

Hospital Management System

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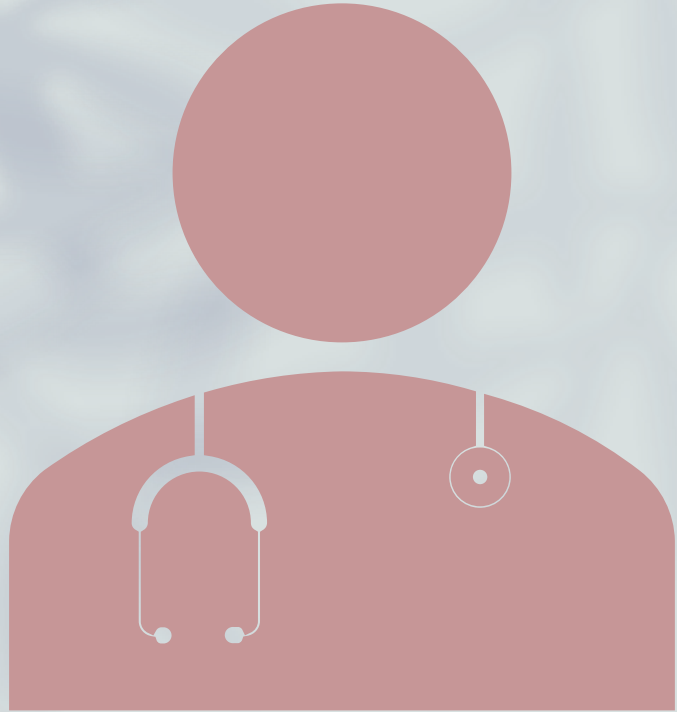
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Introduction



- Hospital management system is a computer system that helps to manage the information related to health care.
- It manages the data related to all departments of healthcare such as clinical, financial, pharmacy etc.

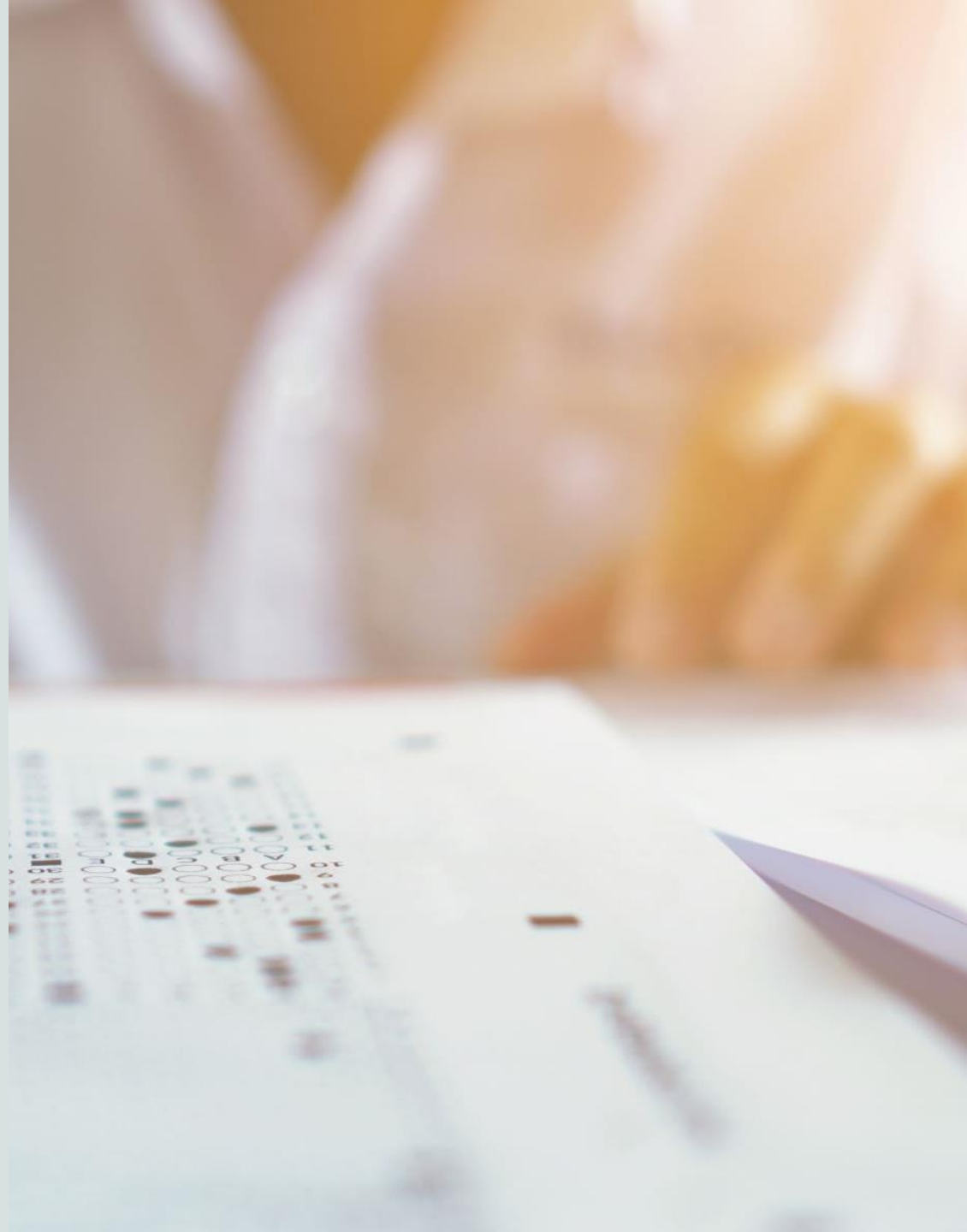
What is hospital management system?



- An HMS is a software application that integrates various functionalities within a hospital into a single platform.
- Streamlines administrative tasks, patient care, and departmental operations.
- Enhances communication and data exchange across departments.

Problem Statement

- A study showed that healthcare providers spend 35% of their time on documenting patient data. While paperwork is unavoidable in a hospital, you can automate the process and reduce the burden on the staff and doctors



Problem Solution

- **Centralizing and unifying data:** Storing all patient information, appointments, finances, and other data in a single, secure platform improves accessibility and accuracy.
- **Enabling data-driven decision making:** The system generates reports and analytics, providing valuable insights for optimizing operations, allocating resources, and improving overall hospital performance.

Related Work

- In this paper, Hospital Management System was created by “MK Gourisaria” for the year 2022. Advances in technology and development have become essential to improving health care outcomes and are the focus of doctors and researchers. With each passing day, there is a new type of chronic disease, increasing health care costs, and increasing demands and expectations from patients. Intelligent hospital management system brings revolution to patients as well as to doctors and staff. With the incorporation of various modern and effective technologies of automation systems and innovations in information technology, smart hospitals cover several aspects of the hospital which include a variety of operations, building design, patient experience.

Paper 2

- Knowledge Management Orientation: an innovative perspective to Hospital Management by "M Ghasemi, MG Nejad, K Bagzibagli" in 2017 the developed items seem to have a potential to help hospital managers and subsequently delivering new products/services successfully based on the standard procedures in their organization. In all innovation processes, the knowledge management areas and their standard steps help hospital managers by a new tool as questionnaire format.

Paper 3

- Acceptance model of a hospital information system by “PW Handayani, AN Hidayanto, AA Pinem” in 2017 hospital management and IT developers should have more understanding on the non-technological factors to better plan for HIS implementation. Support from management is critical to the sustainability of HIS implementation to ensure HIS is easy to use and provides benefits to the users as well as hospitals. Finally, this study could assist hospital management and IT developers, as well as researchers, to understand the obstacles faced by hospitals in implementing HIS.

Feasibility



Technical Feasibility: The necessary technology infrastructure is readily available.



Financial Feasibility: Potential for increased revenue through improved patient satisfaction.



Operational Feasibility: Staff training programs to ensure a smooth transition.



Expected Benefits

This application provides improve patient care ,
Increased efficiency , paperwork reduction and
error and easy communication among hospital staff

Letting patients see doctor availability and book
appointments online.

Speeding up patient registration and record-filling.

Emailing medical test results to patients.

Expected Benefits

- Doctors can manage their schedules better.
- All patient info is in one place, helping doctors diagnose and treat better.
- Collects feedback to improve patient experience.
- Helps in financial management.

Project Goals

- Computerized all the details of the patient and hospital.
- Scheduling the appointment of patient with doctors to make it convenient for both.
- The information of the patients should be kept up to date and there record should be kept in the system for historical purposes.
- Reduce operational costs of hospitals.

Future Work

- Advanced features could be added, such as chatbot to help user, sharing between users, the ability to export monthly reports and online appointment bookings.

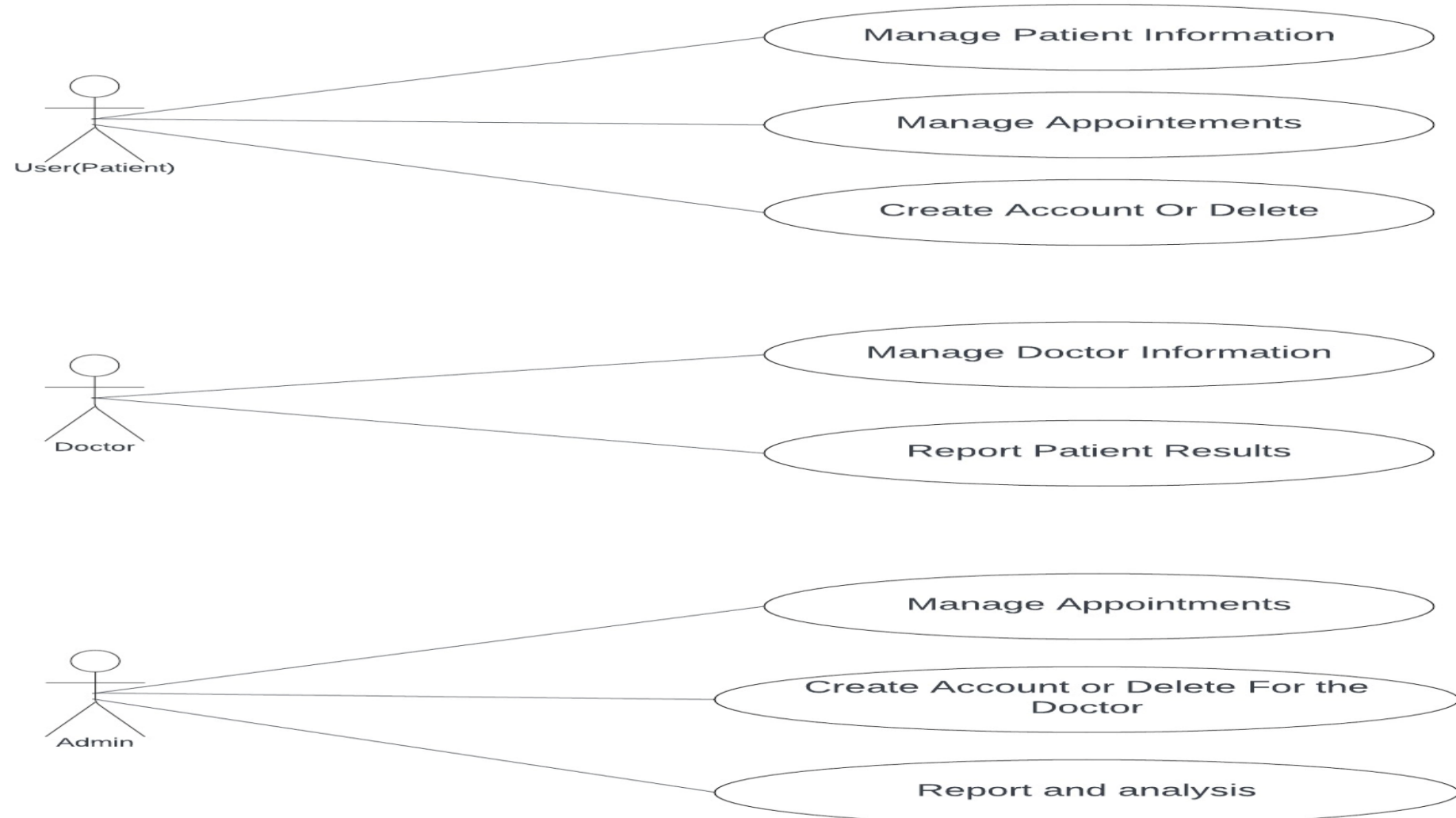
Conclusion

- The implementation of an Integrated Hospital Management System is a strategic investment that will modernize our hospital operations, improve patient care, and ensure long-term sustainability. The proposed system is technically, financially, and operationally feasible, making it a valuable addition to our healthcare infrastructure.



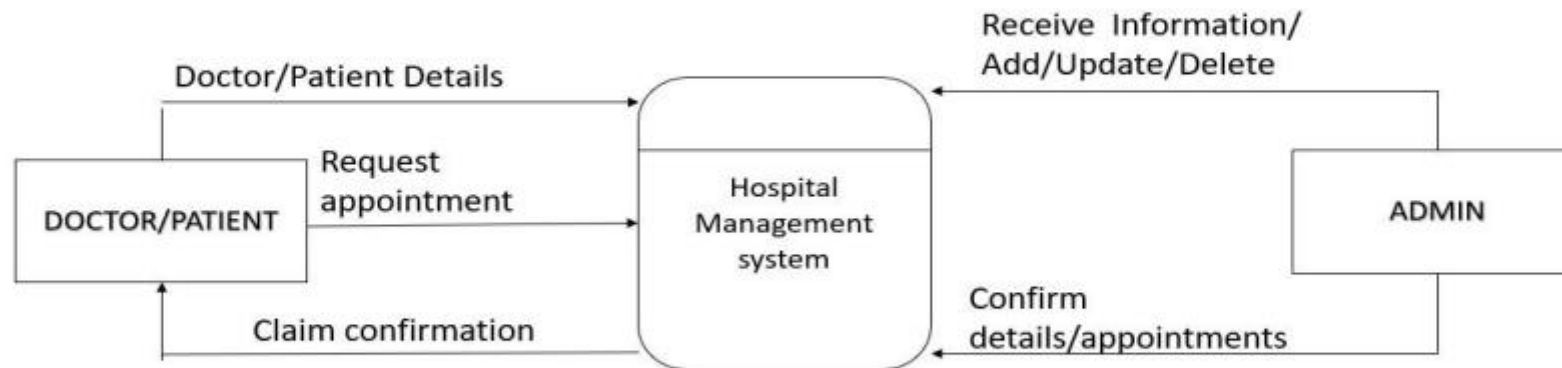
software design

Use Case



Project Diagram

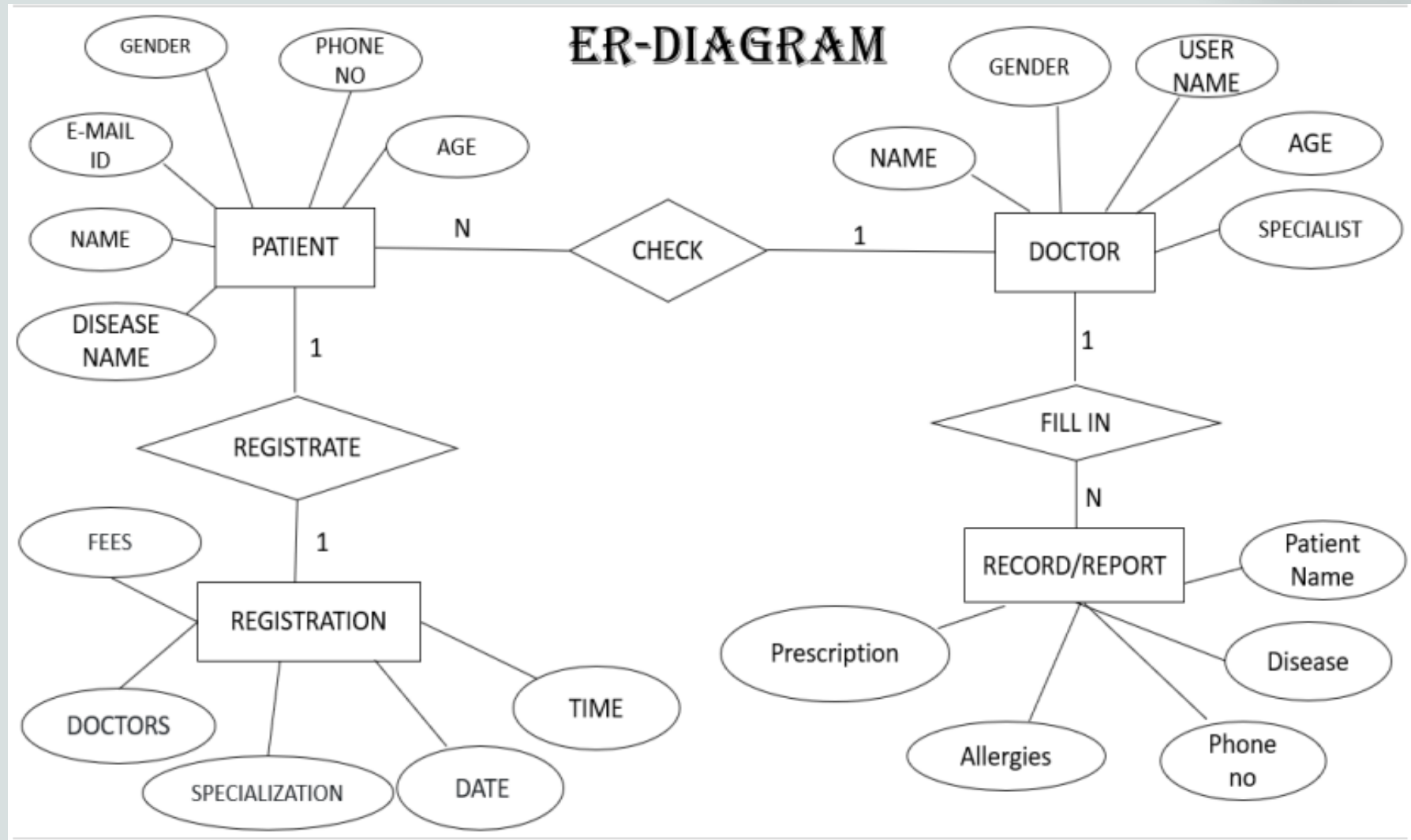
CONTEXT LEVEL DIAGRAM



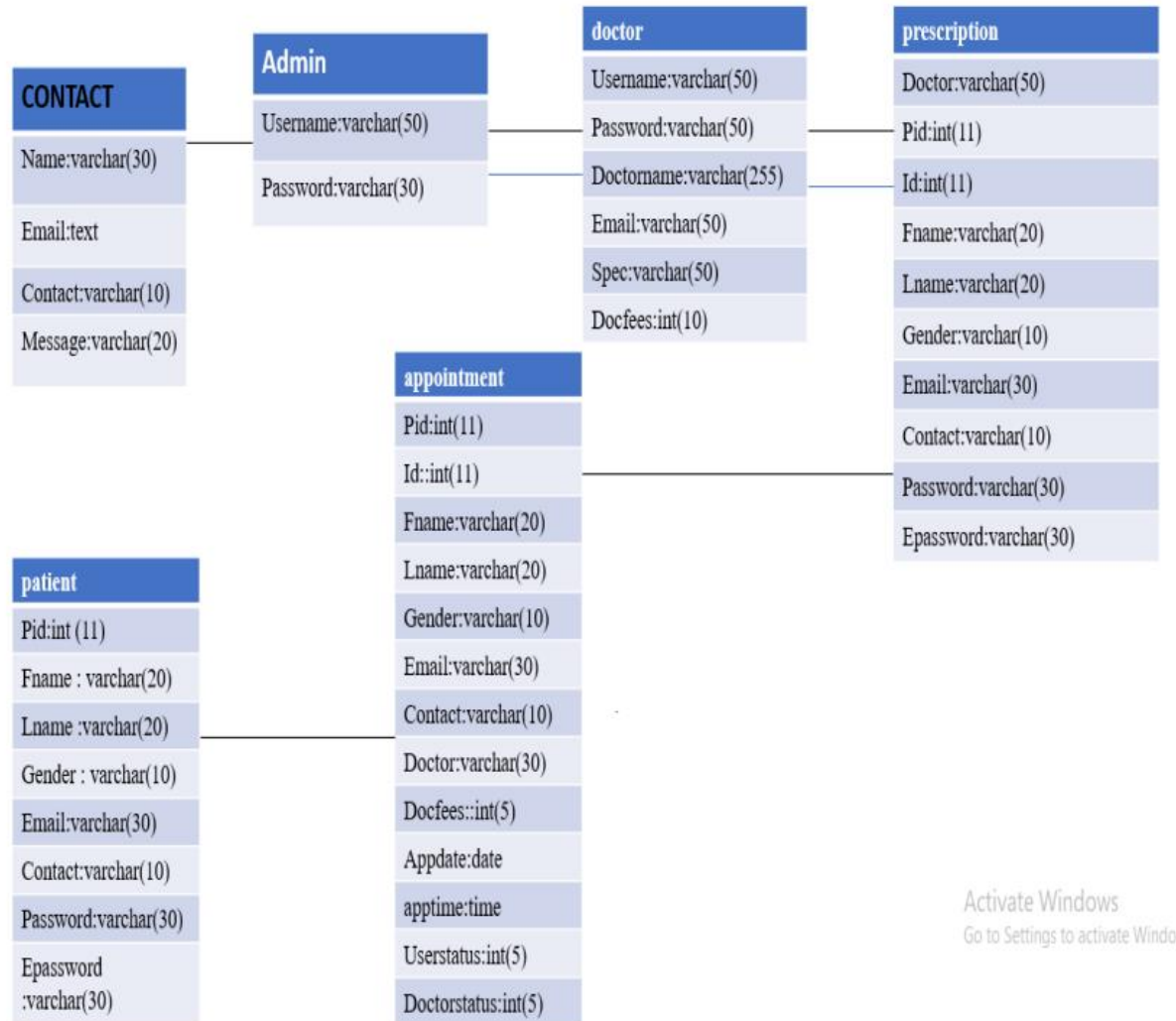
The Explanation

- The patient registers with the system
- The patient logs in to the system.
- The patient selects the "Book Appointment" option.
- The patient selects the doctor.
- The patient submits the appointment request.
- The system sends to the administrator.
- The administrator reviews the appointment request.
- The administrator approves the appointment request.
- The system sends to the patient and the doctor.

ERD



Schema



Connection with database

- ```
function mysqli_connect(
string|null $hostname = null,
string|null $username = null,
string|null $password = null,
string|null $database = null,
int|null $port = null,
string|null $socket = null
): bool|mysqli
```

# Software Specification

- **Front-End:** HTML / CSS / JavaScript / bootstrap
- **Database:** MySQL
- **Back-End:** Php



# Software Requirement

- **Operating System:** Windows 10 Pro.
- **Web Browser:** Google Chrome Microsoft edge.
- **Xampp.**

# Website UI

```
object to mirror
mirror_mod.mirror_object
```

```
operation == "MIRROR_X":
 mirror_mod.use_x = True
 mirror_mod.use_y = False
 mirror_mod.use_z = False
operation == "MIRROR_Y":
 mirror_mod.use_x = False
 mirror_mod.use_y = True
 mirror_mod.use_z = False
operation == "MIRROR_Z":
 mirror_mod.use_x = False
 mirror_mod.use_y = False
 mirror_mod.use_z = True
```

```
selection at the end -add
mirror_ob.select= 1
mirror_ob.select=1
context.scene.objects.
("Selected" + str(mirror_ob.name))
mirror_ob.select = 0
= bpy.context.selected_objects
data.objects[one.name].select
print("please select exactly one mirror")
```

```
-- OPERATOR CLASSES --
```

```
bpy.types.Operator):
 """Mirror X mirror to the selected
 object.mirror_mirror_x"
 Mirror X"
```

# Patient View

HMS

localhost/Hospital-Management-System-master/index1.php

Hospital

HOMEABOUT USCONTACTREGISTER

PatientDoctorAdmin

Register as Patient

First Name \*

Last Name \*

Your Email \*

Your Phone \*


Password \*

Confirm Password \*

☒ Male ☐ Female

[Already have an account?](#)

Register



Professional Doctors

About Hospitals

Global Hospitals


Our location

# Admin View

HMS

localhost/Hospital-Management-System-master/index1.php

🔍 ☆


 Hospital

HOMEABOUT USCONTACTREGISTER

PatientDoctorAdmin

Login as Admin

Login



Professional Doctors

About Hospitals

Lorem ipsum dolor sit amet, ne nam purto nihil impetus, an facilisi accommodare sea

Global Hospitals

Nam leo lorem, tincidunt id risus ut, ornare tincidunt nunc sit amet.

Our location

The Sulthouse V303, Kuningan City, Jakarta Indonesia 12940

Information

Monday - Saturday, 8am to 10pm

Follow us

# Doctor View

Browser tabs: HMS, localhost / 127.0.0.1 / myhmsdl

Address bar: localhost/Hospital-Management-System-master/index1.php

Navigation: HOME ABOUT US CONTACT REGISTER

Hospital

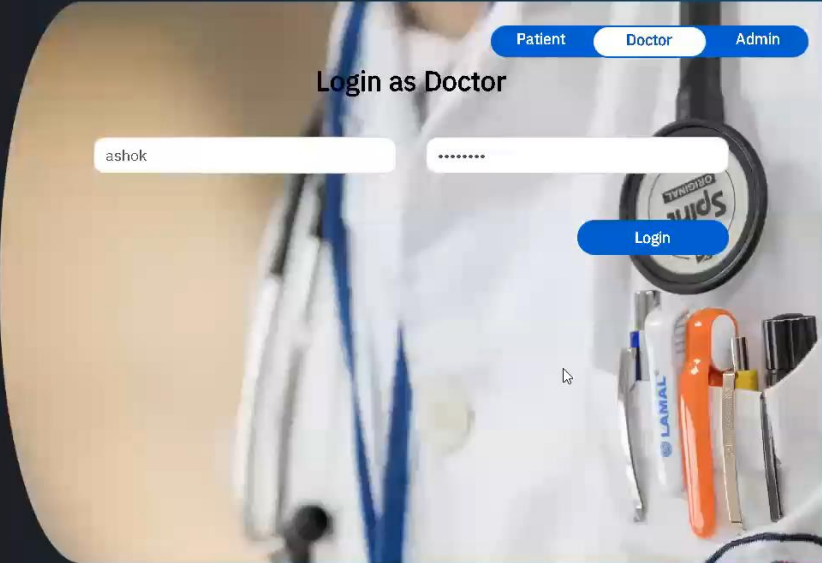
Role Selection: Patient **Doctor** Admin

### Login as Doctor

Username:

Password:

**Login**

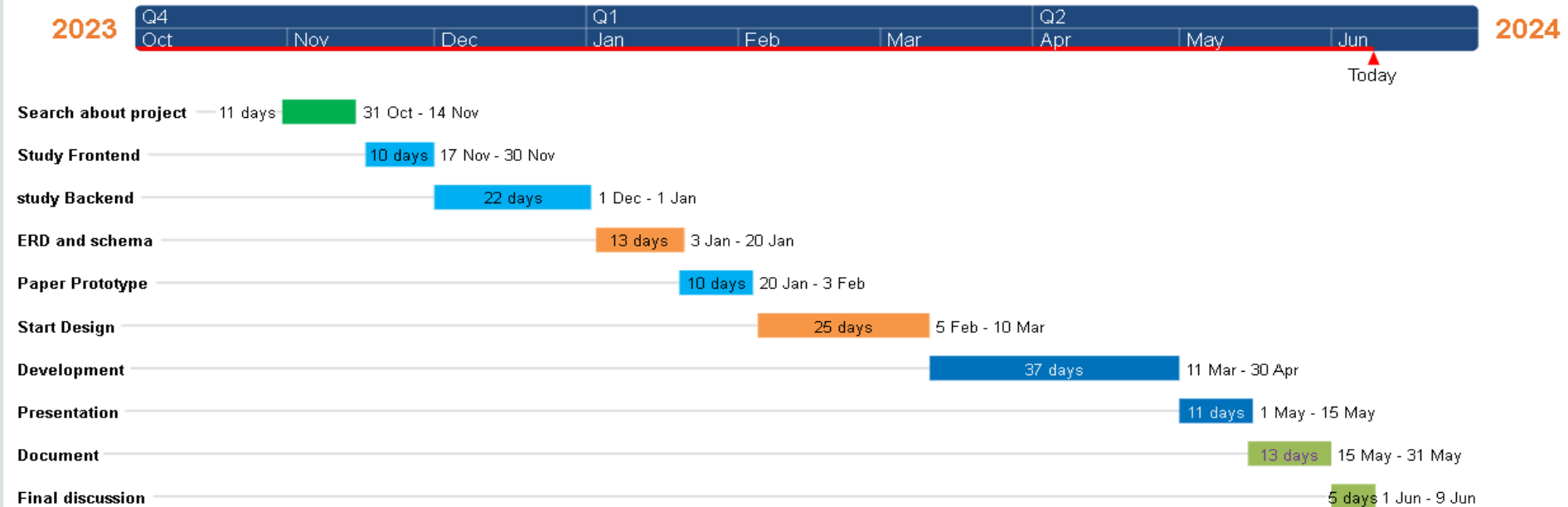


Professional Doctors

Footer: About Hospitals Global Hospitals Our location

# Gantt chart

## Gantt chart for project



# References

- <https://github.com/1yasserppp/HMS?tab=readme-ov-file>
- [https://www.simplilearn.com/tutorials/sql-tutorial/er-diagram-in-dbms#what is an er diagram](https://www.simplilearn.com/tutorials/sql-tutorial/er-diagram-in-dbms#what-is-an-er-diagram)
- <https://vertabelo.com/blog/schema-diagram/>
- <https://mocdoc.com/blog/challenges-while-implementing-the-hospital-management-system>
- <https://caresoft.co.in/7-must-know-benefits-of-hospital-management-system/>





The End!  
Thanks