

HOSPITAL MANAGEMENT SYSTEM

UCS503 Software Engineering Project Report

End-Semester Evaluation

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Software Bid

First Choice	<p>Hospital Management system using python and html</p> <p>-We have all been in that situation when we have an emergency or shortage of time for visiting a hospital. Our team is making a hospital management system which makes possible to book appointment, list of medicines and total bills information under a single system only.</p>
Second Choice	<p>Car game using C++</p> <p>-A fun, exciting, classic game that can be enjoyed by all ages. Since all the members of team Runtime Terror are well versed in CPP we feel this is right in our wheelhouse. Considering the time and effort to be taken to make the source code for the game we believe this is the optimal project for us.</p>
Third Choice	<p>Weather app using flutter</p> <p>-Weather is something that controls everything in our lives. From reaching important meetings on time to deciding when to put our clothes out to dry, everyone finds their own unique use for a weather forecasting app. It is our objective to develop a precise and user-friendly application that everyone can use.</p>

Fourth Choice	Real time chat application using python -When the worldwide pandemic forced us all into our homes with a dreadful sense of isolation the one thing that kept people connected to their loved ones and gave them the motivation to fare out these tough times was online communication platforms. From texting gifs and emojis to a simple goodnight and take care messages, we as the people who were direly affected have recognised the importance that these platforms hold.
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Project Overview

Objective: To build a hospital management system

The project Hospital Management system includes registration of patients, storing their details into the system, storing details of doctors and also computerized billing in hospital. The software has the facility to give a unique username and password for every patient and doctors and stores the details of every patient and the doctor automatically. Patient can search for the doctors in the hospital .

The Hospital Management System can be entered using a username and password. It is accessible either by patients , admin and doctors. Only they can add the particular data into the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.

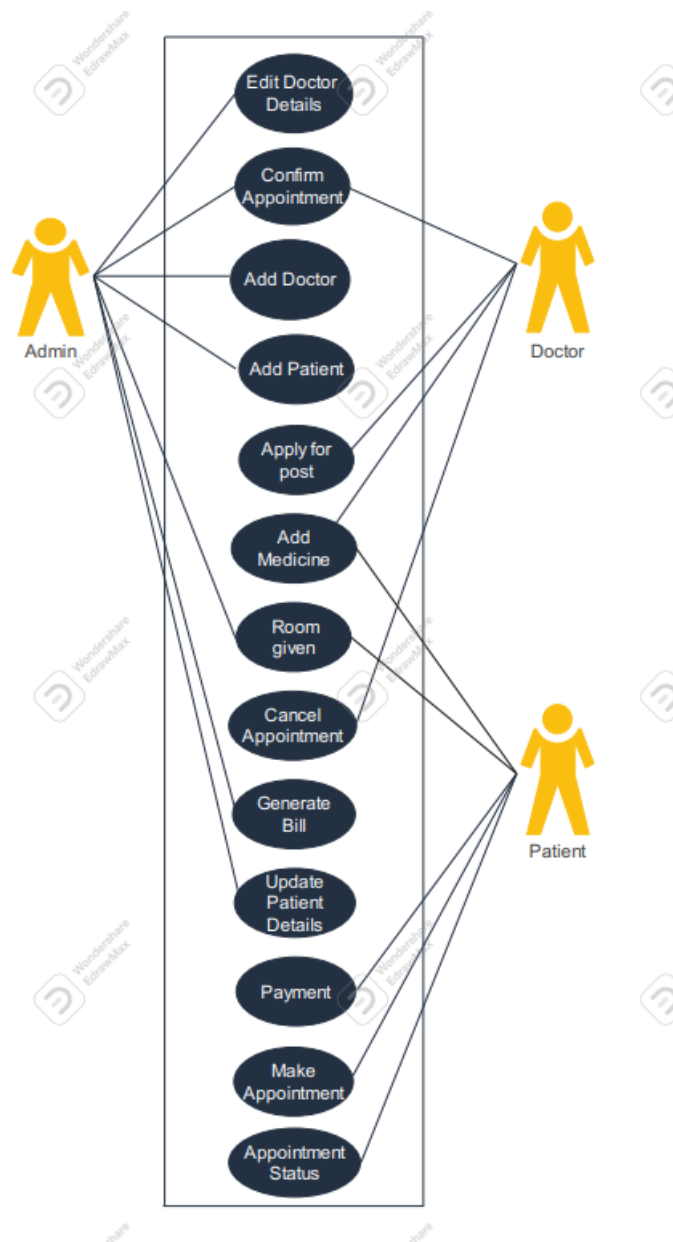
The purpose of the project entitled as “HOSPITAL MANAGEMENT SYSTEM” is to computerize the Front Office Management of Hospital to develop software which is user friendly, simple, fast, and cost – effective. It deals with the collection of patient’s information, diagnosis details, etc.

Traditionally, it was done manually. The main function of the system is to register and store patient details and doctor details and retrieve these details as and when required, and also to manipulate these details meaningfully. System input contains patient details, diagnosis details; while system output is to get these details on to the CRT screen.

NEED:

Our present modern information system makes use of computers for the execution, each of them connected through an optimized network. Healthcare is the most critical aspect of our society, and many health care providers face challenges to offer practical and active services to patients.

USE CASE DIAGRAM



USE CASE TEMPLATES

1.

1. Use Case Title	Edit doctor details
2. Abbreviated Title	E_dr_detail
3. Use case ID	1
4. Actors	Admin
5. Description	
1. Only admit can edit the details of the doctor which are present in the database	
5.1 Pre-Conditions	
1. Doctor should have Registered account.	
5.2 Task Sequence	
1. Go to the page where information of doctors is saved.	
2. Edit the details of the doctor.	
3. Save the new information.	
5.3 Post Conditions	
1. New Information of doctor will be updated.	

2.

1. Use Case Title	Confirm Appointment
2. Abbreviated Title	Cm_apt
3. Use case ID	2
4. Actors	Admin, Doctor
5. Description	
5.1 Pre-Conditions	
1. If doctor is available then appointment is confirmed.	
5.2 Task Sequence	
1. Notify the doctor about appointment.	
2. Then reply to the patient according to the doctor's reply.	
5.4 Post Conditions	
1. Appointment will be cancelled or confirmed.	

3.

1. Use Case Title	Add Doctor
2. Abbreviated Title	Add_Dr
3. Use case ID	3
4. Actors	Admin
5. Description Admin have the permission to add new doctor to the hospital management system.	
5.1 Pre-Conditions 1. All information of doctor should be available to the admin.	
5.2 Task Sequence 1. Create new account of the doctor. 2. Add doctors' information to it.	
5.3 Post Conditions 1. Doctor is able to access his new profile.	

4.

1. Use Case Title	Add patient
2. Abbreviated Title	Add_pt
3. Use case ID	4
4. Actors	Admin
5. Description 1. Patient must have proper symptoms 2. Patient must provide all the necessary details like first name, last name, mobile number etc.	
5.1 Pre-Conditions 1. Vacant room should be available.	
5.2 Task Sequence 1. Patient will provide the required personal information, his/her symptoms 2. Patient will be added to the database	
5.3 Post Conditions 1. patient will be added	

5.

1. Use Case Title	Apply for post
2. Abbreviated Title	Ap_post
3. Use case ID	5
4. Actors	Doctor
5. Description	
1. Doctor who can apply for the vacant post.	
5.1 Pre-Conditions	
1. Doctor should have all the qualifications required for hospital.	
5.2 Task Sequence	
1. Doctor should send resume to the admin.	
2. Admin will further proceed according to the resume of the doctor.	
5.3 Post Conditions	
1. May or may not the post of the doctor will be filled.	

6.

1. Use Case Title	Add medicine
2. Abbreviated Title	Add_mdcn
3. Use case ID	6
4. Actors	Doctor
5. Description	
1. Doctor gives prescription of medicine to the patient.	
5.1 Pre-Conditions	
5.2 Task Sequence	
1. Doctor writes prescription of medicine.	
2. Client purchases it.	
5.3 Post Conditions	
1. Patient uses that medicine.	

7.

1. Use Case Title	Give Room
2. Abbreviated Title	Gv_rm
3. Use case ID	7
4. Actors	admin
5. Description The process where the admin checks and update the room information and status.	
5.1 Pre-Conditions 1. Vacant rooms should be available. 2. Complete information of rooms should be there.	
5.2 Task Sequence 1. Encodes room information. 2. Allots particular room to the patient according to there needs.	
5.3 Post Conditions 1. Room is allotted to the patient.	

8.

1. Use Case Title	Appointment
2. Abbreviated Title	apt
3. Use case ID	8
4. Actors	Pateint, Doctor
5. Description Patient requests an appointment from doctor.	
5.1 Pre-Conditions 1. Doctor should have available time.	
5.2 Task Sequence 1. Patient book for doctor's appointment. 2. Doctor confirms or cancels appointment according to its schedule.	
5.3 Post Conditions 1. Doctor either Cancel or confirm the appointment.	

9.

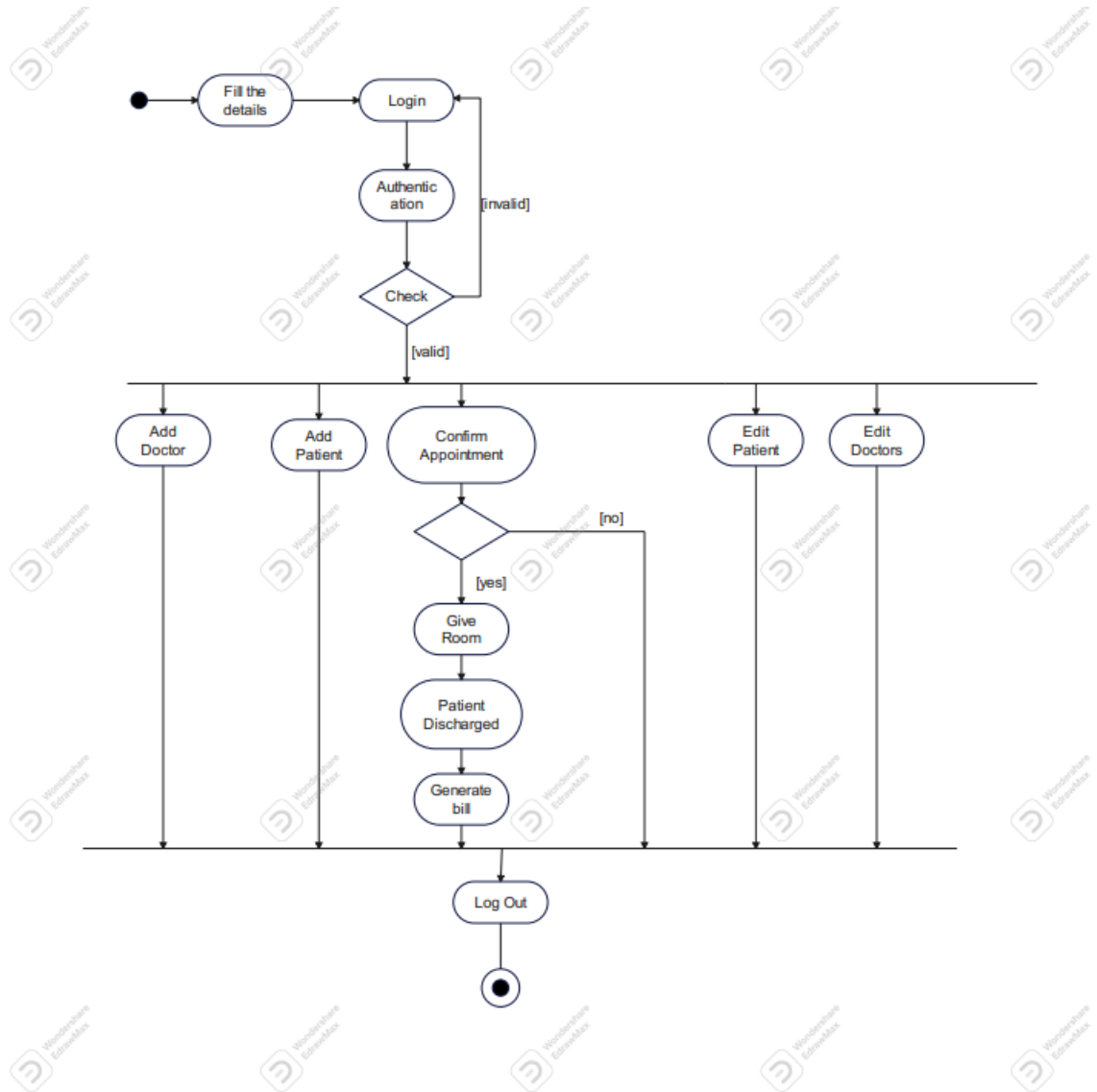
1. Use Case Title	Generate bill
2. Abbreviated Title	Gnrt_bill
3. Use case ID	9
4. Actors	Admin
5. Description	
1. How the admin handles transactions made by the client.	
5.1 Pre-Conditions	
1. Should have medicine and lab bill record.	
5.2 Task Sequence	
1. Sums up all the bills together.	
2. Update the bill information of the patient.	
5.3 Post Conditions	
1. Receives specific amount of payment from patient.	

10.

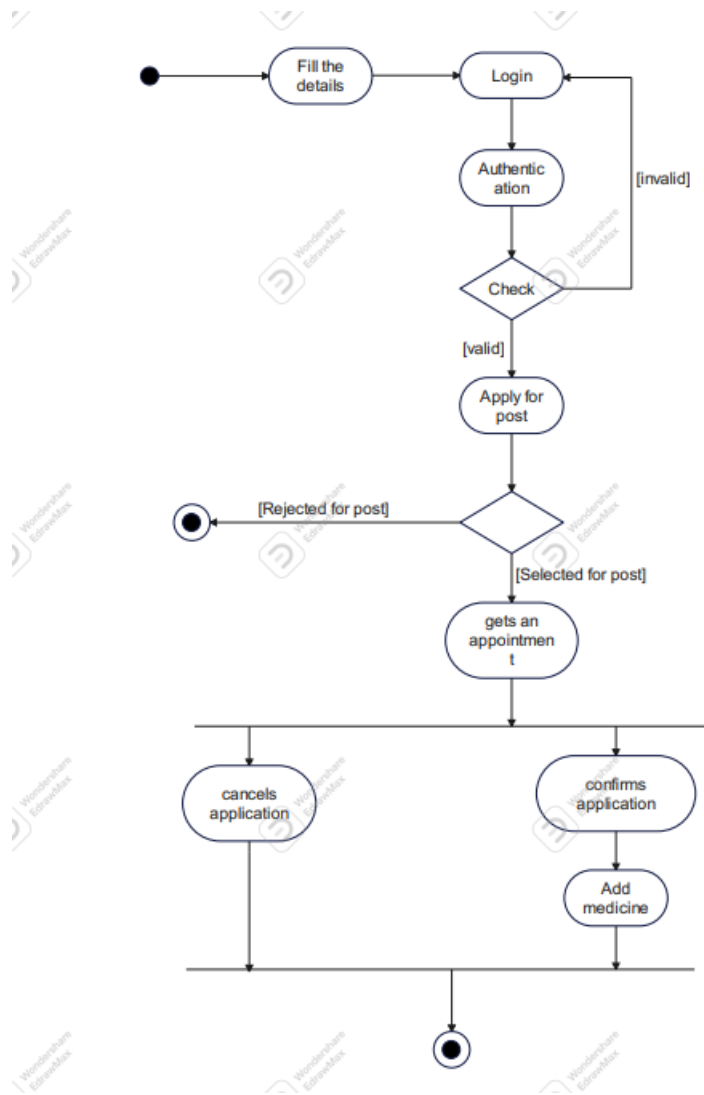
1. Use Case Title	Update patient details
2. Abbreviated Title	Upt_pt_dtls
3. Use case ID	10
4. Actors	Admin
5. Description	
1. Admin has the access to update patient details.	
5.1 Pre-Conditions	
1. Patient should have registered account.	
5.2 Task Sequence	
1. Add new details of patient in the database.	
5.3 Post Conditions	
1. New information of patient is available.	

ACTIVITY DIAGRAM

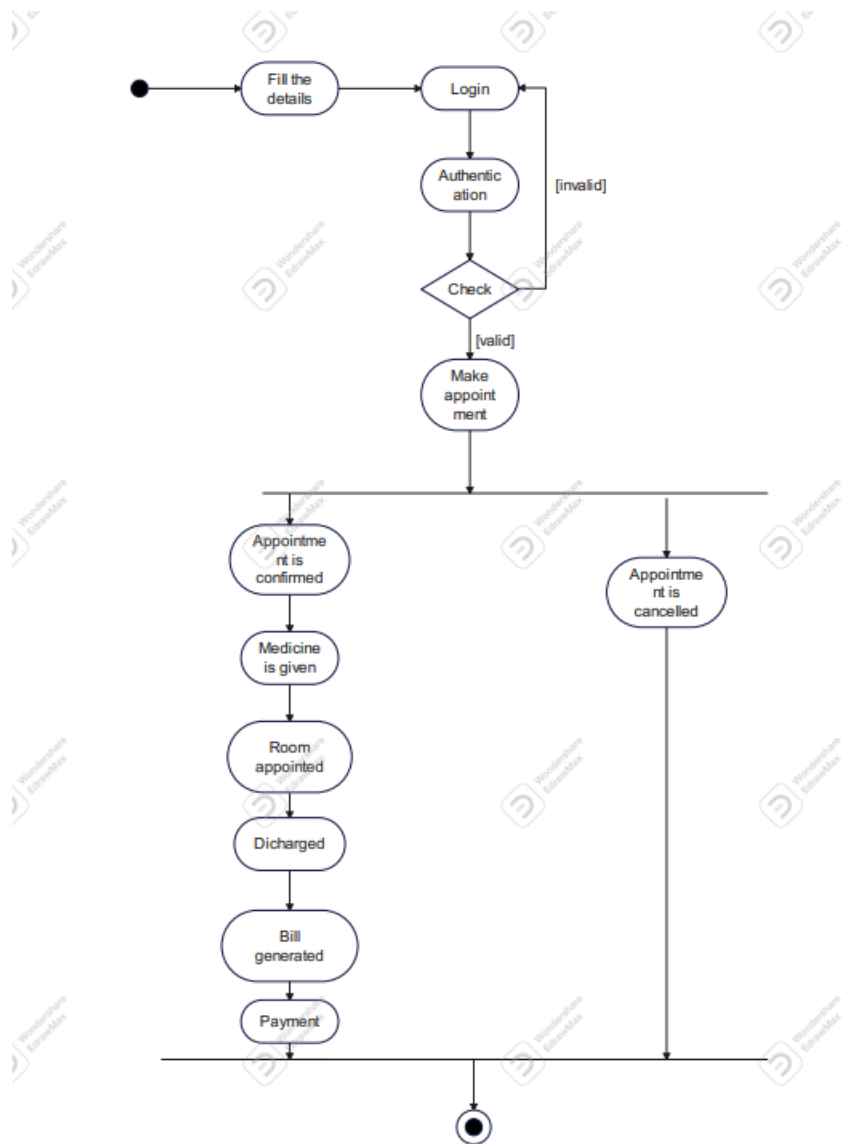
Activity diagram for admin-



Activity diagram for Doctor-

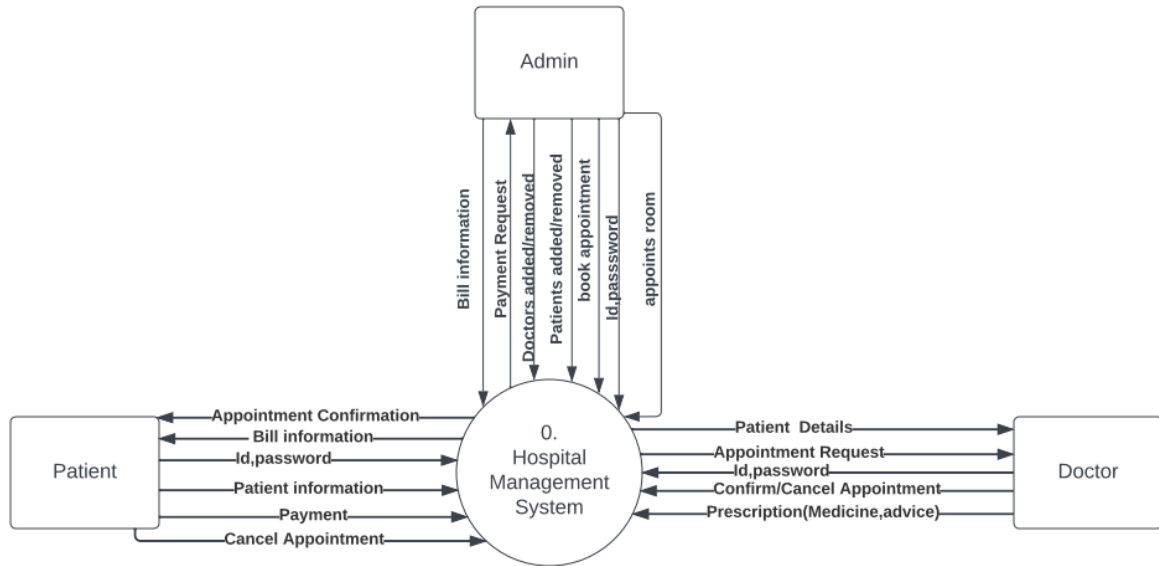


Activity diagram for patient-

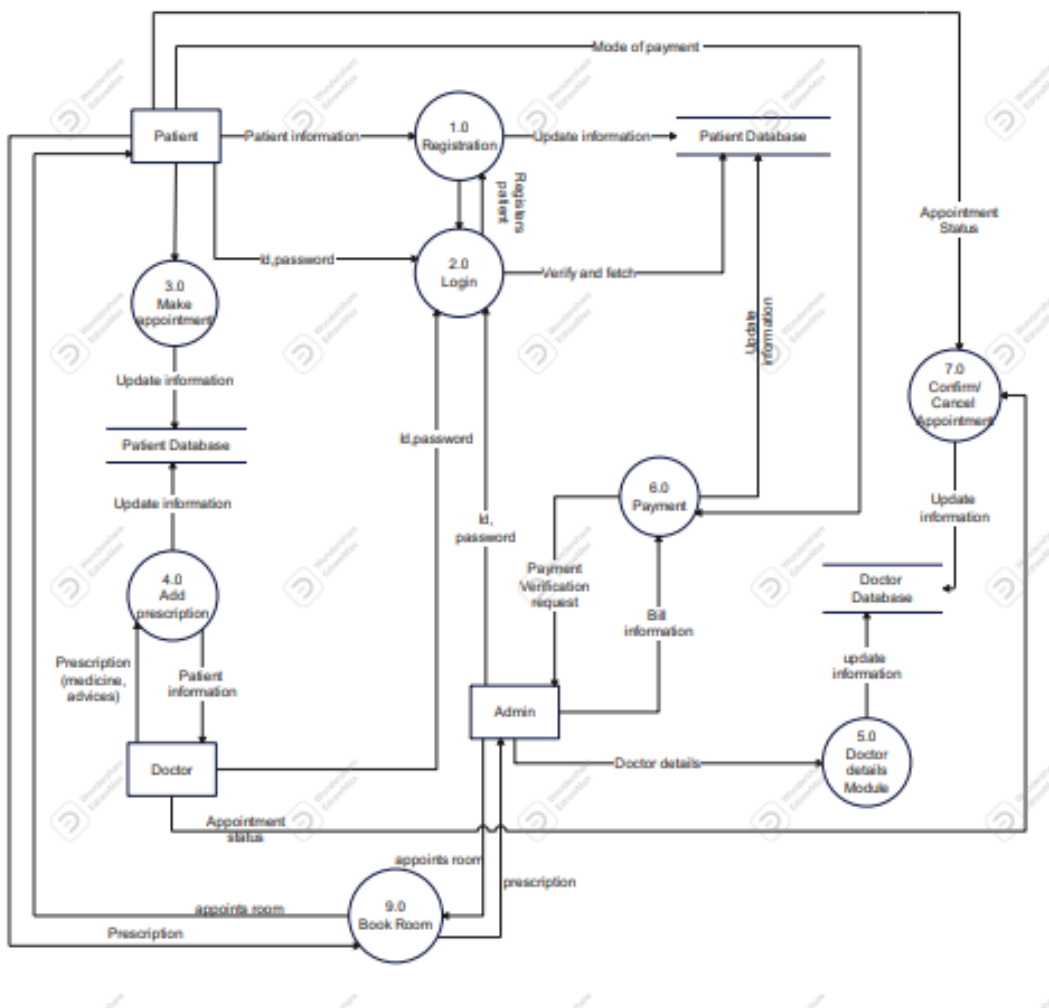


DATA FLOW DIAGRAMS

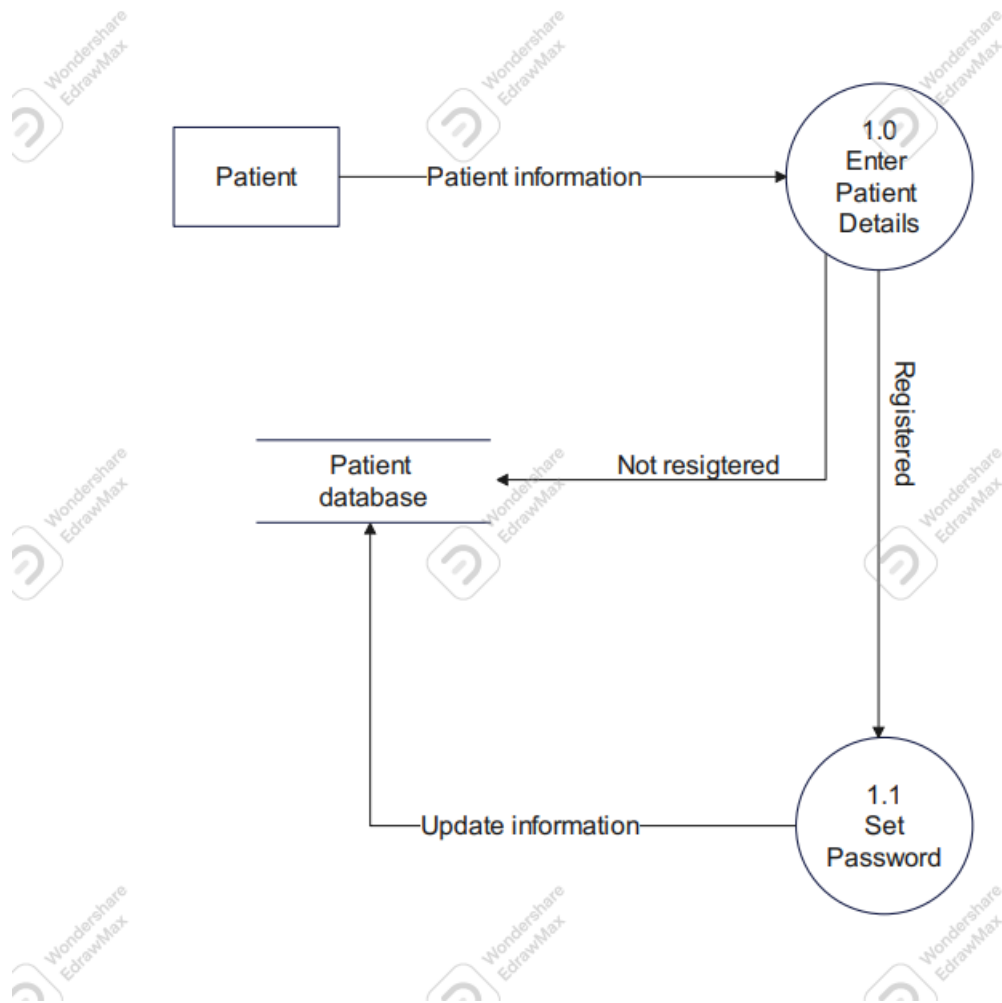
Level 0 DFD-



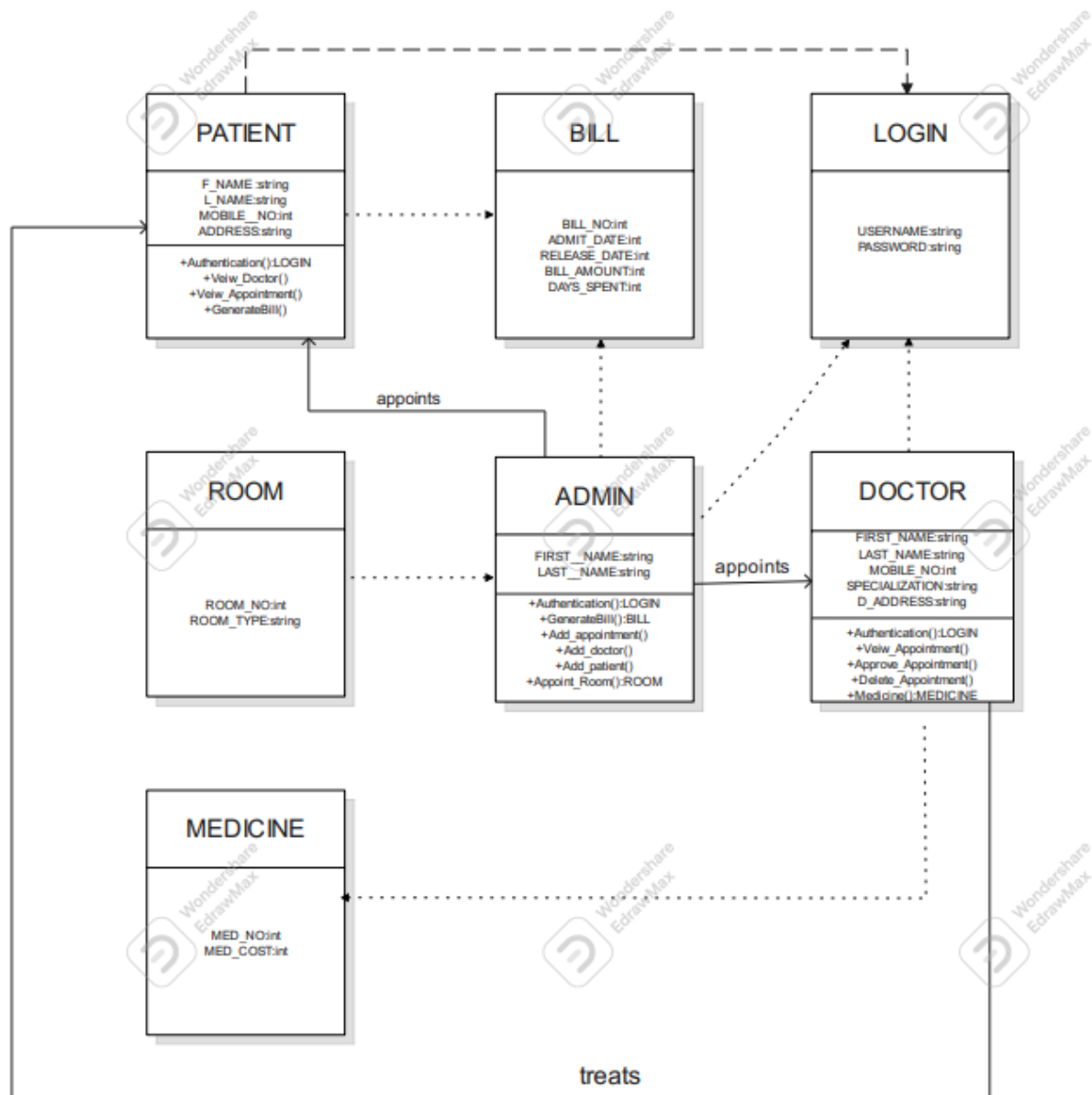
Level 1 DFD-



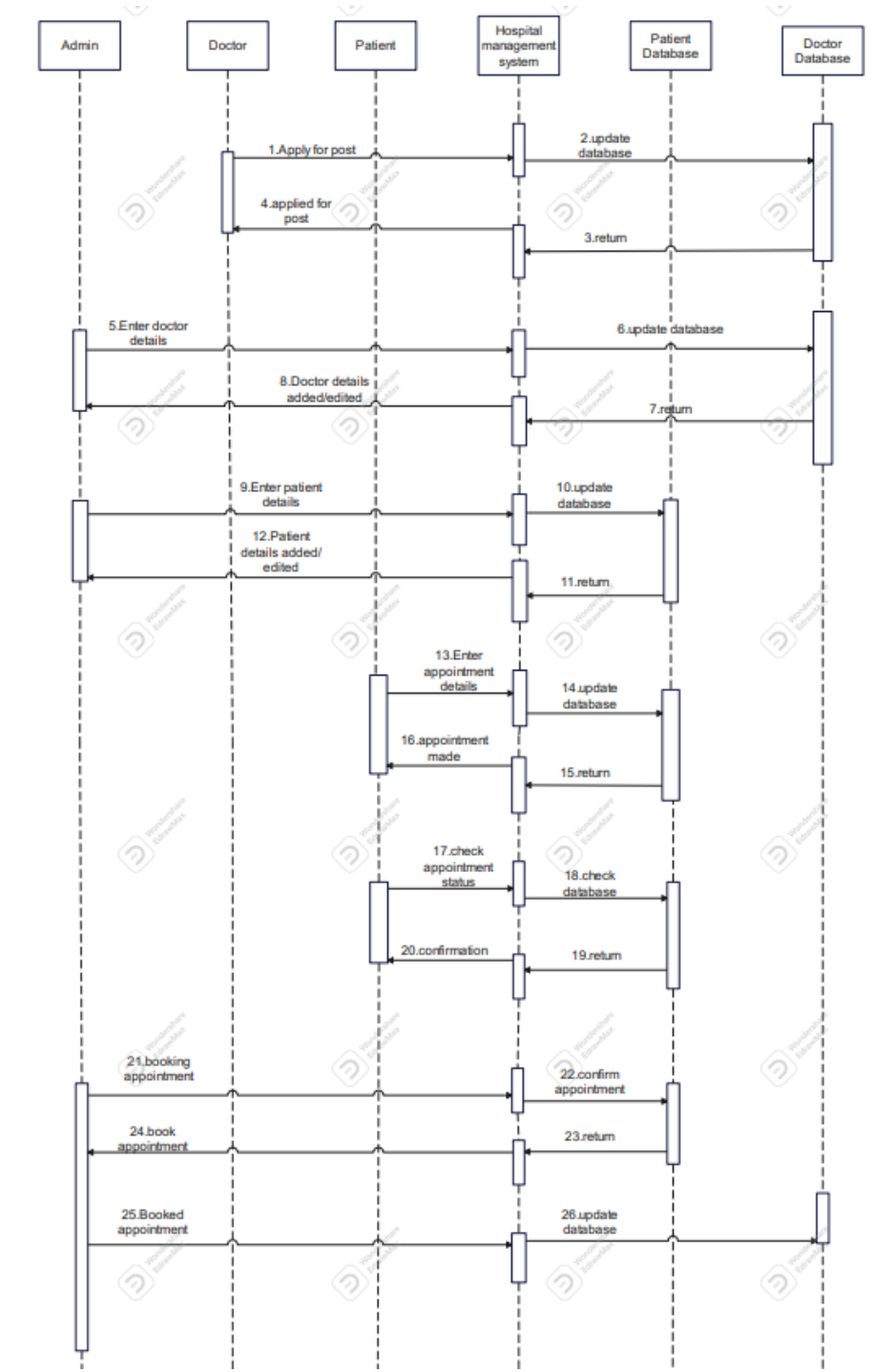
Level 2 DFD-

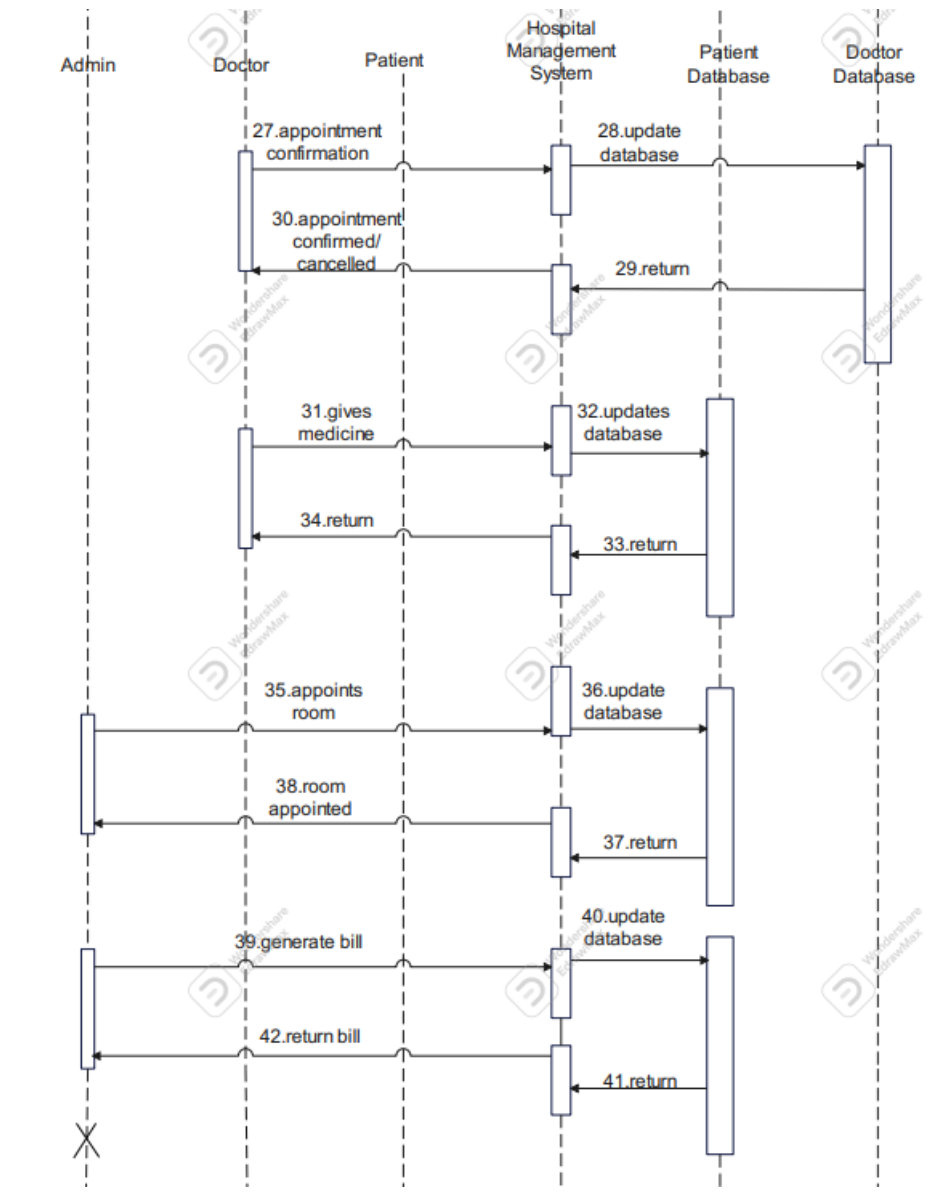


CLASS DIAGRAM

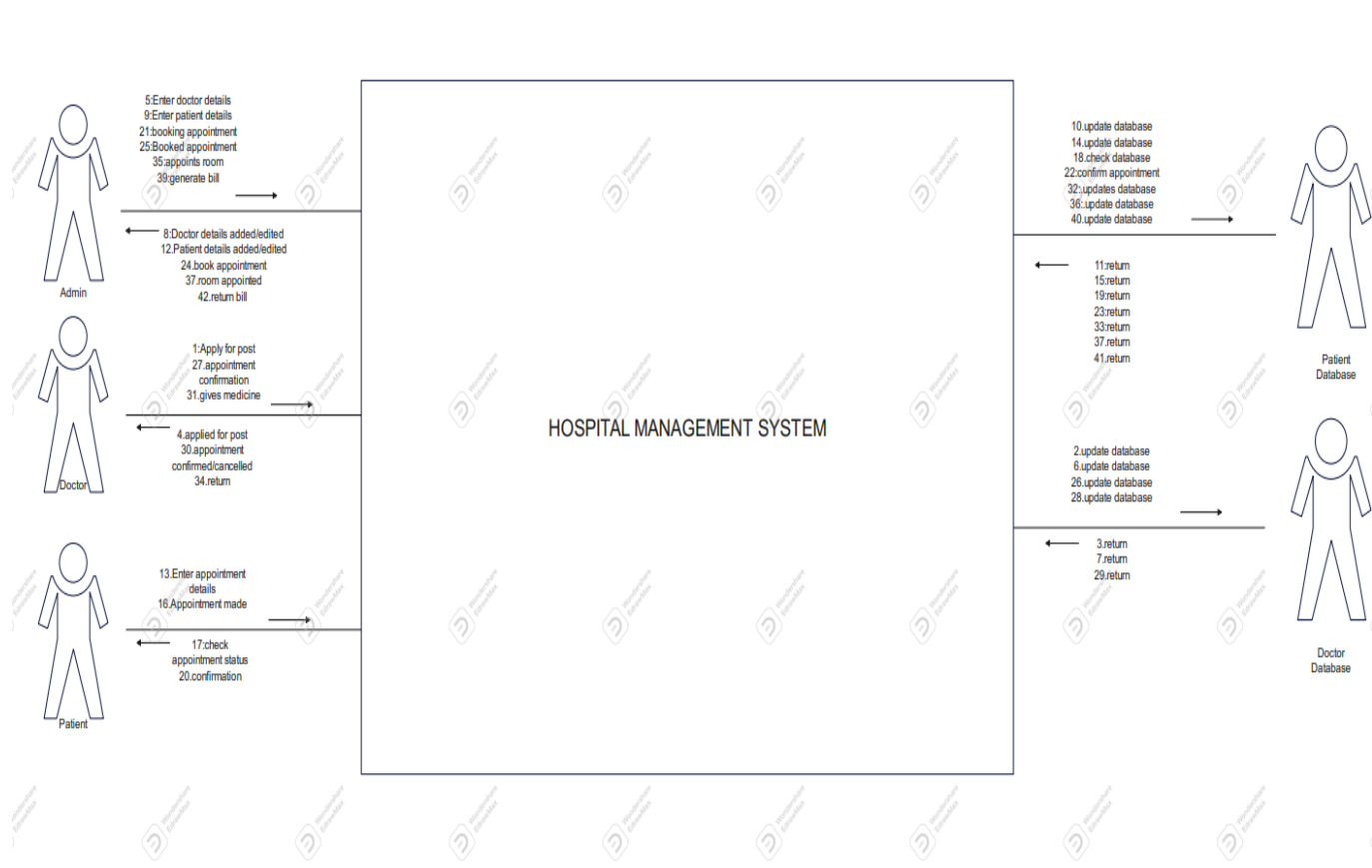


SEQUENCE DIAGRAM





COLLABORATION DIAGRAM



ER DIAGRAM

