

HOSPITAL MANAGEMENT SYSTEM



Group Members

NAME	ROLL NO
AKARSH S NAIR	[AM.EN.U4AIE21008]
ALFY ALEX	[AM.EN.U4AIE21011]
NAYAN M.K	[AM.EN.U4AIE21048]
SHYAMDEV KRISHNAN J	[AM.EN.U4AIE21060]
SANTHOSH MAMIDISETTI	[AM.EN.U4AIE21042]

ABSTRACT:-

As the name specifies "HOSPITAL MANAGEMENT SYSTEM" is a software developed for managing various activities in the hospital. Our project Hospital Management system includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy, and labs. Our software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. User can search availability of a doctor and the details of a patient using the id.

The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or the patient. Only they can add 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. System provides the benefits of streamlined operations, enhanced administration, control, superior patient care, strict cost control and improved profitability. HMS is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospitals. More importantly it is backed by reliable and dependable support. The project 'Hospital Management System' is based on the database, object oriented

and networking techniques. System provides the benefits of streamlined operations, enhanced administration, control, superior patient care, strict cost control and improved profitability

Key words: Doctor, Patient, Medicine, appointment

Functional Requirements of the System

Patient:

- 1. User need to register with the system before using the portal.
- 2. User need to login to the system to access his/her main page.
- 3. User can make the appointment.
- 4. User can view the medicine list.

Doctor:

- 1. Doctor need to login to the system
- 2. Can choose the required department.
- 3. Doctor can edit the appointment details.
- 4. Doctor can view patient list.

Cashier:

- 1. Cashier need to login to the system
- 2. Cashier can manage the credit, add medicine and provides total amount.

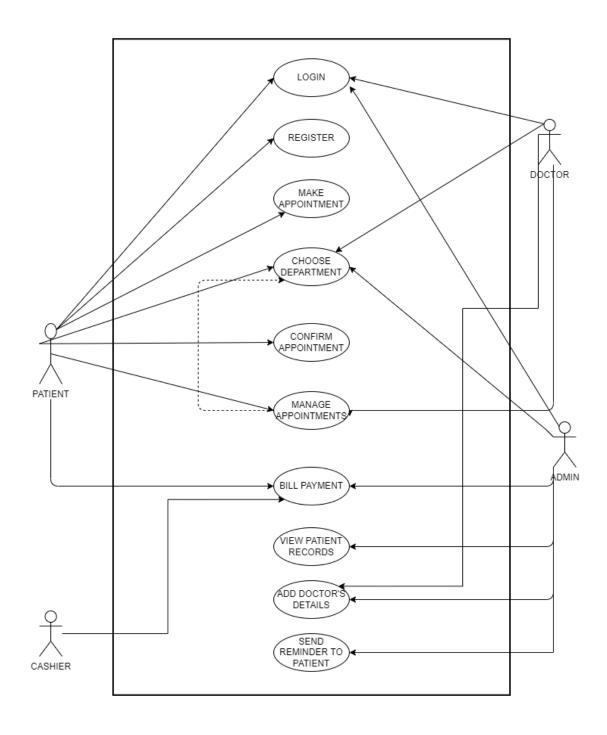
Admin:

- 1. Admin need to login to the system.
- 2. Admin can add doctor and patient details.

Use Cases

Actors	Use case	
Patient	Takes appointment, Add Patient's details, Check the existing patient's details, view medicine List	
Doctor	Choose the department, Add Doctor Name, View the existing doctor's data, View patient List, Log out	
Cashier	Manage the credit, Provides the fee receipt, Add medicine, Log out	
Admin	Add doctor's details, Add patient details, Log out	

USE CASE DIAGRAM



Use Case Description

USE CASE – 1

Use case ID	Login
Brief description	Cahier, Doctor and Admin has to login to portal before any action.
Primary actors	Cahier , Doctor and Admin
Precondition	Select the required Actors from main menu.
Post condition	Actors gets logged in to the portal.
Main success Scenario	The logged-in Actors can view the functions that they can do.
Actor Action	System Response
Users enter login credentials and clicks on login button.	2. Confirms the details and logs the actors in.
3. The users get access into the hospital main page.	
Alternate flow	
	2a. If the sign in details is not correct, system returns error message.

Use case ID	Login
Brief description	Patient can get access to the login portal.
Primary actors	Patient
Precondition	New patients should sign up by entering their details
Post condition	Patient gets registered and can access the portal.
Main success Scenario	If the registered patient is valid, then display welcome message and give access to his/her account else return error message.
	The new patients get confirmation of their registration.
Actor Action	System Response
1. New patient enters login credentials and clicks on login button.	2. Confirms the details and logs the patient in.
3. The patient get access into the hospital main page.	
Alternate flow	
	2a. If the sign in details is not correct, system returns error message.

Use case ID	Takes appointment	
Brief description	The patient selects the department and the appointment date and time.	
Primary actors	Patient	
Precondition	Browse the options for consultation.	
Post condition	Displays the selected department, appropriate doctor's name and patient details.	
Main success Scenario	The appointment gets fixed.	
Actor Action	System Response	
The patient uses appointment window to Type the name and other patient information	2. Displays the user inputs.	
3. Type the preferred date.	4. Present the session tab to choose time of convenience.	
5. Clicks on preferred session	6. Displays the selected date and time.	
Alternate flow		
	6a. If any of the information given by patient is incorrect unsuccessful message is displayed.6b. Redirect to main menu.	

USE CASE – 4

Use case ID	Add Medicine details
Brief description	Admin can add the medicine list with the price and name of the medicine and is stored in the text file.
Primary actors	Cashier
Precondition	Select the specified input to Add the medicine.
Post condition	Added Medicine list will be added in the text file.
Main success Scenario	Display the message for Successfully adding the medicine details.
Actor action	System response
The cashier Select the specified input to Add the medicine	Displays the new medicine list with price and name
	3. Displays the list in text file.
Alternate flow	
	3a. If the price and name of medicine is invalid show unsuccessful message.3b. if the text file is not present display something went wrong

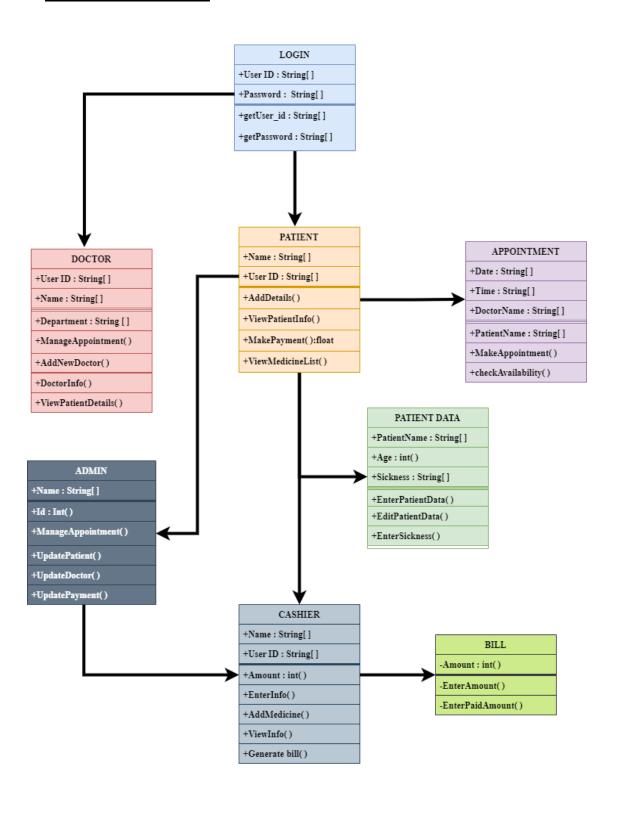
<u>USE CASE – 5</u>

Use case ID	Add Patient and Doctor details
Brief description	Admin can add the Patient and Doctor details list
	with the name and other details of the doctor, admin
	and is stored in the text file.
Primary actors	Admin
Precondition	Select the specified input to Add the details.
Post condition	Added details will be added in the text file.
Main success Scenario	Display the message for Successfully adding the
	Patient and Doctor details.
Actor action	System response
The cashier Select the specified input to Add the medicine	2. Displays the new details of patient and doctor.
	3. Displays the list in text file.
Alternate flow	
	2a. If the details are invalid show unsuccessful
	message.
	3b. if the text file is not present, display something
	went wrong

Use case ID	Bill Payment
Brief description	The cashier provides option for the fee payment. Gives the total amount
Primary actors	Cashier
Precondition	Select the total amount option
Post condition	Displays the total amount
Main success Scenario	Display the message for successful payment.
Actor action	System response
The patient uses payment window to select the mode of payment.	2. Displays the amount for consultation.
	3. Requests the card details
	4. The amount debited information comes from gateway.
5. Cashier checks whether the payment is details are correct.	6. Display message that the appointment is completed.
Alternate flow	
	6a. The gateway communicates the amount is not debited, unsuccessful message is displayed

Use case ID	Log Out
Brief description	If the Doctor, Cashier and Admin are not interested to add or change anything can logout of the portal
Primary actors	Doctor, Cashier and Admin
Precondition	Select the specified input to log out
Post condition	The user will get logged out.
Main success Scenario	Displays the logged out successful message.
Actor action	System response
The actors has to choose the specified input in the screen to log out.	Displays the successfully logged out message.
Alternate flow	
	2a. Show unsuccessful log out message.

CLASS DIAGRAM:



User Input and Output:

Actor	Admin ,Doctor and Cashier
User Input (LOGIN)	*Name *User ID *Password
Output	Login Successful window appears with all the details.

Actor	Patient
User Input (PATIENT DATA)	TO ADD ENTRY (By clicking 3) *Name *Age *Sickness Name
Output	*Gender *Age Dialogue Box with the confirmed details provided by the patient appears.

Actor	Patient
User Input (APPOINTMENT)	TO MAKE APPOINTMENT By clicking (2) *Date *time *Patient Name *Doctor name *Age *Disease
Output	Display the message for appointment confirmation.

Actor	Patient
User Input (APPOINTMENT)	*TO CHECK DOCTOR LIST (By clicking 3) *TO CHECK MEDICINE LIST

	(by clicking 4)
Output	Display the message the list

Actor	Admin
User Input	*Name *Id
Output	Display the window for the admin to add the details of patients and doctor

Actor	Cashier
User Input	*Name *User ID *Enter total amount *Add medicine
Output	Bill will be generated