



American International University- Bangladesh

CSC 4261: Advanced Programming in Web Technology

CO1 Evaluation

Project Report

FALL 23-24

Project Title: Hospital Management System

Project Domain: To HMS better efficient to user

Group Number: 09

Section: B

Student Name	Student Id
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Hospital Management System

Introduction:

The Hospital Management System project aims to streamline and automate various administrative and clinical tasks within a hospital setting. By developing this system, we can enhance the efficiency and accuracy of operations performed by administrators, doctors, nurses, and receptionists. It will facilitate tasks such as patient registration, appointment scheduling, medical record management, prescription creation, and financial monitoring. Through this project, we can contribute to improving the overall management and patient care within a hospital environment.

Problem Analysis:

The existing manual processes and lack of an efficient Hospital Management System result in various challenges, including time-consuming administrative tasks, difficulties in accessing and updating patient information, inefficient appointment scheduling, and inadequate financial monitoring. These challenges lead to decreased productivity, increased errors, and reduced quality of patient care. Therefore, there is a need for a comprehensive and user-friendly Hospital Management System to streamline operations, enhance data management, improve patient experience, and optimize resource utilization.

Significance of Solving the Problem:

By developing an effective Hospital Management System, healthcare institutions can achieve numerous benefits. These include:

1. **Enhanced Efficiency:** Automating administrative tasks such as appointment scheduling, patient registration, and financial monitoring can significantly improve operational efficiency and reduce manual errors.
2. **Streamlined Data Management:** Centralizing patient information, medical records, prescriptions, and test results in a secure digital system enables easy access, updates, and sharing among authorized healthcare professionals, leading to better coordination and continuity of care.
3. **Improved Patient Experience:** Efficient appointment scheduling, quick access to medical records, and timely communication contribute to a positive patient experience, ensuring convenience, accuracy, and personalized care.
4. **Optimal Resource Utilization:** Effective management of doctors, nurses, rooms, and departments enables optimal resource allocation, reducing waiting times and maximizing the utilization of available resources.

Existing Solutions:

1. Website: www.evercarebd.com

Description: Evercare provides a comprehensive suite of hospital management software that includes modules for various departments, such as request an appointment, find a doctor, download report, health check

2. Website: www.squarehospital.com

Description: Square hospitals offers a range of solutions for healthcare organizations, including hospital management systems that encompass find a doctor, book rooms, patient medical

records, book opd appointment, online payment

Feature Analysis:

1. User Category:

There are n-types of Users here. They are:
(4 users)

- Admin
- Doctor
- Nurse

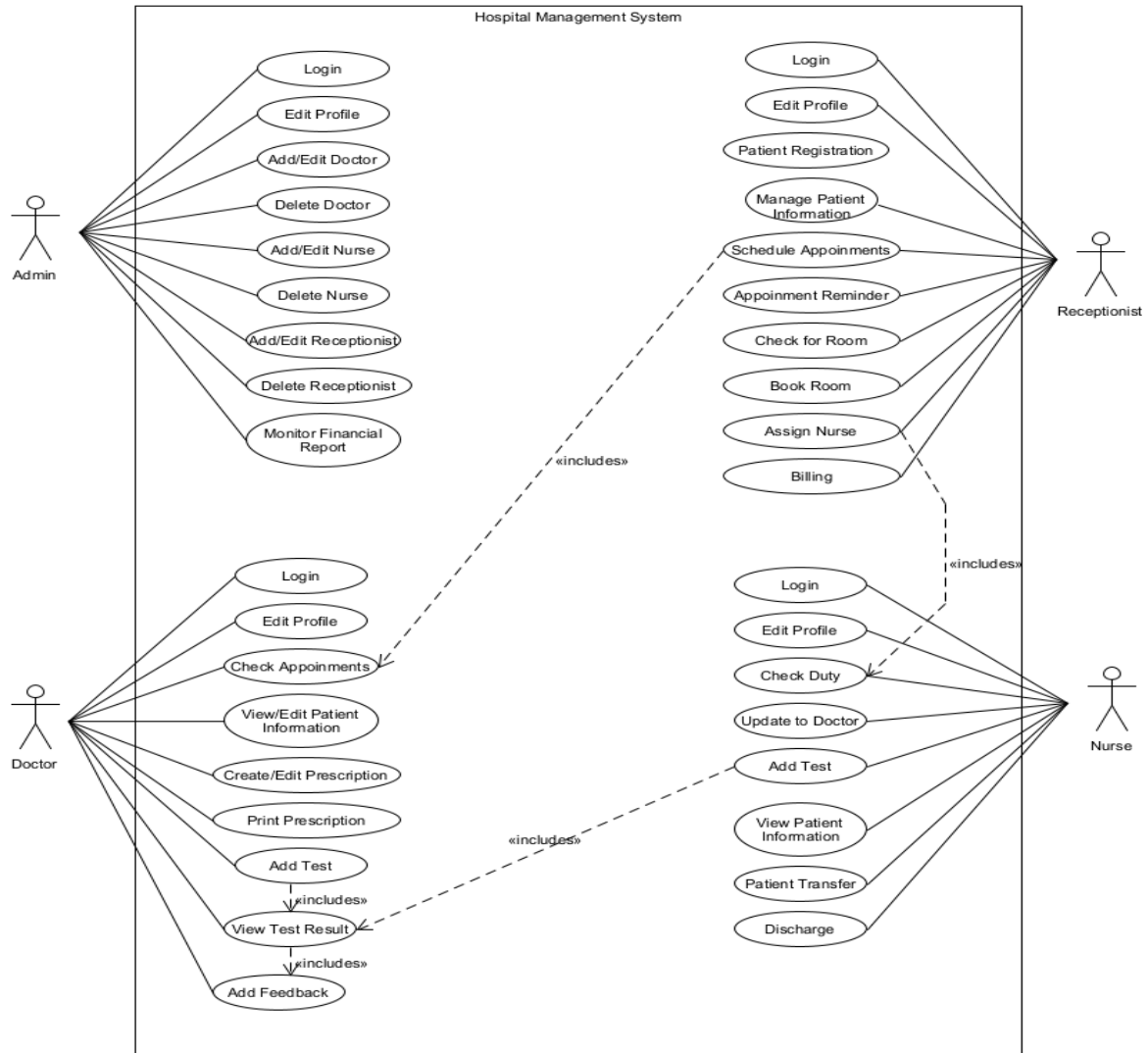
2. Feature List:

In this project the “Admin” has the following features:
(20 feature per user)

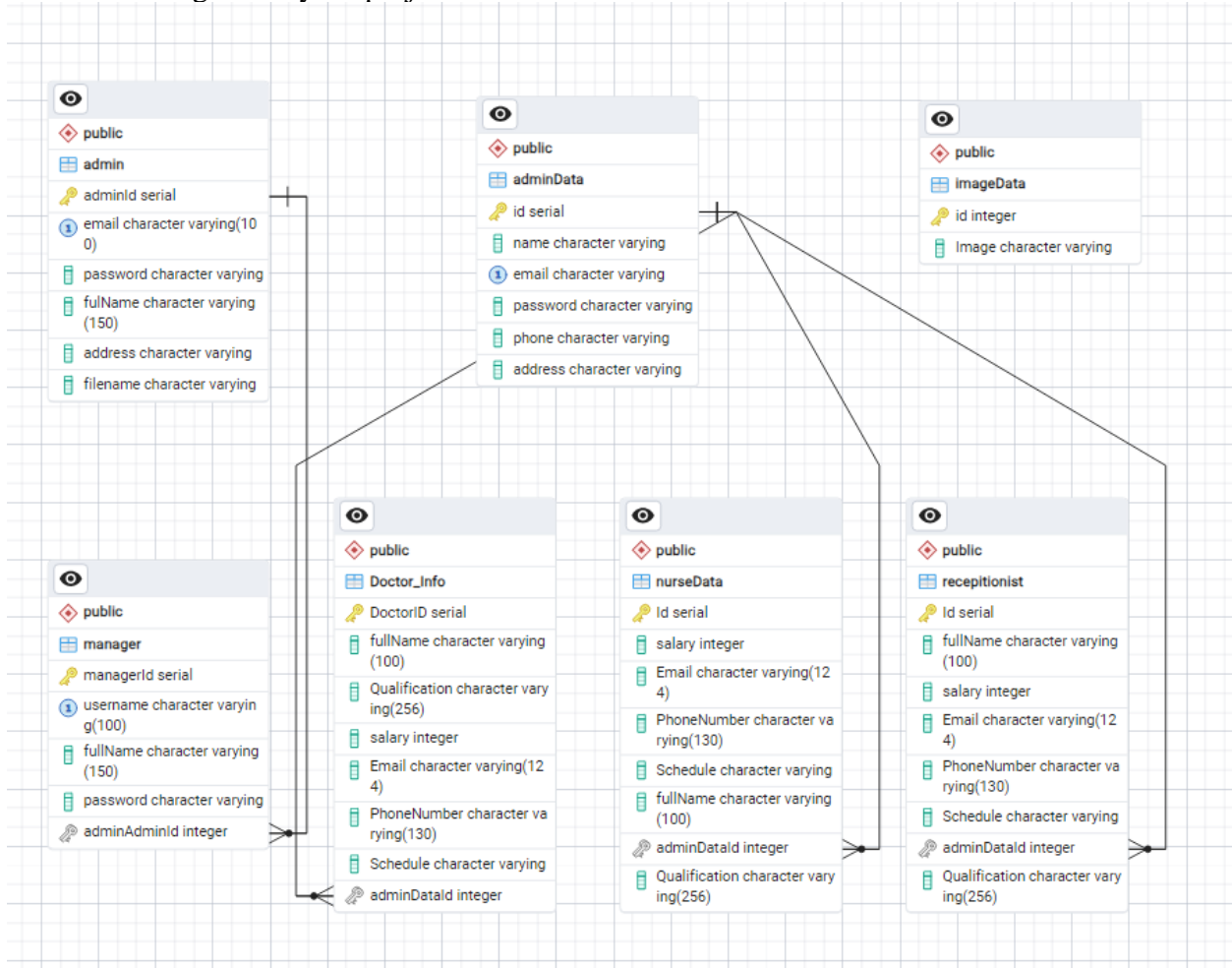
- resistration
- Login
- Logout
- View profile
- UploadPhoto
- Change Password
- Add Doctor
- Edit Doctor
- Delete Doctor
- Add Nurse
- Edit Nurse
- Delete Nurse
- Add Receptionist
- Edit Receptionist
- Delete Receptionist
- Monitor Financial Report
- Send Notification
- View Doctor List
- View Nurse List
- View Receptionist List
- Search Users
- Backup
-

Design:

Use Case diagram of our project here.



Draw a ER diagram of your project here:

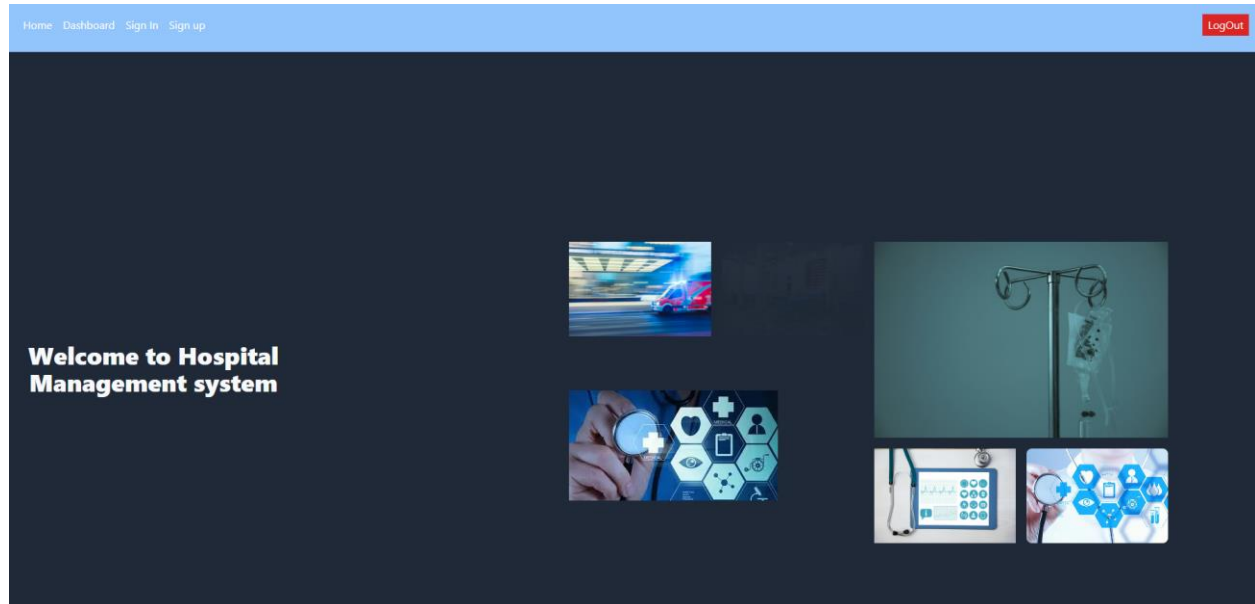


Tools Used:

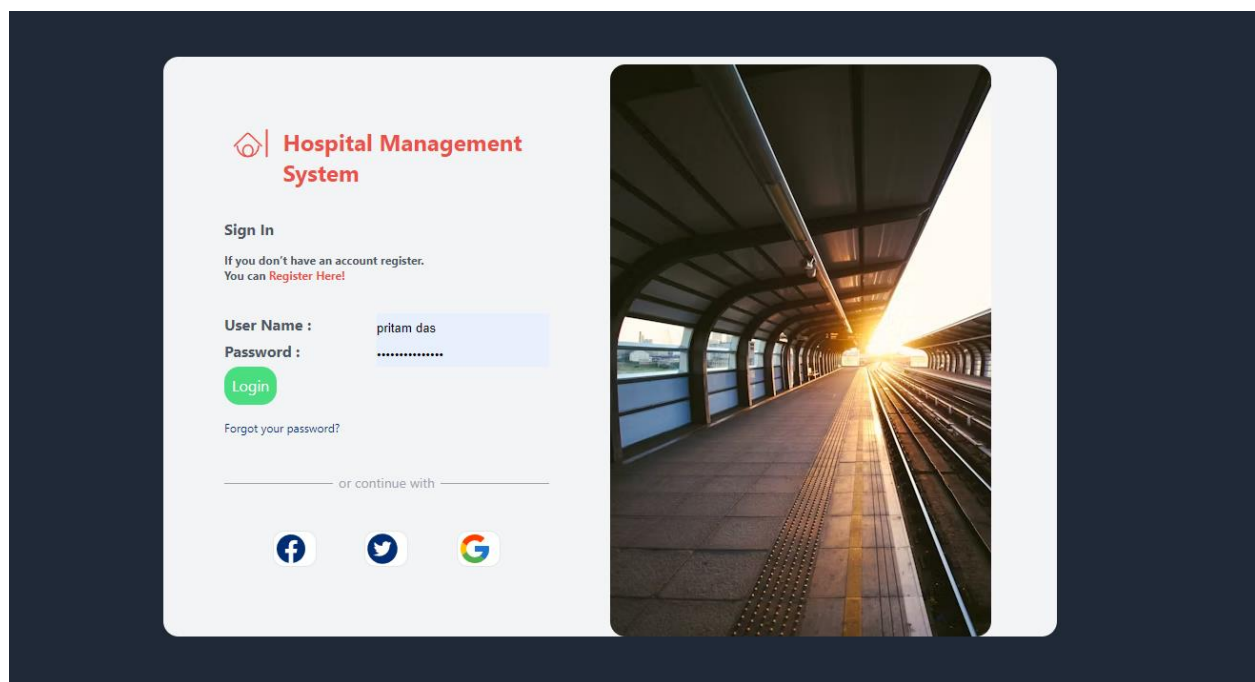
To develop this project, we have used the following:

- visual Studio Code
- Postman
- PostgreSQL
- .
- .
- Tool N

UI/UX : Home:



Login:



Registration:

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Hospital Management System

Sign Up

If you already have an account registered
You can [Login Here](#)

Name :

Email :

Password :

Confirm Password :

Phone :

Address :

[Sign Up](#)

or continue with

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Hospital Manament

[Admin Panel](#)

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Dashboard

View Profile

User Managemen

View Admin list

Pages

Settings

User Data

Total Nurses	Total Doctors
467	267
Total Patient	Total Receptionnists
789	234

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Add user:

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Full Name :

Qualification :

Salary :

Email :

Phone :

Schedule:

ADD

[Contact Us](#) [About](#) [FAQ](#)

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Hospital Manament > Admin Panel 05:02 AM

Search by username... [Search](#)

<div>ID: 9</div> <div>Name: adity das</div> <div>Qualification: nursing medical dregee</div> <div>Salary : 450000</div> <div>Email: sujonparia la127 mail.com</div> <div>Phone Number: 01332987371</div> <div>Schedule: Night</div> <div>Manage Users</div>	<div>ID: 3</div> <div>Name: Adityo saha</div> <div>Qualification: MBBS</div> <div>Salary : 250000</div> <div>Email: adityosahapandy127@gmail.com</div> <div>Phone Number: 01873987371</div> <div>Schedule: Day</div> <div>Manage Users</div>	<div>ID: 4</div> <div>Name: Adityoergerg saha</div> <div>Qualification: MBBS</div> <div>Salary : 250000</div> <div>Email: adityosahargepandy127@gmail.com</div> <div>Phone Number: 01873987371</div> <div>Schedule: Day</div> <div>Manage Users</div>
<div>ID: 5</div> <div>Name: Punam Das</div> <div>Qualification: MBBS</div> <div>Salary : 50000</div> <div>Email: Punamsahapandy127@gmail.com</div> <div>Phone Number: 01373987371</div> <div>Schedule: Day</div> <div>Manage Users</div>	<div>ID: 10</div> <div>Name: AKI Islam</div> <div>Qualification: nursing medical dregee</div> <div>Salary : 50000</div> <div>Email: aki27@gmail.com</div> <div>Phone Number: 01332987371</div> <div>Schedule: Night</div> <div>Manage Users</div>	<div>ID: 13</div> <div>Name: Rokibul islam</div> <div>Qualification: MBBS</div> <div>Salary : 500000</div> <div>Email: Rokibul@gmail.com</div> <div>Phone Number: 01332987371</div> <div>Schedule: Night</div> <div>Manage Users</div>

Impact of this project:

In today's rapidly evolving healthcare landscape, our Hospital Management System project is pivotal. It enhances operational efficiency, streamlines data management, and improves patient experiences, contributing to better healthcare delivery. By optimizing resource utilization and minimizing errors, our system promotes cost-effectiveness and elevates the quality of care, ultimately benefiting individuals and society as a whole.

Limitations and Possible Future Improvements:

While our Hospital Management System addresses many challenges, future iterations could focus on enhancing interoperability with existing healthcare systems, incorporating AI for predictive analytics, and ensuring robust cybersecurity measures to safeguard patient data. Continuous updates and user feedback integration will be key to maintaining relevance and addressing emerging needs in the dynamic healthcare environment.

CO1 Evaluation: Project Report Evaluation			
Problem Analysis (5)	Use Case Diagram (5)	ER Diagram (5)	Total (15)