



**Daffodil**  
*International*  
**University**

**C Project Documentation**

**Title:ABC Hospital Management System**

**Submitted To:**

Md Shohel Arman Shuvo  
Department of SWE  
Daffodil International University

**Submitted By:**

- *MD Anik Islam*
- *S MD Mahmudul Hasan Saurav*
- *Arman Haque Ashik*

## **Students Declaration**

We, the author, hereby declare that the project becomes the property of Daffodil International University (DIU) and to be placed at the department of Software Engineering. We also give permission to the DIU to reproduce this project in whole or in part for the purpose of research or academic exchange only.

### **Student's Certified by:**

**Student's signature: .....**      **Date: .....**

**Student's signature: .....**      **Date: .....**

**Student's signature: .....**      **Date: .....**

### **SUPERVISOR Certified by:**

**Supervision signature:.....**

**Date:.....**

### **Student's Details:**

We are the students of swe department of 3<sup>rd</sup> semester .

Serial	Name	Student Id
1	Md Anik Islam	171-35-2069
2	S MD Mahmudul Hasan	171-35-2071
3	Arman Haque Ashik	171-35-2080

## **AKNOWLEDGEMENT**

First and foremost all thanks to Allah for giving us the strength to start and complete our project.

Secondly we would like to express our special thanks of gratitude to our teacher **MD Shohel Arman** who gave us this golden opportunity to do this wonderful project Hospital Management System.

Which also helped us in doing a lot of research and we came to about so many new things and we are really thankful to them.

Thirdly we want to appreciate our department of software engineering especially our honorable head **Dr. Touhid bhuiyan** and our dear teachers for excellence teaching and providing such incredible study.

Lastly we would also like to thank our parents and friends who helped us a lot finalizing this project within the limited time frame.

*Thanks*

*MD Anik Islam*

*S. MD. Mahmudul Hasan Saurav*

*Arman Haque Ashik*

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## **List of Abbreviations**

In our this project We have used below this abbreviations

- **Doc** = Doctors
- **P** = Patients
- **Pname** = Patient Name
- **Dname** = Doctor Name
- **Dpass**= Doctor Password
- **Pass** = Password
- **Rem** = Remember
- **A1**= Appointment
- **I** = Increment
- **Reg** =Registration
- **Re** = Re-choice
- **Add** = Address
- **Phn** = Phone Number



## *Design Symbols*

In Our project , we used ..

\*

#

=

\t

\xDB

\xDD

# ABC General Hospital

## **ABSTRACT**

**Background:** Hospital Management system is very important system for collect information about the patient, doctor and staff's keep it for good purpose.

**Objective:** The main objective of this project is to store patients, doctor and staff's data. And to manage the staff's and doctor's availability. The Hospital Management System can be entered using a username and password. It is accessible by an administrator. Only they can add data into the database.

**Method:** At first we putted someone's data then we implemented it in the project.

**Result:** Our project Hospital Management system includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy. Our software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically.

**Conclusion:** The project Hospital management system is for computerizing the working in the hospital. We have tested it with some data and found very good working. It can keep all data whoever put's data in it and watch it for good purpose.

# **Chapter 1: Introduction**

## **1.1 Project Over View:**

This is a Hospital Management project. It's about collection of data both of doctor and patient. We create this project for the benefit of Doctor, Patient and Management.

Here Doctor can check their appointment list, their own schedule and also schedule of the staff . Patient can check Doctor details and schedule , cost of different sector. Patient can take appointment, give his /her complain and contract to the management by using this. Only registered patient can get all this benefit. Management can handle all of this. Any time if they want to change anything, they can do it.

## **1.2 Obstacles:**

When we started this project we got many problem considering we didn't got unity no one is working on it lack not understanding how start then we finally got some help from teachers and friend's we are able to do it and finish it. Sometimes we get some problem that caused major problem like file, pointer etc. this type of problem has caused us so much time but we overcome it and successfully finished it.

## **1.3 Technology Requirement:**

- **Software and Application Platforms:**

- Code: Blocks

- **Hardware :**

Unfortunately there is no hardware used in my project.

## **1.4 Supporting:**

You have to give proper support for maintenance and give full support to run it smoothly on any device.

## **1.5 training**

Whoever is going to use it need proper training to control the whole project and maintain it without any error.

## **1.6 Pricing:**

The cost of seeing my project from start to completion will be \$12000.

It has been calculated by an hourly rate of \$50.

## **1.7 Contact Us:**

You can us in any of given below way:

Name: Md. Anik Islam.

Email: [anikislam668@gmail.com](mailto:anikislam668@gmail.com)

Mobile: 01687893691

Name: S MD Mahmudul Hasan

Email: Mohammadsaurav@gmail.com

Mobile: 01629697898

Name: Arman Haque Ashik

Email: Ashik1502@gmail.com

Mobile: 01750342433

## **Chapter 2: Requirement Analysis**

### **2.1 Requirement Elicitation:**

- Management
- Patient
- Doctor

### **2.2 Task of Management:**

- ❖ Log In to the project with username and password.
- ❖ They can create bill for the patient.
- ❖ Only Head of admin can give username and password of doctor.
- ❖ They can check the patient Complain.
- ❖ They can check schedule of Doctor and Staff.
- ❖ They can control everything of the project.

### **2.3 Task of Patient :**

- ❖ They can log in to project with the registered password.
- ❖ They can check doctor details, services and cost of different sector.
- ❖ They can take appointment.
- ❖ They can write a comment.
- ❖ They can contact to management anytime by using contact us function.

## **2.4 Task of Doctor:**

- ❖ Log in to the project with admin given password and user name.
- ❖ Check the Appointment list.
- ❖ Check schedule of his/her staff.

## **2.5 System Tasks:**

- ❖ Save the all data of Registration.
- ❖ Count the each number registration.
- ❖ Save the all comment.
- ❖ Save the all record of bills.
- ❖ Save appointment Patient Information.
- ❖ It wills Shows entered and save data.

## Chapter 3: PROJECT METHADOLGY

### 3.1 First page:

This is the first page of our project as you can see I have created a lot feature and you have to select one of these options.

1. Press 1 for Management
2. Press 2 for Patient
3. Press 3 for Doctor

```
*****
**ABC General Hospital**
*****

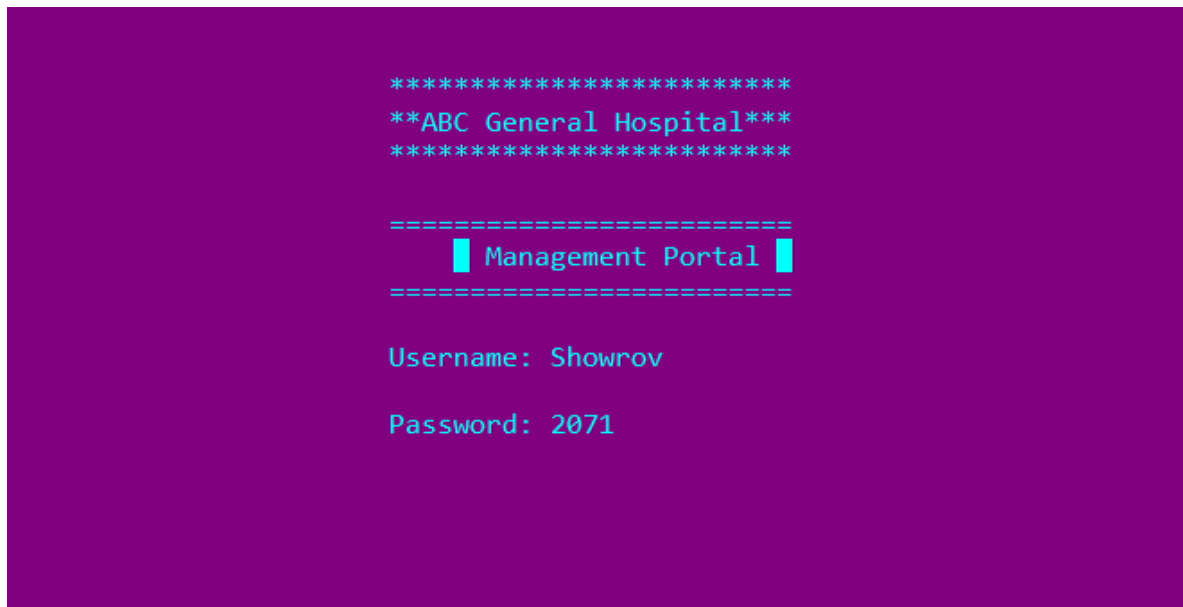
1.Management
2.Patient
3.Doctor

Enter Your Choice:
█
```

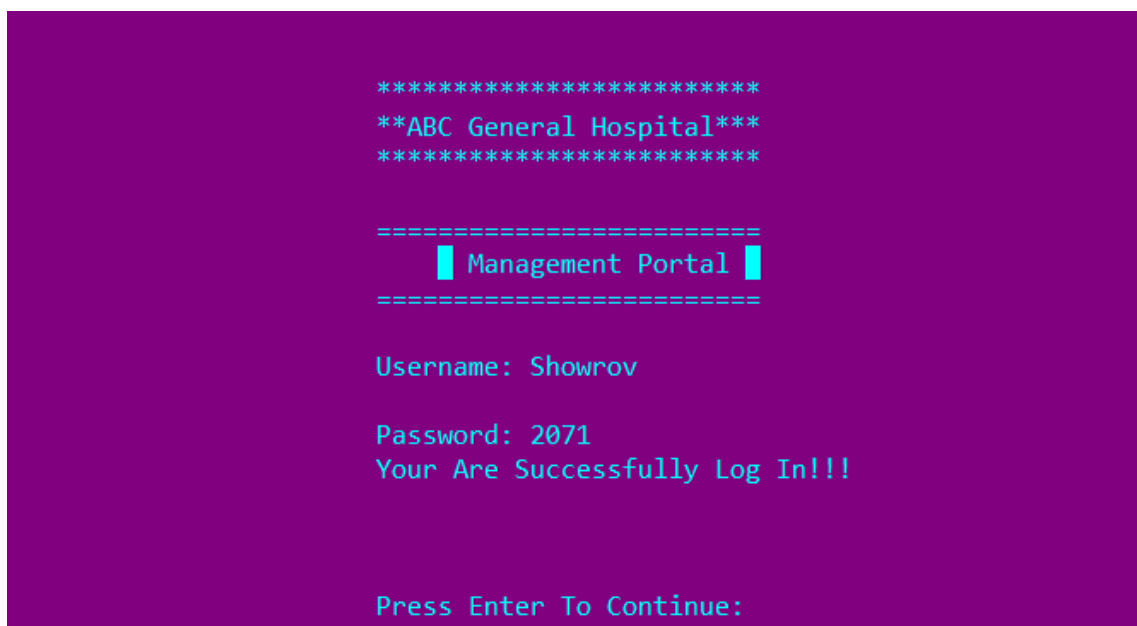


### **3.2 Management Log In:**

After press 1 then goes on it. This is Management Log in page.  
Management needs username and password to access on this project.



After give username and password then press Enter.



### **3.3 Management Menu:**

This is Management main menu and you have to select one of these option.

1. Press 1 for Time schedule
2. Press 2 for Doctor details
3. Press 3for Time schedule of staff
4. Press 4 for Payment history
5. Press 5 for Bill
6. Press 6 for add doctor user name and password
7. Press 7 for check the registration list of Doctor
8. Press 8 for check the registration list of Patient
9. Press 9 for check Complain
10. Press 10 for Log out.

```
=====
  █ Management Menu █
=====

1.Time schedule of doctor
2.Doctor Details
3.Time schedule of staff
4.Check Payment History
5.Bill
6.Add doctor USer Name and password
7.Check Registration of Doctor
8.Check Registration of Patient
9.Check Complian

10. Log out

Enter your choice: █
```

### 3.4 Time Schdule Of Doctor:

This is the time schedule of doctor's.

```
*****
**ABC General Hospital**
*****

====Time Schedule of Doctor====

1.Saturday

2.Sunday

3.Monday

4.Tuesday

5.Wenesday

6.Thursday

7.Friday

Enter Your Choice: 
```

Here is what you have to do:

- 1:you have to press 1 & press enter to see which doctor is avaiable on saturday.
- 2: you have to press 2 & press enter to see which doctor is avaiable on sunday.
- 3: you have to press 3 & press enter to see which doctor is avaiable on monday.
- 4: you have to press 4 & press enter to see which doctor is avaiable on tuesday.
- 5: you have to press 5 & press enter to see which doctor is avaiable on wednesday.
- 6: you have to press 6 & press enter to see which doctor is avaiable on thursday.
- 7: you have to press 7 & press enter to see which doctor is avaiable on friday.

You have to press above 7 & press enter to get to the management menu.

Here is one example if you want to see which category doctor is free today.

```

**ABC General Hospital**
*****
=====
|      Name      |      Category      |      Room NO      |      Time      |
=====
| Dr. Abdullah-Al-Safi |      Cardiology      |      502MB      | 1.00-3.00pm |
=====
| Dr. Mohammad Safiuddin |      Cardiology      |      309MB      | 2.00-4.00pm |
=====
| Dr. Amit Kapoor      |      Orthopedics      |      205MB      | 9.00-11.00am |
=====
| Dr. Abu Jafar Chowdury |      Orthopedics      |      209MB      | 3.00-7.00pm |
=====
| Dr. Sarwar Alam      |      Oncology      |      404MB      | 1.00-5.00pm |
=====
| Dr. Mofazzel Hossain |      Oncology      |      303MB      | 9.00-3.00pm |
=====
| Dr. Mansur Habib      |      Medicine      |      201MB      | 11.00-1.00pm |
=====
| Dr. QuaziDeen Mohammad |      Medicine      |      407MB      | 5.00-8.00pm |
=====
| DR. Abdullah khan      |      Dental      |      307MB      | 5.00-8.00pm |
=====
| Dr.M.A. Shikder      |      Dental      |      307MB      | 9.00-11.00am |
=====
| Dr. Rezoana Rima      |      Children      |      505MB      | 9.00-11.00am |
=====
| Dr. Kazi Abul Hasan      |      Children      |      505MB      | 5.00-8.00pm |
=====
| Dr. Mofrehuddin Ahmed |      Dermatology      |      301MB      | 9.00-1.00pm |
=====

Press Enter To Go Menu:

```

you have to press enter to go back.

### **3.5 Doctor Details:**

If you want to see doctor details in the management menu then you have to press 2.

```
*****
**ABC General Hospital**
*****

=====
  Categories
=====

1.Cardiology Heart Specialist
2.Child Specialist
3.Dental Doctor
4.Dermatology Specialist
5.Neuromedicine Specialist
6.Oncology Cancer Specialist
7.Orthopedics Specialist
enter your choice: 2_
```

Here you can see doctor catagories Suppose you want to see child specialist then you have to press 2 and press en

```
*****
**ABC General Hospital**
*****

=====Child specialist=====*

1.Dr. Rezoana Rima
2.Dr. S.K.A. Razzaque
3.Dr. Kazi Abul Hasan
4.Dr. Md. Al - Amin Mridha
5.Dr. Md. Aminul Ehsan
6.Professor Dr. Afiqul Islam
7.Professor Dr. Md. Abid Hossain Mollah
8.Professor Dr. Selim Shakur
9.Dr. Syed Khairul Amin
10.Professor Dr. Mohammed Istiaque Hossain

Enter your choice: 1
```

And here we want to see Dr. rima qualification.

```
*****
**ABC General Hospital**
*****

Dr. Rezoana Rima
Qualification : MBBS, FCPS ( Pediatric )
Designation : Consultant
Expertise : Pediatric Cardiac Surgeon
Organization: United Hospital Limited , ABC General Hospital
Chamber: ABC General Hospital
Location: Plot # 15, Road # 71, Gulshan - 2, Dhaka - 1212, Bangladesh
Phone: +880-2-8836000, 8836444

Press 1 to BAcK Page

Enter YOur choice:1
```

Here we can see the qualification.

suppose we want to go back then we have click 1 and press Enter to go back.

Then it will go back to the previous page.

And there we put an invalid number then we able to go to the management menu.

### 3.6 Bill:

Suppose Now we have to see bill method. Then we have to click 5 and press Enter.

```
*****
**ABC General Hospital**
*****

Patient Name:anik          Patient Age:20
Patient Address:savar
Patient Phone Number:01715487568

          N.B:Press 1 for Bill End

Object_____  Quantity_____  Amount_____
urine test      1              500.000000
blood test      1              200.000000
MRI test        1             5000.000000
ct scan         1            10000.000000
█
```



Now we have to see the bill how much the bill came Out. Then we have to click 1 & press Enter.

```
*****
**ABC General Hospital**
*****

Patient Name:anik          Patient Age:20
Patient Address:savar
Patient Phone Number:01715487568

      N.B:Press 1 for Bill End

Object_____  Quantity_____  Amount_____
urine test      1                500.000000
blood test      1                200.000000
MRI test        1                5000.000000
ct scan         1                10000.000000
1

_____
TOTAL=15700.000000
Cash = █
```

If we pay less than the bill then then it will request us to pay the due.

```

**ABC General Hospital**
*****

Patient Name:anik          Patient Age:20
Patient Address:savar
Patient Phone Number:01715487568

N.B:Press 1 for Bill End

Object_____ Quantity_____ Amount_____
urine test      1          500.000000
blood test      1          200.000000
MRI test        1          5000.000000
ct scan         1          10000.000000
1

T0Tal=15700.000000
Cash =15000

Due=700.000000

Please Complete the Due :)

Cash =

```

And if we pay more than the due it will return us the money

```

Patient Name:anik          Patient Age:20
Patient Address:savar
Patient Phone Number:01715487568

N.B:Press 1 for Bill End

Object_____ Quantity_____ Amount_____
urine test      1          500.000000
blood test      1          200.000000
MRI test        1          5000.000000
ct scan         1          10000.000000
1

T0Tal=15700.000000
Cash =15000

Due=700.000000

Please Complete the Due :)

Cash =1000

Return=300.000000

Press 1 for Print the Bill:1

```

If we click 1 & press Enter then it will print the bill .

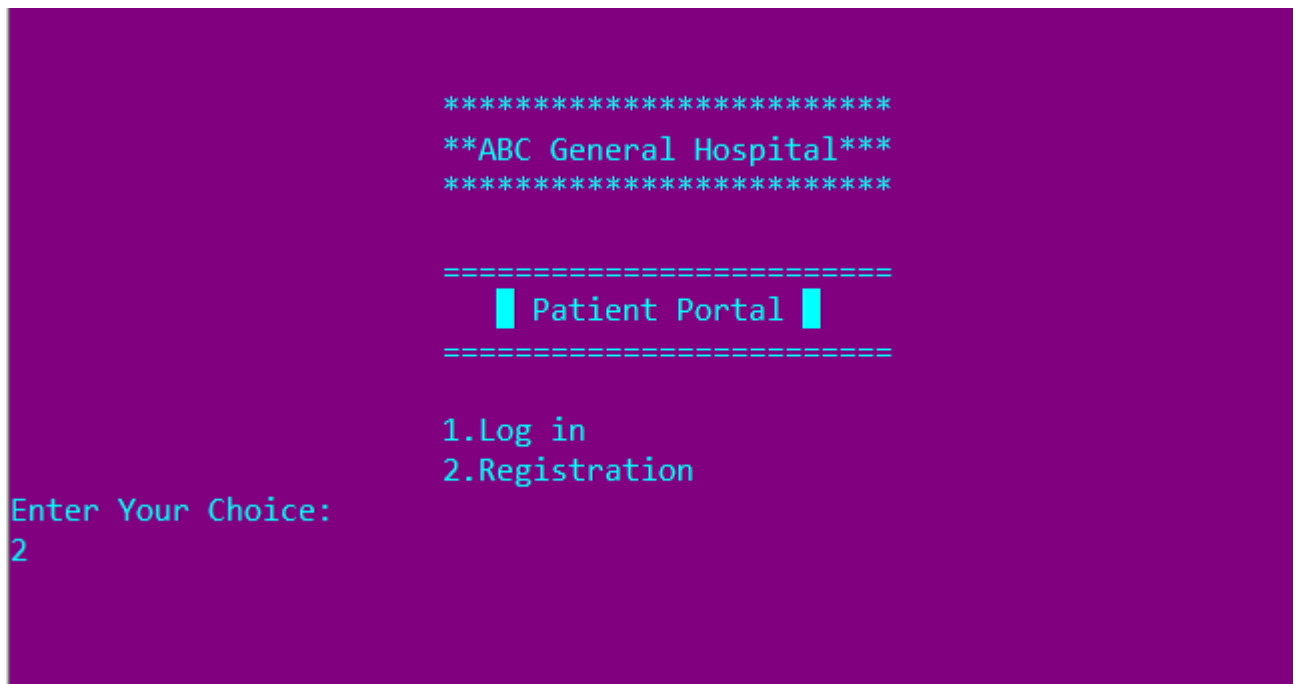
```
*****
**ABC General Hospital**
*****

          █ YouR Bill Iss Printing.....
              PLease wait.....

          Your Bill Is Successfully Print Out
Press any key to continue . . .
```

### **3.7 Patient Login & Registration:**

This is the patient welcome menu.



If you want to enter in the patient menu then first you have to register.

Then log in.

```
*****
**ABC General Hospital**
*****

  Patient Sign Up

=====

Patient Name: Anik

Patient Password: 2069

Patient Email:Anik@gmail.com

Patient Address:Savar

Your are successfully Registered
Press 1 for Login
Press 2 for Back
Enter You choice1_
```

After the registration you have to press 1 for log in.

This is log in page.

```
*****
**ABC General Hospital**
*****

=====
  Patient Sign In
=====

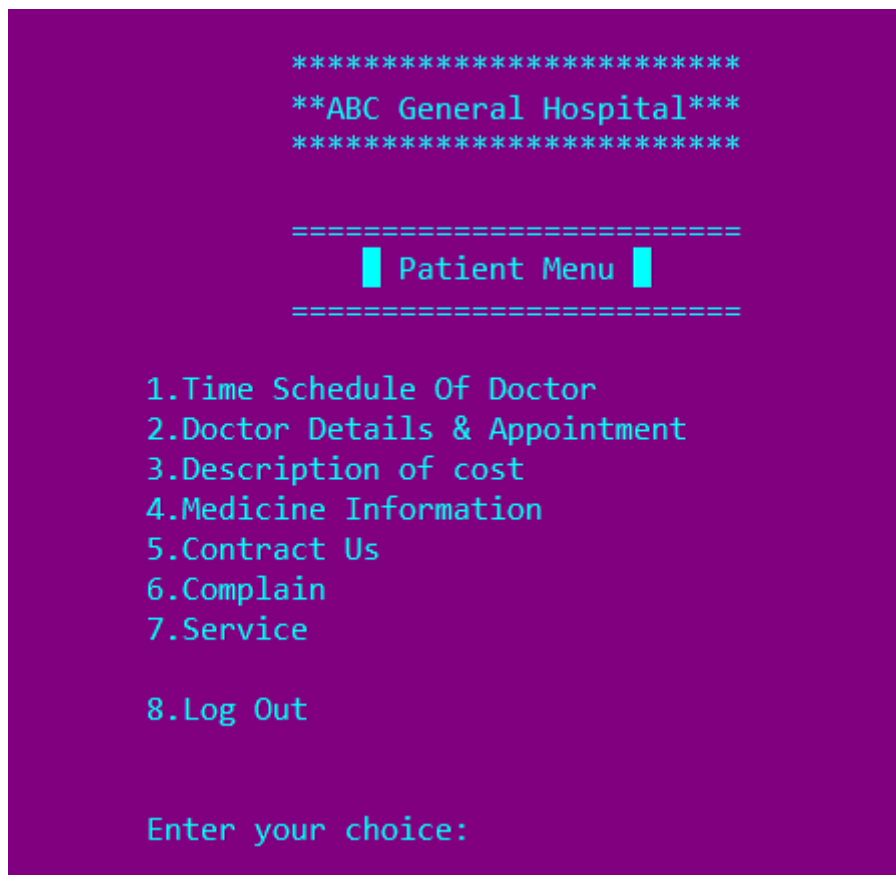
Patient Name: Anik

Password: 2069

Correct Name & Password
Press any key to continue . . . _
```

If your name and password are correct then it will enter into the patient menu.

### **3.8 Patient Menu:**



This is Patient main menu and you have to select one of these option.

Here is the description:

- 1: press 1 & press Enter to see time schedule of doctor.
- 2: press 2 & press Enter to see doctor details & appointment.
- 3: press 3 & press Enter to see description of cost.
- 4: press 4 & press Enter to see medicine information.
- 5: press 5 & press Enter to see the details of contact us.
- 6: press 6 & press Enter to use complain box.
- 7: press 7 & press Enter to see the service details.
- 8: press 8 to log out from the patient menu.

### **3.9 Doctor Details & Appointment:**

If you want see doctor detail's and take appointment then you have to press 2.

```
*****
**ABC General Hospital**
*****

Dr. Rezoana Rima
Qualification : MBBS, FCPS ( Pediatric )
Designation : Consultant
Expertise : Pediatric Cardiac Surgeon
Organization: United Hospital Limited , ABC General Hospital
Chamber: ABC General Hospital
Location: Plot # 15, Road # 71, Gulshan - 2, Dhaka - 1212, Bangladesh
Phone: +880-2-8836000, 8836444

DO You want to take appointment
Press 1 for Appointment:1
```

Here if you want to take appointment from the doctor then press 1. Then it will go to the appointment box.

Here is the appointment page.

```
Enter You Name:Shoowrov

Enter Your Phone Number:01715548756

Your serial is:1

Press 1 to BACk Page

Enter YOur choice:1
```

After you have the serial then you can press 1 to get back to the previous page.

### **3.10 Cost of Description:**

If you want to see costs of tests then you can press 3 to see.

```
=====
1:Admission fee : 10,000
2:Doctor fee : 1000
3: CT Scan : 10000
4: ENT Procedure : 7000
5: ENT Surgery : 54500
6: IVF Procedure :8500
7:Normal Delivery Package : 46,500
8.Blood test : 700
9:Urine test : 500
10:X-ray : 1000
11:MRI : 7000
12:Bed cost : 12000
13:ICU Cost : 40000
14:NICU cost : 30000
15: Ultrasonography :700
16: ECG :1200
17: Urine test :500
18:ORTHOPEDIC SERGERY:25000
19CARDIOLOGY SERGERY:30000
20:HURT SERGERY:52000
21:DNA TEST:2000
Press any key to continue . . .
```

### **3.11 Medicine Information:**

Here if you want to see medicine information then press 4 and enter.

```
*****
**ABC General Hospital**
*****

=====
  Medicine Info
=====

Enter MEdicine Name:Seclo
```



Here you have to put the medicine name to see its power and price.

```
*****
**ABC General Hospital**
*****

Power = Omeprazole 20mg & 40mg/capsule

price = 5.00tk (per piece)
Press any key to continue . . . █
```

If you press any key then it will go back to menu page.

### **3.12 Contact us:**

If you want to know about us and contact us then you have to press 5 and enter

\*\*\*\*\*

\*\*ABC General Hospital\*\*

\*\*\*\*\*

=====

■ ConTruct Us ■

=====

Address: A-91/3,Dhanmondi,AB road-2/3,Dhaka-1205,Bangl

Care line 16060 (for appointment & emergency)

Phone no:

\*\*\*\*\*

+88 02 814245 (8 Numbers), +88 02 814157 (8 Nu

+88 02 814440 (8 Numbers), +88 02 814233 (8 Nu

EMERGENCY LAND PHONE

=====

+88 02 8144465, +88 02 8144476, +88 02 81444

FAX : +88 02 9118922(General), +88 02 9114344(

Needful Extension Numbers are:

Information Desk : 2003, 2004

Patient Services : 2011

Nursing Services : 1091, 1097, 1087

■ Official Details ■

MD. Anik Islam

Founder and Director of ABC Hospital

Tel: 880-2-8144400 (PABX) Extn: 1509

E-mail: Anik@abchospital.com

S. MD. Mahmudul Hasan

CAO, ABC Hospital ltd.

E-mail: Mahmudul@abchospital.com

Billing & Business Office

MD. Arman Hauqe Asik

Manager business office

Tel: 880-2-8144400 (PABX) Extn: 3136,

E-mail: Asik@abchospital.com

Press any key to continue . . .

### **3.13 Complain:**

If you want to complain something about the hospital then press 6 and enter.

```
*****
**ABC General Hospital**
*****

=====
  Complain 
=====
Enter Your Name:Anik

Write Your Comment:i think the staff ae not very friendly

Press any key to continue . . . █
```

Here you have to put your name and then write down your report and press enter.

### 3.14 Doctor Sign In

This is the how you have to log in into the doctor menu.

```
*****
**ABC General Hospital**
*****

=====
  Doctor Sign In
=====

Doctor Id: asik

Password: 2080

Correct Name & Password

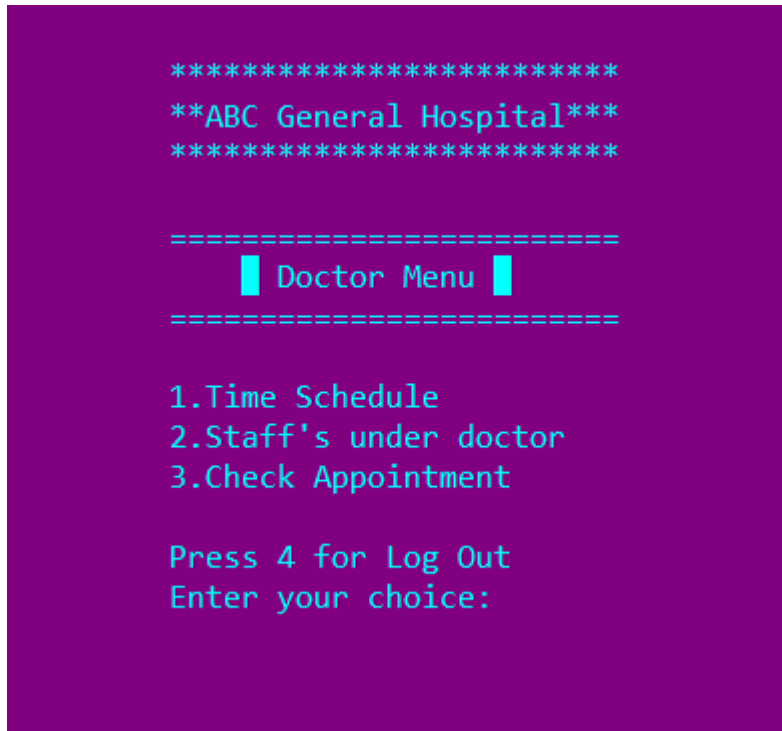
Press any key to continue . . .

Enter Your Code:80_
```

This name, password and code are all given by admin. You have to put it correctly or it never enter into doctor menu.

### **3.15 Doctor Menu:**

This is the doctor menu.



Here what you have to do:

- 1: press 1 & press Enter to see time schedule of doctor.
- 2: press 2 & press Enter to see staff's under doctor.
- 3: press 3 & press Enter to see if the doctor has any appointment.

Or

Press 4 to log out from the page.

### **3.16 Schedule of doctor and staff :**

Suppose we need to see doctor's duty today then we have to press 1.

```
*****
**ABC General Hospital**
*****

=====
  Doctor Schedule
=====
Duty on:Saturday,Monday(1.00pm-3.00pm)
Room no:402MB
Press any key to continue . . .
```

Here we can see the doctor's duty that logged in some moments ago.

If we want to see staff's who is under the doctor. Then we have to press 2 and enter.

```
*****
**ABC General Hospital**
*****

=====
  Staff
=====
Dr. Amit Kapoor
Staff: Akash Ahmed
Press any key to continue . . .
```

Here we can see staff who works under the doctor.

### **3.17 Doctor Appointment & log out:**

Suppose now we have to see if the doctor have any appointment today.

Then we have to press 3 and enter.

```
*****
**ABC General Hospital**
*****

=====
  Appointment List
=====

Paitent name=rashik
Paitent Phone Number=1122334556
Serial is=1
Paitent name=fjfvhjvhr
Paitent Phone Number=9847478839
Serial is=2
Paitent name=Anik
Paitent Phone Number=0188977
Serial is=3

Press any key to continue . . .
```

Here we can see 3 patients are here for doctor.

If we want to log out from the page then press 4.

```
*****
**ABC General Hospital**
*****

You are Successfully log out

Press any key to continue . . .
```

Now we are successfully log out and get to the main page.

### **3.18 SOFTWARE REQUIREMENT SPECIFICATION**

We collect the requirements from all stakeholders and here we analysis them:-

Requirements in below:-

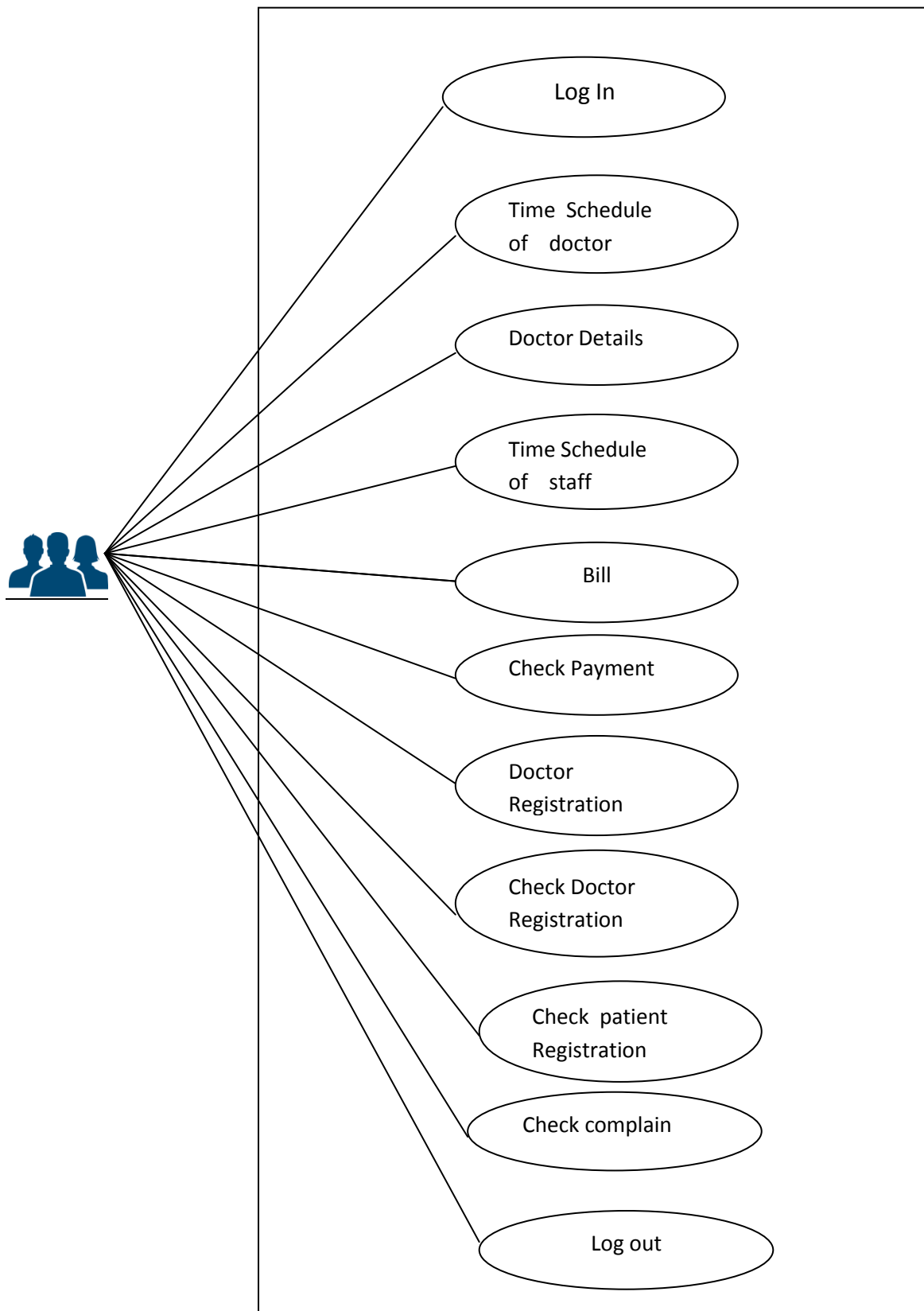
<b>SRS id</b>	<b>Title</b>	<b>User</b>	<b>Description</b>	<b>Requirement type</b>	<b>Priority</b>
ABC:1	Log in	Admin	Allow access to website.	FR	High
ABC:2	Log on	Patient & Doctor	Allow access to the patient menu & doctor menu.	FR	High
ABC:3	Registration	patient	For add some personal data to get the access of website.	FR	high
ABC:4	Time schedule of doctors	Admin,	To see which doctor duty which day & time.	FR	Low
ABC:5	Time schedule of doctor	doctor & patient	To see the doctor duty is on which time.	FR	high
ABC:6	Doctor details & appointment	patient	To watch the details of doctor and take appointment if they like.	FR	high
ABC:7	Check payment history	admin	How much they paid earlier to see that.	FR	low
ABC:8	Bill	admin	To pay hospital expense.	FR	high
ABC:9	Add doctor user name & password	admin	If any new doctor join to the hospital then admin will create id for them.	FR	high



<b>SRS id</b>	<b>Title</b>	<b>User</b>	<b>Description</b>	<b>Requirement type</b>	<b>Priority</b>
ABC:10	Description of cost	patient	Which test cost how much.	FR	medium
ABC:11	Medicine information	patient	Which medicine cost how much.	FR	High
ABC:12	Contact us	patient	If you have ever need then can find us in contact info.	FR	low
ABC:13	Check appointment	doctor	Doctor can see how many appointment he /she have.	FR	High
ABC:14	Complain	patient	Any kind mistakes or faults found by the hospital authority and report it.	FR	medium
ABC:15	Service	patient	Which kind of help we provide.	FR	high
ABC:16	Staff's	Patient, doctor	Which staff's duty when and under which doctor.	FR	medium

### **3.19USE CASE:**

#### **3.19.1 Use case for Management:**



## Use Case Description:

Use case	Log in	
Goal	To get access in the website.	
Preconditions	N/A	
Success end condition	The user can successfully log in and see the contents.	
Failed end condition	If the user failed he/she cannot get into the website.	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/main success	Step	Action
	1	User need to give Username and password.
	2	User need to make sure the username and password are correct.
	3	If correct user will get access to the website or else user can't.

Use case	Bill	
Goal	To make a bill for hospital expense	
Preconditions	N/A	
Success end condition	Your payment was successful.	
Failed end condition	Sorry you didn't paid your due. Please pay it.	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/main success	Step	Action
	1	Insert what test has been done by user.
	2	Insert the quantity of test's .
	3	After paying see if there are any due's.
	4	After clearing all payment/dues print out the bill.

Use case	Time schedule of doctors.	
Goal	To see which doctor's duty in which time.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Choose which day's doctor duty you want to see.
	2	Watch your doctor's duty.

Use case	Time schedule of staff.	
Goal	To see which staff's duty in which time under which doctor.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Choose which day under which doctor's is staff duty.
	2	Watch your staff duty time.

Use case	Check payment.	
Goal	To see how much money they paid before.	
Preconditions	N/A	
Success end condition	This amount of money they have paid	
Failed end condition	Sorry there is no payment before	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Enter into check payment.
	2	See how much they have paid.
	3	Return to main menu.

Use case	Check doctor registration	
Goal	Check how many doctor have been registered.	
Preconditions	N/A	
Success end condition	This many id have been registered.	
Failed end condition	Sorry no ids have been registered.	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to check registration.
	2	Watch how many registered.
	3	Get a successful notice.

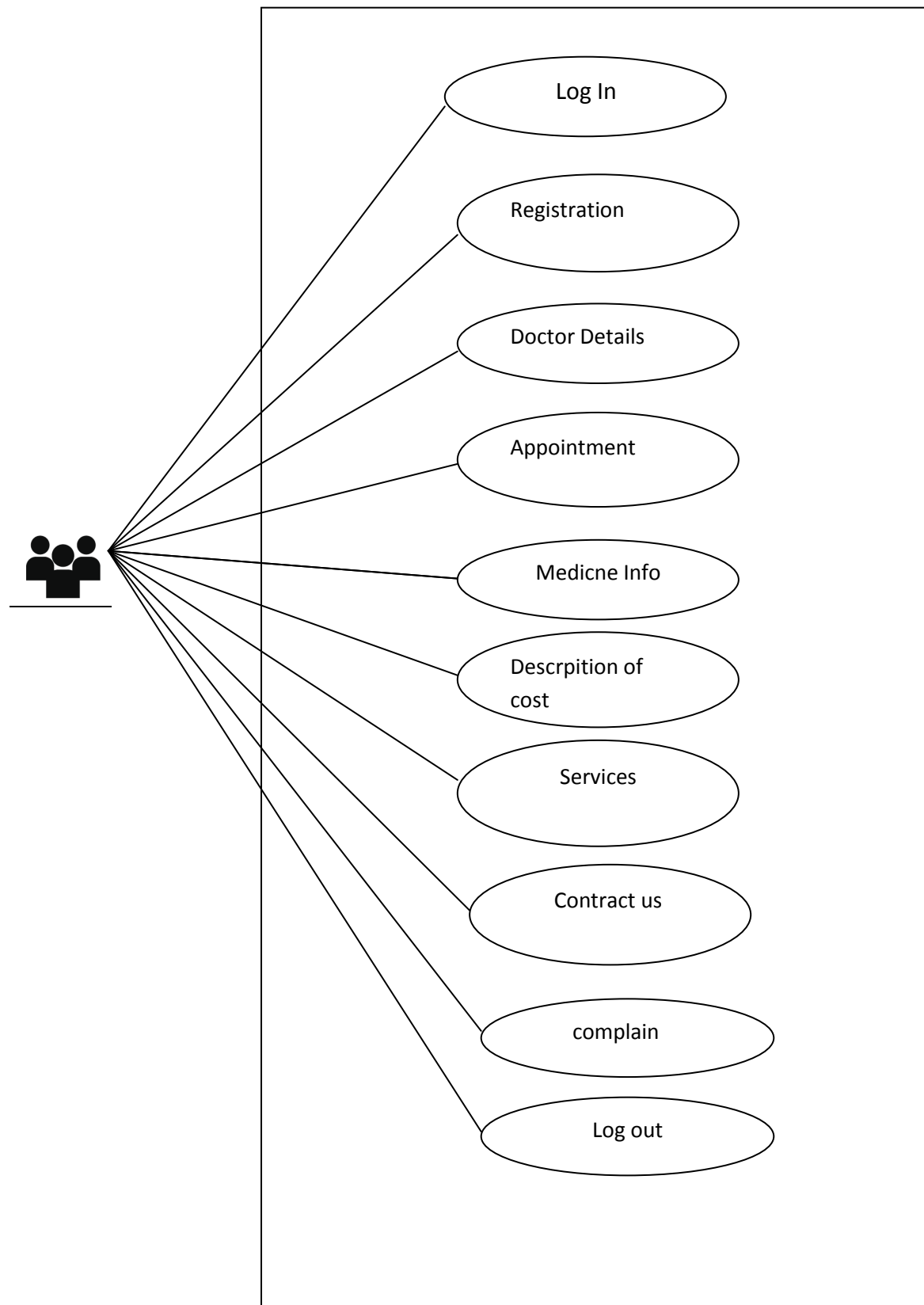
Use case	Check patient registration	
Goal	Check how many patient have been registered.	
Preconditions	N/A	
Success end condition	This amount of patient has been registered.	
Failed end condition	No patient has been registered.	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to check patient registration.
	2	See how many have.
	3	Get a successful notice.

Use case	Check Complain	
Goal	To check complain about the hospital authority.	
Preconditions	N/A	
Success end condition	This complaint has been reported by this id.	
Failed end condition	No complaint has been reported.	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to complain box
	2	Check complaint box if there has any or not.
	3	Get a successful notice.

Use case	Doctor registration.	
Goal	To gather some information about doctor.	
Preconditions	N/A	
Success end condition	Your doctor id has successfully registered.	
Failed end condition	N/A	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/main success	Step	action
	1	Admin needs to give all information that is needed.
	2	Admin can't skip this stage.
	3	Get a successful notice.

Use case	Log out	
Goal	To get out from the page.	
Preconditions	N/A	
Success end condition	You have successfully logged out.	
Failed end condition	You can't logged out.	
Primary actors;	Admin	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Click log out option.
	2	Do what they asked you to log out.
	3	If you do you will be logged out or else you can't.

### **3.19.2 Use case for Patients:**





Use case	Log in	
Goal	To get access in the patient menu.	
Preconditions	N/A	
Success end condition	You have successfully logged in.	
Failed end condition	If the user failed he/she cannot get into the patient menu.	
Primary actors;	Patient	
Secondary actors	N/A	
Triggers	N/A	
Description/main success	Step	Action
	1	Patient need to give Username and password.
	2	Patient need to make sure the username and password are correct.
	3	If correct patient will get access to the patient menu or else user can't.

Use case	Time schedule of staff.	
Goal	To see which doctor's duty in which time.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Patients	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Choose which day's under which doctor and enter.
	2	Watch your staff duty.

Use case	Time schedule of doctors.	
Goal	To see which doctor's duty in which time.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Patients	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Choose which day's doctor duty you want to see.
	2	Watch your doctor's duty.

Use case	Registration	
Goal	To gather some information about user.	
Preconditions	N/A	
Success end condition	You have successfully registered.	
Failed end condition	If the user doesn't give information what was asked the registration will not be complete.	
Primary actors;	Patients	
Secondary actors	N/A	
Triggers	N/A	
Description/main success	Step	action
	1	User needs to give all information that is asked.
	2	User can't skip this stage.
	3	Get a successful notice.

Use case	Appointment.	
Goal	To take appointment from doctor's.	
Preconditions	N/A	
Success end condition	Your appointment has been counted.	
Failed end condition	Sorry you can't take appointment	
Primary actors;	Patients	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Enter into doctor details & appointment.
	2	If you like the doctor qualification.
	3	Then take appointment.

Use case	Doctor details	
Goal	To see doctor qualification	
Preconditions	N/A	
Success end condition	N\A	
Failed end condition	N\A	
Primary actors;	Patients	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to doctor details
	2	Choose which specialist doctor you want to see.
	3	Then choose doctor and see

Use case	Description of cost	
Goal	To see which test cost how much money.	
Preconditions	N/A	
Success end condition	N\A	
Failed end condition	N\A	
Primary actors;	Patient	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Click on description of cost
	2	See which test cost how much
	3	Then back to main menu

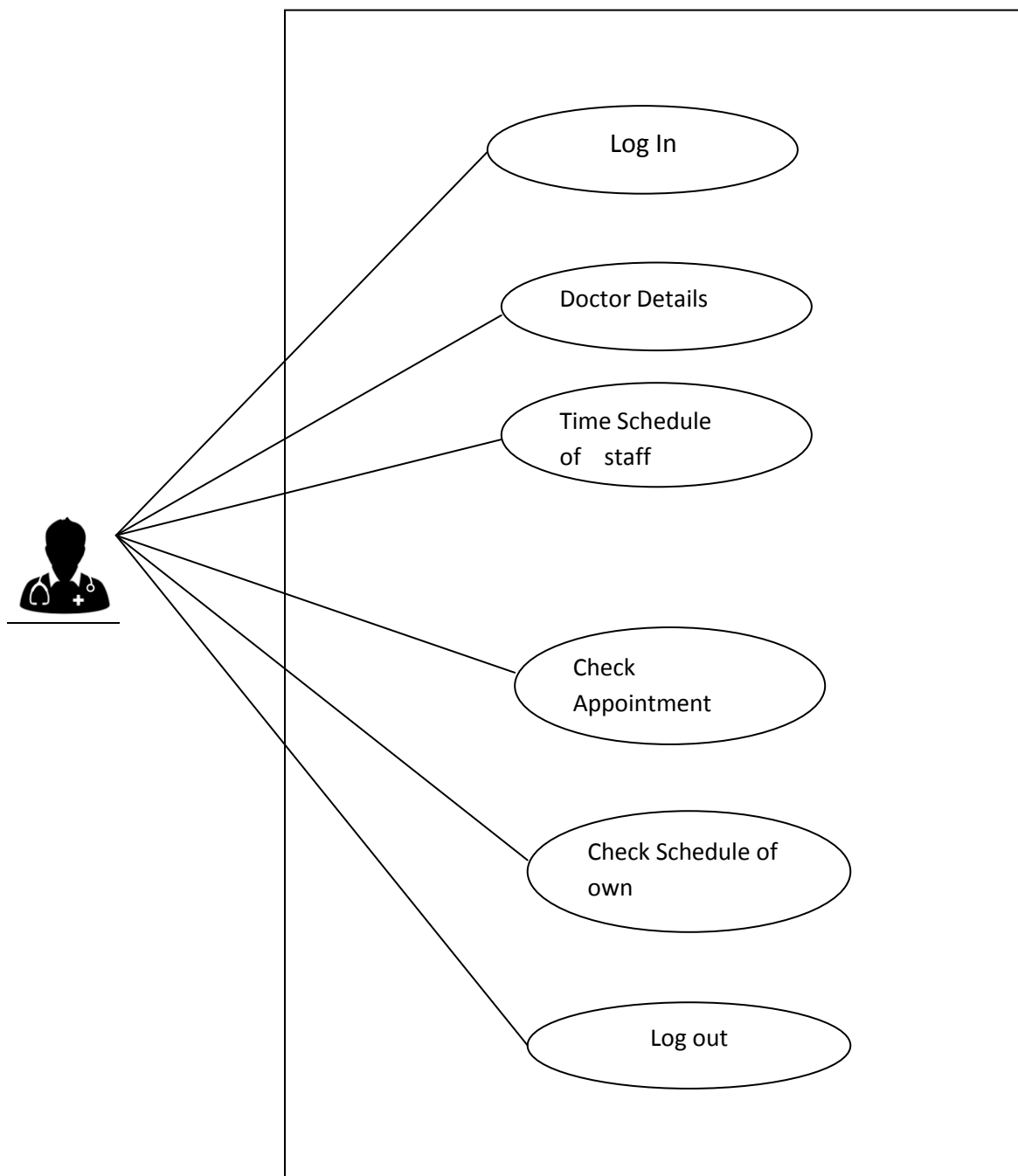
Use case	Contact us	
Goal	To call us in case of emergency.	
Preconditions	N/A	
Success end condition	N\A	
Failed end condition	N\A	
Primary actors;	Patient	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to contact us option.
	2	Click on to see it and use it.
	3	If in case of emergency call us.

Use case	Complain	
Goal	To complain us about hospital authority.	
Preconditions	N/A	
Success end condition	Your complaint has been taken.	
Failed end condition	You didn't do right the complaint can't be taken.	
Primary actors;	Patients	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to complain box
	2	Enter your name and write your complain.
	3	Get a successful notice.

Use case	Services	
Goal	To use service provided by hospital authority.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Patient	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Go to service option
	2	Click to know about it
	3	Choose which one you want to use it.

Use case	Log out	
Goal	To get out from the page.	
Preconditions	N/A	
Success end condition	You have successfully logged out.	
Failed end condition	You can't log out.	
Primary actors;	Patient	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Click log out option.
	2	Do what they asked you to log out.
	3	If you do you will be logged out or else you can't.

### **3.19.3 Use case for Doctors:**



Use case	Log in	
Goal	To get access in the doctor menu.	
Preconditions	N/A	
Success end condition	You have successfully logged in.	
Failed end condition	If the user failed he/she cannot get into the doctor menu.	
Primary actors;	Doctor	
Secondary actors	N/A	
Triggers	N/A	
Description/main success	Step	Action
	1	Doctor need to give Username and password.
	2	Doctor need to make sure the username and password are correct.
	3	If correct doctor will get access to the website or else user can't.

Use case	Time schedule of staff.	
Goal	To see in which time his/her staff duty on.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Doctors	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Choose time schedule of staff and enter
	2	Watch your staff duty.



Use case	Time schedule of own.	
Goal	To see his\her own duty in which time.	
Preconditions	N/A	
Success end condition	N/A	
Failed end condition	N/A	
Primary actors;	Doctors	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Choose time schedule of own enter to it.
	2	Watch duty time.

Use case	Appointment.	
Goal	To see appointment from patients.	
Preconditions	N/A	
Success end condition	This is your appointment today.	
Failed end condition	Sorry you don't have appointment today.	
Primary actors;	Doctor	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Enter into appointment.
	2	See how many appointment you have.

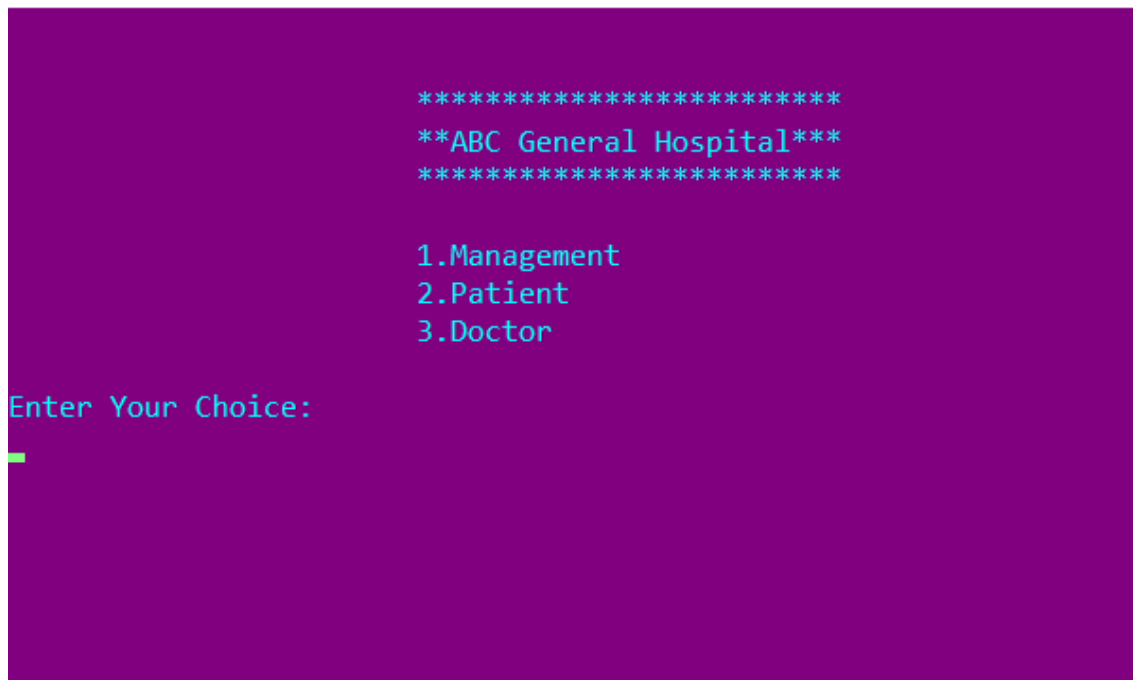
Use case	Log out	
Goal	To get out from the page.	
Preconditions	N/A	
Success end condition	You have successfully logged out.	
Failed end condition	You can't log out.	
Primary actors;	Doctor	
Secondary actors	N/A	
Triggers	N/A	
Description/Main success	Step	Action
	1	Click log out option.
	2	Do what they asked you to log out.
	3	If you do you will be logged out or else you can't.

## **CHAPTER 4: RESULTS AND USER MANUAL**

### **4.1 Welcome Page:**



### **4.2 Officially Main menu:**



#### 4.3 Patient Log in:

```
*****
**ABC General Hospital**
*****

=====
  Patient Sign In
=====

Patient Name: Anik

Password: 2069

Correct Name & Password
Press any key to continue . . . █
```

#### 4.4 Management Log in:

```
*****
**ABC General Hospital**
*****

=====
  Management Portal
=====

Username: Showrov

Password: 2071
Your Are Successfully Log In!!!

Press Enter To Continue:
```

#### 4.5 Doctor Log in:

```
*****
**ABC General Hospital**
*****

=====
  Doctor Sign In
=====

Doctor Id: asik

PassWord: 2080

Correct Name & Password

Press any key to continue . . .

Enter Your Code:80_
```

#### 4.6 Management Menu:

```
=====
█ Management Menu █
=====

1.Time schedule of doctor
2.Doctor Details
3.Time schedule of staff
4.Check Payment History
5.Bill
6.Add doctor USer Name and password
7.Check Registration of Doctor
8.Check Registration of Patient
9.Check Complian

10. Log out

Enter your choice: █
```

#### 4.7 Patient Menu:

```
*****
**ABC General Hospital**
*****

=====
█ Patient Menu █
=====

1.Time Schedule Of Doctor
2.Doctor Details & Appointment
3.Description of cost
4.Medicine Information
5.Contract Us
6.Complain
7.Service

8.Log Out

Enter your choice:
```

#### 4.8 Doctor Menu:

```
*****  
**ABC General Hospital**  
*****
```

```
=====
```

Doctor Menu
-------------

```
=====
```

- 1.Time Schedule
- 2.Staff's under doctor
- 3.Check Appointment

Press 4 for Log Out  
Enter your choice:

#### 4.9 Time Schedule of Doctor:

```
*****
**ABC General Hospital**
*****

Dr. Rezoana Rima
Qualification : MBBS, FCPS ( Pediatric )
Designation : Consultant
Expertise : Pediatric Cardiac Surgeon
Organization: United Hospital Limited , ABC General Hospital
Chamber: ABC General Hospital
Location: Plot # 15, Road # 71, Gulshan - 2, Dhaka - 1212, Bangladesh
Phone: +880-2-8836000, 8836444

Press 1 to BACk Page

Enter YOur choice:1
```

#### 4.10 Bill:

```
Patient Name:anik          Patient Age:20
Patient Address:savar
Patient Phone Number:01715487568

N.B:Press 1 for Bill End

Object_____ Quantity_____ Amount_____
urine test      1      500.000000
blood test      1      200.000000
MRI test        1      5000.000000
ct scan         1      10000.000000
1

TOTal=15700.000000
Cash =15000

Due=700.000000

Please Complete the Due :)

Cash =1000

Return=300.000000

Press 1 for Print the Bill:1
```



#### 4.11 Doctor Registration:

```
*****
**ABC General Hospital**
*****

#####DocTor RegisTration#####

N.B: Special Code:
Child(1-10)          Dental(21-30)
Cardiology(41-50)    Onclogy(61-70)
Dematology(81-90)    Medicine(101-110)
                   Orthopedis(121-130)

Name: asik

Pass: 2080

Special Code:80
Press any key to continue . . . █
```

#### 4.12 Patient Registration:

```
*****
**ABC General Hospital**
*****

█ Patient Sign Up█
=====

Patient Name: Anik

Patient Password: 2069

Patient Email:Anik@gmail.com

Patient Address:Savar

Your are successfully Registered
Press 1 for Login
Press 2 for Back
Enter You choice1█
```

#### 4.13 Doctor Details:

```
*****
**ABC General Hospital**
*****

Dr. Rezoana Rima
Qualification : MBBS, FCPS ( Pediatric )
Designation : Consultant
Expertise : Pediatric Cardiac Surgeon
Organization: United Hospital Limited , ABC General Hospital
Chamber: ABC General Hospital
Location: Plot # 15, Road # 71, Gulshan - 2, Dhaka - 1212, Bangladesh
Phone: +880-2-8836000, 8836444

DO You want to take appointment
Press 1 for Appointment:1
```

#### 4.14 Appointment:

```
Enter You Name:Shoowrov

Enter Your Phone Number:01715548756

Your serial is:1

Press 1 to BAcK Page

Enter YOur choice:1
```

#### 4.15 Search Medicine Information:

```
*****
**ABC General Hospital**
*****

=====
  Medicine Info
=====

Enter MEdicine Name:Seclo
```

After search:

```
*****
**ABC General Hospital**
*****

Power = Omeprazole 20mg & 40mg/capsule

price = 5.00tk (per piece)
Press any key to continue . . . █
```

#### 4.16 Complain:

```
*****
**ABC General Hospital**
*****

=====
  Complain
=====

Enter Your Name:Anik

Write Your Comment:i think the staff ae not very friendly

Press any key to continue . . . █
```

#### 4.17 Doctor Staff Schedule:

```
*****
**ABC General Hospital**
*****

=====
  █ Doctor Schedule █
=====
Duty on:Saturday,Monday(1.00pm-3.00pm)
Room no:402MB
Press any key to continue . . .
```

#### 4.18 Doctor Schedule:

```
*****
**ABC General Hospital**
*****

=====
  █ Staff █
=====
Dr. Amit Kapoor
Staff: Akash Ahmed
Press any key to continue . . .
```

#### 4.19 Appointment list:

```
*****
**ABC General Hospital**
*****

=====
  Appointment List
=====

Paitent name=rashik
Paitent Phone Number=1122334556
Serial is=1
Paitent name=fjfvhjvhr
Paitent Phone Number=9847478839
Serial is=2
Paitent name=Anik
Paitent Phone Number=0188977
Serial is=3

Press any key to continue . . .
```

#### 4.20 Log Out:

```
*****
**ABC General Hospital**
*****

You are Successfully log out

Press any key to continue . . .
```

## **Chapter 5: Conclusion**

The project hospital management system is for computerizing the working in a hospital. The software takes care of all requirement of an average hospital and is capable to provide easy and effective storage of information related to patients that come to the hospital. It generates test reports; provide billing information, service and medicine information etc. to the doctor and patients.

The whole project has been done by only C language.

The whole project has been divided into three major parts like Admin, Patient & Doctor. Each one has their own role to perform and system responds accordingly.

### **RECOMMENDATIONS FOR FUTURE WORKS**

We work hard a lot to complete the project. In this short time, we try to give our best to complete project. But a lot of thing needs to add on this project. Our future scopes are given below:

The system comprise of following feature:

- I. Management of authority.
- II. Management of doctors.
- III. Management of patients.
- IV. Manage time schedule of doctor.
- V. Manage appointment.
- VI. Manage billing.
- VII. Management of new doctor adding.
- VIII. Management of medicine information
- IX. Management of cost description.

Future scopes:

- I. Managing Reports
- II. Feedbacks Management
- III. Inquiry Management
- IV. Specialty Management
- V. Searching Information
- VI. Managing useful information in form of News
- VII. Management of Patient's previous visit and its information

## **References:**

Our teacher help us a lot to solve our problems. But after that, We take some help from those Websites.

- [Wikibooks.com](https://en.wikibooks.org/)
- [Stactoverflow.com](https://stackoverflow.com/)
- [Programiz.com](https://programiz.com/)