM Azizur Rahman	Azizurrahman110@gmail.com	Savar	01887234512	Medicine Specialist, MBBS, FCPS	Edit Delete
8.	Dr. Md. Fazal Karim	Fazalkarim99@gmail.com	Badda	01917556643	Medicine, Lever, Gastric Specialist	Edit Delete

Fig 4.4: All Doctors List

Patients Page

In that section admin can add patients details. when admin adds patients then patients can see the doctors list and decide the doctors which they want to appoint. Then admin finally input the patients name, email, phone number and address, sex, blood group, birth of date. After input all of these information this will store in patients database. admin can also edit and delete information if they needed.

The screenshot displays the 'List of Patients' interface. At the top, there is a navigation bar with 'Welcome admin' and 'Settings'. Below it, a breadcrumb trail shows 'Home > List of patients'. The main heading is 'List of Patients', followed by a green 'Add New' button and a 'Print' button. The 'Patient Database' section includes a 'Show 10 entries' dropdown and a search box. The table below lists five patients with their IDs, names, phone numbers, addresses, and edit/delete options.

Patient Id	Name	Phone	Address	Options
1.	mahbub Hasan	01755815133	mirpur12	Edit Delete
2.	Dhruba	01740306739	Dhanmondi 32	Edit Delete
3.	Rifa	01916219190	mirpur12	Edit Delete
4.	Arif hasan	01768060644	Dhanmondi 32	Edit Delete
5.	Sammi akther	01765432109	Badda	Edit Delete

At the bottom right of the table, there is a pagination control with buttons for 'First', 'Previous', '1' (selected), 'Next', and 'Last'.

Fig 4.5: All Patients List

Appointment Page

Admin can create 2 types of appointments. There are today and upcoming appointments. For today's appointments, admin can input patient's name, doctor name, date, start time, and end time. Admin can also input types of diseases. This information will be stored in all options in appointments. Admin can delete patient information if needed.

The screenshot displays the 'List of Appointments' page. The page title is 'List of Appointments' with a green 'Add Appointment' button. A 'Print' button is also visible. Below the title, there is a search bar and a 'Show 10 entries' dropdown. The main content is a table with the following data:

ID	Patient	Doctor	Date & Time	Remarks	Options
1	mahbub Hasan	Dr. ATM Mowladad Chowdhury	2019-03-29 : 18:00:00 - 18:20:00	headache problem	Delete
2	Arif hasan	Prof. Fazila-Tun-Nesa Malik	2019-03-29 : 20:00:00 - 20:20:00	Heart disease problem	Delete
3	Sammi akther	Dr. Md. Fazal Karim	2019-03-29 : 19:40:00 - 20:00:00	Liver Disease problem	Delete
4	Rifa	Dr. Md. Al - Amin Miridha	2019-03-31 : 18:00:00 - 18:15:00	Allergies	Delete
5	Dhruba	Dr. Tahera Nazrin	2019-03-31 : 20:30:00 - 20:50:00	Infectious Diseases	Delete
6	Sammi akther	Dr. Jesmin Hossain	2019-04-02 : 19:20:00 - 19:35:00	Scleroderma	Delete

At the bottom right of the table, there are pagination controls: 'First', 'Previous', '1' (selected), 'Next', and 'Last'.

Fig 4.6: All Appointment List

Test Page

In that section admin can input test category name, description of that test details, and the price of test category. They can also input doctor's commission rate and test type. After input all those information this will store in list of all tests. Admin can edit, delete and print this document if needed.

The screenshot displays the 'All Tests' page. At the top, there is a navigation bar with 'Welcome admin' and 'Settings'. Below it, a breadcrumb trail shows 'Home > List of all tests'. The main content area features a large heading 'All Tests' and a green button labeled 'Add New Test Category'. A 'Print' button is also visible. Below these is a table titled 'All Test Categories'. The table has a search bar and a 'Show 10 entries' dropdown. The table contains four rows of test categories, each with an 'Edit' and 'Delete' button in the 'Options' column.

No.	Name	Description	Category Price	Doctors Comission (%)	Type	Options
1.	ECG	Heart disease	300 Tk.	10 %	Diagonostic Test	Edit Delete
2.	MRI	Brain injury	1200 Tk.	15 %	Diagonostic Test	Edit Delete
3.	Abdominal X-Ray	belly pain	400 Tk.	5 %	Diagonostic Test	Edit Delete
4.	THYROID BLOOD TESTS	hormones problem	750 Tk.	20 %	Diagonostic Test	Edit Delete

Fig 4.7: All Test List

Stock Page

There are two types of list of stocks. There are list of reagents and list of assets.

List of Reagents: If reagents is needed for this center they can buy those reagents from this section by input their name, company name, quantity, total cost ,status and expire date. Admin can also update and delete that information if they needed. Those information will store in all list of reagents.

The screenshot displays the 'List Of All Reagents' page. The page title is 'List Of All Reagents'. There is a green button labeled 'Add New Reagent' and a 'Print' button. Below the buttons is a search bar and a 'Show 10 entries' dropdown. The main content is a table with the following data:

No.	Reagent Name	Reagent From Company	Quantity	Total Cost Of Reagent	Due Of Reagent	Expire Date	Status	Option
1.	Acid Red	Pharmaceutical Company	5	3000 Tk.	0	2019-03-29	Expired	Edit Delete
2.	Karl Fischer	Melon Chemicals	5	10000 Tk.	2000	2019-03-28	Expired	Edit Delete
3.	Barium Sulphate	IMPRESS CHEMICAL BD.	10	10000 Tk.	1000	2019-03-30	Not Expired	Edit Delete
4.	Commercial Chemica	Maritime Entrepreneurs Pte. Ltd.	20	20000 Tk.	30000	2019-04-02	Not Expired	Edit Delete

At the bottom of the table, there are navigation buttons: First, Previous, 1 (selected), Next, Last.

Fig 4.8: All Reagents List

List of Assets: If any instrument is needed for this center they can buy those instruments from this section by input their name, company name, quantity, total cost, due. Admin can also update and delete those information if they needed. Those information will store in all list of assets.

The screenshot displays a web application interface for managing assets. The sidebar on the left contains navigation links such as Dashboard, Doctor (2), Patient (2), Appointment (3), List of all tests, List of all stocks (2), Sales (4), Due Report (2), Expenses (3), List of salaries and bonuses, List of all share holder, Bank Account And Cash, Users (3), and List of all achieves. The main content area is titled 'List Of All Assets' and features an 'Add New Asset' button and a 'Print' button. Below these is a table with the following data:

No.	Asset Name	Asset From Company	Quantity	Total Cost Of Asset	Due Of Asset	Option
1.	x-ray machine	Dragon Medical Equipment (ZJG) Co.Ltd.	2	400000 Tk.	150000	Edit Delete
2.	ECG Machine	Pharmaceutical Company	5	150000 Tk.	0	Edit Delete
3.	Hospital Bed	Pharmaceutical Company	30	500000 Tk.	200000	Edit Delete
4.	Bowl Stand	Ablation Pharmaceuticals Ltd.	20	120000 Tk.	20000	Edit Delete
5.	PC	LG ltd	20	600000 Tk.	200000	Edit Delete
6.	scanner	Radix Flameproof Scanner ltd	10	450000 Tk.	50000	Edit Delete

The table also includes a search bar and pagination controls at the bottom right, showing 'First', 'Previous', '1', 'Next', and 'Last'.

Fig 4.9: All Assets List

Sales Pages

There are four types of sales .They are list of sales, daily sales, monthly sales, returned sales list.

List of sales: Here admin input patients name, doctors name reference name. After submitting this information admin will add test name, discount and current received amount for this test. After input those information software will provide a voucher those information. Admin can delete that voucher if they need.

The screenshot shows the 'List of Sales' page. The sidebar on the left contains navigation items with red notification counts: Doctor (2), Patient (2), Appointment (3), List of all tests, List of all stocks (2), Sales (4), List of sales (highlighted), Daily Sales, Monthly Sales, Returned sales list, Due Report (2), Expenses (3), and List of salaries and bonuses. The main content area has a breadcrumb 'Home > List of sales', a title 'List of Sales', an 'Add Sale' button, and a 'Print' button. Below is a table with 11 columns: Invoice Id, Patient, Doctor, Date, SubTotal, Discount, Grand Total, Paid Amount, Due Amount, Invoice Taken By, and Action. The table contains 5 rows of sales data.

Invoice Id	Patient	Doctor	Date	SubTotal	Discount	Grand Total	Paid Amount	Due Amount	Invoice Taken By	Action
290320191553841836	mahbub Hasan	Dr. ATM Mowladad Chowdhury	Friday 29 March 2019	1200	200	1000	1200	-200	admin	View
290320191553842038	Rifa	Dr. Md. Al - Amin Mridha	Friday 29 March 2019	0	0	0	0	0	admin	View
290320191553842086	Arif hasan	Prof. Fazila-Tun-Nesa Malik	Friday 29 March 2019	750	200	550	1000	-450	admin	View
290320191553842116	mahbub Hasan	Dr. ATM Mowladad Chowdhury	Friday 29 March 2019	1200	200	1000	3000	-2000	admin	View
290320191553842212	Sammi akther	Dr. Tahera Nazrin	Friday 29 March 2019	0	0	0	0	0	admin	View

Fig 4.10: All Sales List

Daily sales: Here admin input patients name, doctors name reference name. After submitting this information admin will add test name, discount and current received amount for this test. After input those information software will provide a voucher those information. Admin can delete that voucher if they need.

Monthly sales: Here admin input patients name, doctors name reference name. After submitting this information admin will add test name, discount and current received amount for this test. After input those information software will provide a voucher those information. Admin can delete that voucher if they need.

The screenshot displays a web application interface for managing sales. On the left is a dark sidebar with navigation items: Dashboard, Doctor (2), Patient (2), Appointment (3), List of all tests, List of all stocks (2), Sales (4), List of sales, Daily Sales, Monthly Sales (highlighted in green), Returned sales list, and Due Report (2). The top header shows 'Welcome admin' and 'Settings'. The main content area is titled 'List of Sales' and includes an 'Add Sale' button and a 'Print' button. Below this is a section for 'Monthly Payments' with a search bar and a table. The table has columns for 'No.', 'Month', and 'Grand Total'. One entry is visible: No. 1, Month March 2019, Grand Total 6600. At the bottom right of the table are pagination controls: First, Previous, 1 (selected), Next, Last.

No.	Month	Grand Total
1	March 2019	6600

Fig 4.11: Daily and Monthly Sales List

Returned sales list: If admin returned all this three option information those will store in returned sales list.

Returned Sales

Show 10 entries Search:

Invoice Id	Patient	Doctor	Date	SubTotal	Discount	Grand Total	Paid Amount	Due Amount	Invoice Taken By	Action
290320191553842157	Rifa	Dr. Md. Al - Amin Mridha	Friday 29 March 2019	0	0	0	0	0	admin	Restore
290320191553842212	Sammi akther	Dr. Tahera Nazrin	Friday 29 March 2019	0	0	0	0	0	admin	Restore
290320191553842349	mahbub Hasan	Dr. ATM Mowladad Chowdhury	Friday 29 March 2019	0	0	0	0	0	admin	Restore

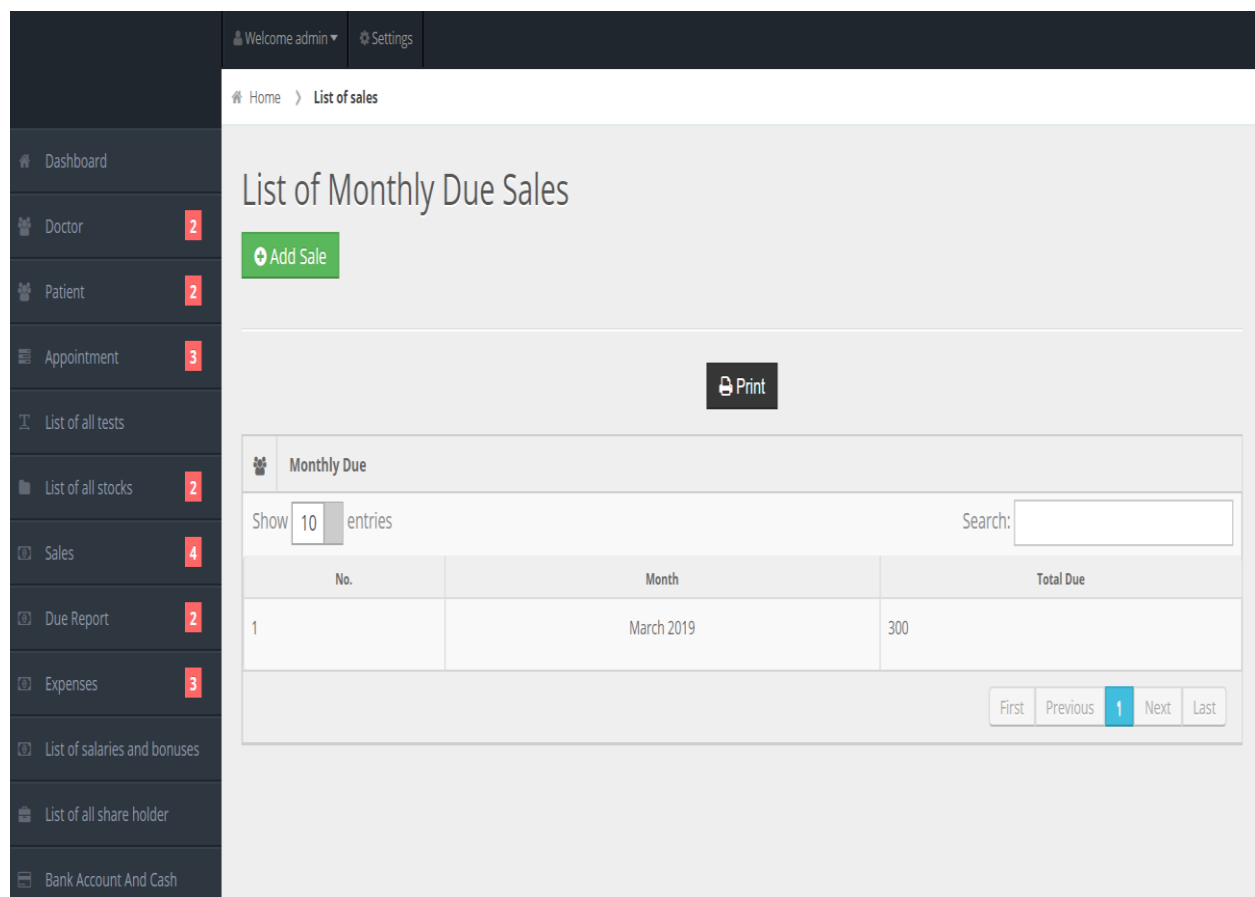
Fig 4.12: Returned Sales List

Daily and monthly due List

There are two options they are daily due and list of monthly due option in that section.

Daily due list: Here admin input patients name, doctors name reference name. After submitting this information admin will add test name, discount and current received amount for this test. After input those information software will provide a voucher those information. Admin can delete that voucher if they need.

Monthly due list: Here admin input patients name, doctors name reference name. After submitting this information admin will add test name, discount and current received amount for this test. After input those information software will provide a voucher those information. Admin can delete that voucher if they need.



The screenshot displays a web application interface for managing sales. The top navigation bar includes 'Welcome admin' and 'Settings'. The sidebar on the left lists various modules: Dashboard, Doctor (2), Patient (2), Appointment (3), List of all tests, List of all stocks (2), Sales (4), Due Report (2), Expenses (3), List of salaries and bonuses, List of all share holder, and Bank Account And Cash. The main content area is titled 'List of Monthly Due Sales' and features an 'Add Sale' button. Below this is a 'Print' button and a table with the following data:

No.	Month	Total Due
1	March 2019	300

The table also includes a search bar and pagination controls (First, Previous, Next, Last).

Fig 4.13: Daily and Monthly Due List

All Expense Page

There are three options in that section: they are list of expense, daily expense, monthly expense. For input the information first admin has to select daily or monthly expense.

Daily expense: to add expense admin can input expense category, total amount, description of expenses as note comment. This will store in list of expenses page.

Monthly expenses: to add expense admin can input expense category, total amount, description of expenses as note comment. This will store in list of expenses page.

The screenshot displays the 'List of Expenses' page. The top navigation bar shows 'Welcome admin' and 'Settings'. The sidebar on the left contains various menu items, with 'List of expenses' highlighted in green. The main content area features a 'List of Expenses' title, an 'Add Expense' button, and a 'Print' button. Below these is a table with the following data:

No.	Expense's Category	Total Amount	Note	Taken By	Options
1.	Meeting purpose	20000	paid	admin	Edit Delete
2.	To bring Carrying products	5000	paid	admin	Edit Delete

At the bottom of the table, there are pagination controls: 'First', 'Previous', '1', 'Next', and 'Last'.

Fig 4.14: Total Expense List

Salaries and Bonus Page

In that section admin will input the name of employee, amount of salary, month, salary type (bonus, salary) whose will give. This information will store in list of all salaries.

Dashboard

Doctor 2

Patient 2

Appointment 3

List of all tests

List of all stocks 2

Sales 4

Due Report 2

Expenses 3

List of salaries and bonuses

List of all share holder

Bank Account And Cash

Users 3

List of all achieves

Welcome admin Settings

Home > List of all salaries and bonuses

List Of All Salaries

Add New Salary Or Bonus

Print

List Of All Salaries And Bonuses

Show 10 entries Search:

No.	Given For	Given By	Amount in cash	For Month	Type	Option
1.	Receptionist	admin	20000	2019-03-29	Salary	Edit Delete
2.	Nurse	admin	5000	2019-03-02	Bonus	Edit Delete
3.	Security	admin	8000	2019-03-27	Salary	Edit Delete

First Previous 1 Next Last

Fig 4.15: Total Salaries and Bonus List

Shareholder list

In that section admin can input shareholders name, their percentage, and amount in taka. After saving those information those will store all shareholders list. Admin can update and delete those information if needed.

The screenshot displays the 'All Share Holders List' page. The top navigation bar shows 'Welcome admin' and 'Settings'. The sidebar on the left contains various menu items, with 'List of all share holder' highlighted in blue. The main content area features a 'Print' button and a table with the following data:

No.	Name	Percent (%)	Amount in Tk	Options
1.	SALMAN F. RAHMAN	25%	50000000 Tk.	Edit Delete
2.	SAYEED ABUL HOSSAIN	15%	25000000 Tk.	Edit Delete

Below the table, there is a summary: 'All Amount by Share Holder's : 75000000Tk.' The page also includes a search bar and pagination controls (First, Previous, 1, Next, Last).

Fig 4.16: Total ShareHolders List

Bank Account Page

In that section admin can input store of bank amount. In this page admin can see total cost and total cash. They can also observe the total value against their total cost and total cash

The screenshot displays a web application interface for managing bank accounts. The main content area is titled 'List Of All Accounts' and features a table with the following data:

No.	Amount	Account Id Or Name	Description	Added By	Option
1.	1000000	7654389	For 3 years	admin	Edit Delete

Below the table, there are two summary tables:

Total Cash

Name	Cash
Total Cash From Share Holders :	7500000 Tk.
Total Cash From Sales :	10900
Total Cash From Bank Accounts :	1000000 Tk.
Total Cash: 76010900 Tk.	

Total Costs

Name	Cash
Total Cost From Reagents :	43000 Tk.
Total Cost From Assets :	2220000 Tk.
Total Cost From Expense :	25000 Tk.
Total Cost From Salary And Bonuses :	33000 Tk.
Total Cost: 2321000 Tk.	

Total Value : 73689900 Tk.

Fig 4.17: Total Value List

User Page

In that section admin can take permission from user and then they will create new user if they needed. If any user quiet from the job admin can remove those user or can add new admin.

The screenshot displays the 'All Users' management interface. At the top, there is a navigation bar with 'Welcome admin' and 'Settings'. Below it, a breadcrumb trail shows 'Home > List of all users'. The main content area features a green 'Add New User' button and a table titled 'All Users'. The table has columns for 'No.', 'Name', 'Email', 'Permissions', and 'Options'. Three users are listed:

No.	Name	Email	Permissions	Options
1.	admin	admin@gmail.com	Remove Permissions	
2.	mahbub Hasan	mahbubdhruba11o@gmail.com	Remove Permissions	Delete
3.	Arif hasan	arifbdhasan@gmail.com	Make Admin	Delete

Below the table, there are pagination controls: 'First', 'Previous', '1', 'Next', 'Last'. The sidebar on the left contains a list of menu items, with 'Users' highlighted in green and 'Make Permissions' in red.

Fig 4.18: All Users List

Achievement List

In that section admin can save a great achievement in the hospital, such as the government award or any honorable title prize.

The screenshot displays the 'All Achievement List' page. At the top, there is a navigation bar with 'Welcome admin' and 'Settings'. Below it, a breadcrumb trail shows 'Home > List of achievements'. The main heading is 'All Achievement List', followed by a green 'Add New Achievement' button. A table titled 'All Achievements List' contains two entries. The table has columns for 'No.', 'Image', 'Title', 'Small Description', and 'Options'. The first entry is 'Achievement' with a description 'Last 5 years Achievement in this diagnostic center'. The second entry is 'Govt award' with a description 'The best hospital received Award 2018.'. Each entry has 'Edit' and 'Delete' buttons. A search bar and a 'Show 10 entries' dropdown are located above the table. At the bottom right, there are pagination controls: 'First', 'Previous', '1', 'Next', and 'Last'.

No.	Image	Title	Small Description	Options
1.		Achievement	Last 5 years Achievement in this diagnostic center	Edit Delete
2.		Govt award	The best hospital received Award 2018.	Edit Delete

Fig 4.19: All Achievement List

4.3 Testing Implementation

Testing implementation is process of testing upcoming implementation of a system, where tester or system architect will see cases and specification, is it implementable or have limitations.

Implementation testing requires following parameters:

- **Technologies, Example:** HTML, CSS, images save, etc.
- **Type of a project:** Software, Android version, website etc.
- **Language of a project :**English

CHAPTER 5

CONCLUSION AND SCOPE OF FUTURE WORK

5.1 Conclusion

The project Smart diagnostic center is for computerizing the working in a hospital. The product deals with every one of the necessities of a normal medical clinic and is capable to give simple and compelling stockpiling of data identified with patients that surface to the emergency clinic. It is incredible improvement over the manual framework has accelerated the procedure. The emergency clinic overseeing framework altogether checked and tried with the information and subsequently is discovered dependable. The product deals with all the prerequisite of a normal medical clinic and is skilled to give simple and proficient stockpiling of data identified with patients that surfaces to the emergency clinic.

It creates test reports; give solution subtleties including different tests, diet guidance, and meds recommended to patient and specialist. It likewise gives infusion subtleties and charging office based on patient's status whether it is an indoor or open air understanding. The framework additionally gives the office of reinforcement according to the prerequisite.

The framework is secure as a client can adjust the data simply after the best possible verification. Odds of blunder are likewise disposed of two vast degree. Computerization and mechanization of the entire framework helps in simple and quick access to the required data. The framework is exceedingly easy to understand as fitting message are given to manage the client signed in.

5.2 Scope of future work

The emergency clinic the board framework can upgrade by including greater office like drug store framework for the stock subtleties of prescription in drug store. Giving every future empower the clients to incorporate greater remark in the system. Although the task is finished in it however as there is dependably a future extension for development; the equivalent applies to this product. The arrangement for getting arrangement from the specialist through Internet, i.e., Online Appointment office can be included. The specialist could see the solicitations from a few patients and as needs be give the arrangement if conceivable.

Further, Mobile Application can be actualized to enable the patients to see their past visit subtleties and get arrangement from specialists through mobiles. Posting of workers starting with one emergency clinic then onto the next can likewise be overseen. Further, specialists can be given the arrangement to post their articles on the site of hospital. It creates test reports; give remedy subtleties including different tests, diet guidance, and prescriptions endorsed to patient and specialist. It additionally gives infusion subtleties and charging office based on patient's status whether it is an indoor or open air quiet. The framework additionally gives the office of reinforcement according to the prerequisite.

APPENDICES

Project Reflection

From summer 2018 semester I had started my journey for make a very unique and beautiful platform, there was an employer helped by the software. I accomplished the model for progress to contrivance and observe my user that were I achieve to touch my aim.

Hopefully say that this project will be very friendly for the necessitous hospital employer. This software will be very helpful for our people. So, I hopeful that “smart diagnostic center software” will remain friend for our people,

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Project Report 02

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