



American International University- Bangladesh

CSC 3222: Web Technologies

Project Title: Clinic Management System

Student Name
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Clinic Management System

Introduction:

In this era, people are getting involved with clinics in terms of receiving healthcare services or in terms of a profession by performing different roles in the clinics. To make a clinic's working procedure more manageable, cost-effective, and reliable, a dynamic way needs to be introduced to a clinic. For these reasons, we are developing a clinic management system.

Background Study

Reference websites and the ideas we got from the sites:

- (<https://uhlbd.com/>) – One of the leading hospital websites of Bangladesh. This site shows their hospital works, services, achievements and research. We got a lot of idea in terms of developing our project from this site like the upper bars and the labels, search bar, front end designs.
- (<https://www.squarehospital.com/>) – This is another front rowed hospital websites of Bangladesh. This website shows their day-to-day updates, services, media coverage etc. From here we got the idea of ambulance calling feature.
- (<https://phpgurukul.com/hospital-management-system-in-php/>) – This site is based on PHP, HTML, CSS, JavaScript learning. We got insights about the admin, doctor and patient module from here for our project.
- (https://www.researchgate.net/publication/343149774_Hospital_Management_System) – This is one of the best research websites in the world where quality researches are indexed. We have found a paper on hospital management system. From here we got the idea to add check outs and room info of patients for our project.
- (<https://www.geeksforgeeks.org/hospital-management-system-in-c/>) – This a learning platform for different coding language and other necessities to develop a software. Here we have found a compiler-based hospital management system and we got the idea of printing records from database for our project.
- (<https://www.evercarebd.com/dhaka/>) – This site is of another prominent hospital of Bangladesh which maintains the patient doctor engagement and shows their activities. We got the idea of attaching news and media section like patient stories.
- (<https://www.populardiagnostic.com/>) – This site serves as a management tool of their hospital. From this site, we took the idea of patient portal.

Requirement Analysis:

1. User Category:

There are 3-types of Users here. They are:

- Admin
- Doctor
- Patient



Clinic Management System

2. Feature List:

In this project the “Admin” has the following features:

- Can see doctors’ list and information
- Can add new doctor
- Can add new patient
- Can see patient count
- Can see doctor count

In this project the “Doctor” has the following features:

- Can add new patient
- Can make prescription for patients

In this project the “Patient” has the following features:

- Can get appointment
- Can select doctor
- Can see doctor’s list
- Can ask query
- Can give review of the service



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Design:

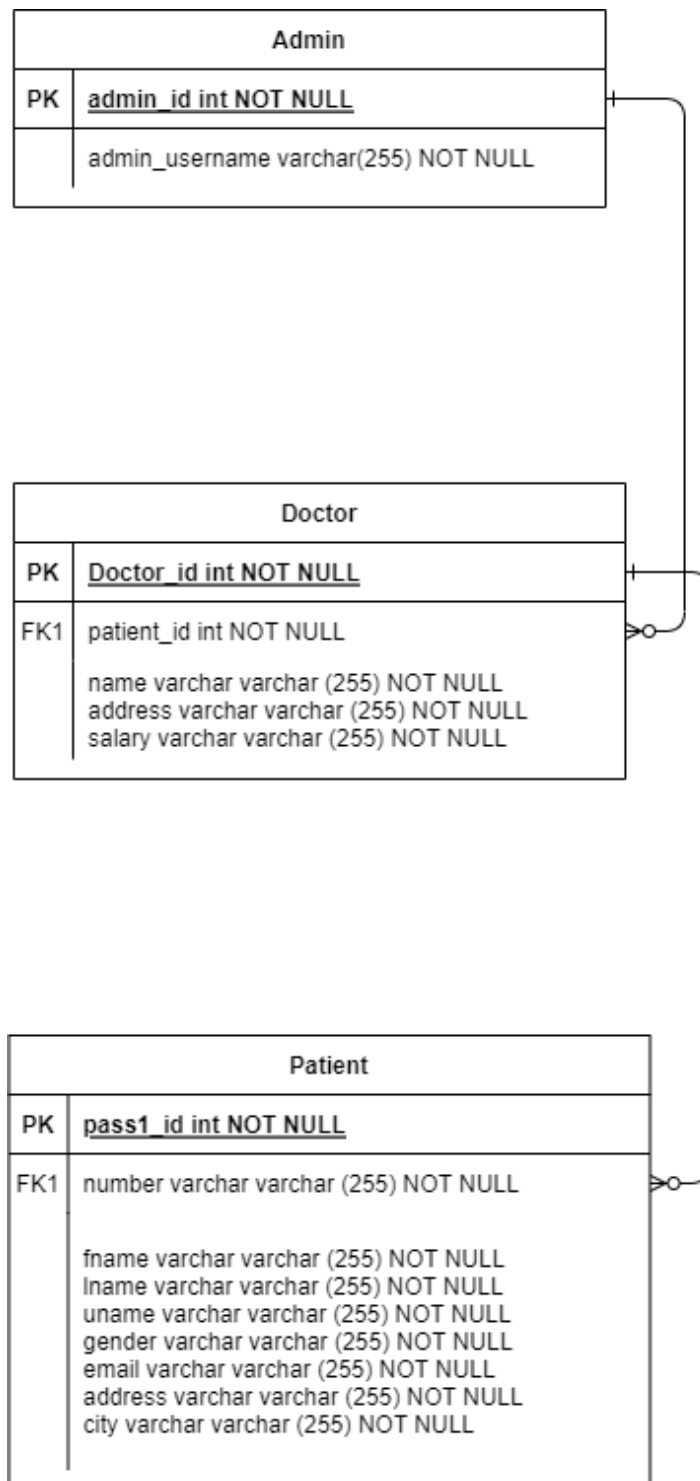


Figure 1: ER diagram of Clinic Management System.



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Tools Used:

To develop this project, we have used the following:

- Visual Studio Code (Version - 1.80.0)
- Sublime Text 4
- XAMPP Server (Version – 8.2.4-0)
- draw.io
- Google Chrome Browser
- Microsoft Edge Browser
- Mozilla Firefox Browser

System Images against the Specification:

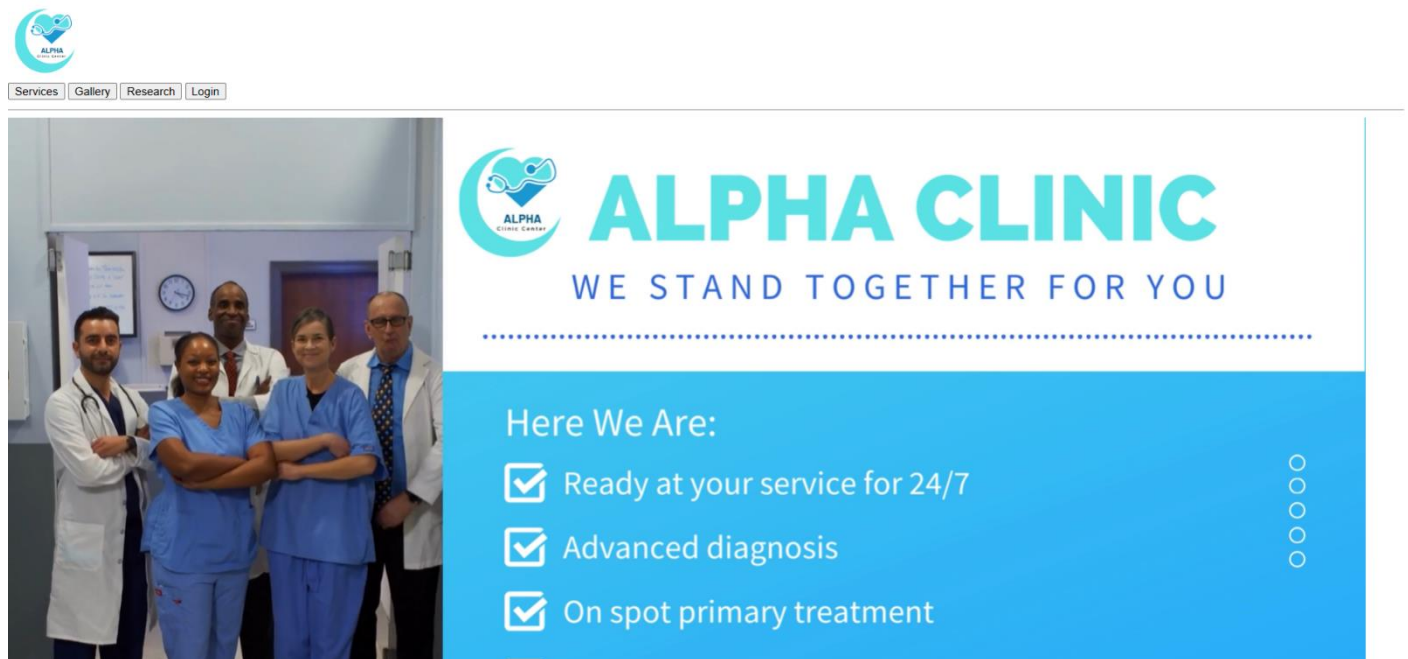


Figure 2: Home Page.

Here, the users like admin, doctor and mainly patients who will be interested to know the clinic's services and activities can see what types of services are available. Admin, doctor and patients can login from here.



Clinic Management System

Take Appointment

Alpha Clinic Center

plot 05, Road 11, Purbachal
Dhaka 1212, Bangladesh

Contact Us

Email: alphaclinic@gmail.com
Phone Number: +880-1783653302

Emergency?

+880-1783753302

Social Media

Facebook:
Linkedin:

Carrer Opportunity

Job Openings

Developed by: GroupSigmaBoys.
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Figure 3: Home Page.

Here, the patients can take appointment. For that they need to click the “Take Appointment” button and they will be posted for login or registration section.



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Please Login

Admin

Doctor

Patient

Back

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Figure 4: Login Panel.

Here, the users like admin, doctor and Patients can login by clicking their designated buttons. They will be transferred to another page where login will appear. They can also get back to homepage whenever they want.



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Login Page

Username
Password

Alpha Clinic Center

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Figure 5: Login Page.

Here, the patients can register themselves. The admin, doctors and patients can login from here.



Admin

Manage Doctor

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plot 05, Road 11, Purbachal
Dhaka 1212, Bangladesh

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Figure 6: Admin Page.

Here, the admin can manage doctors, patients and his information. Ther admin can also logout by clicking the logout button.



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Doctors

Add New

#	Name	Mobile	Address	Salary	Option
---	------	--------	---------	--------	--------

Alpha Clinic Center	Contact Us	Emergency?	So
plot 05, Road 11, Purbachal	Email: alphaclinic@gmail.com	+880-1783753302	

Figure 7: Admin's Doctor Manage.

Here, admin can see doctor's name, mobile number, address and salary.



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Doctor

Name

Enter Name

Mobile

Enter Mobile

Address

Enter Address

Salary

Enter Salary

Submit

Figure 8: Admin's Doctor Manage.

Here, admin can add new doctor's name, mobile number, address and salary.



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Doctors					
Add New					
#	Name	Mobile	Address	Salary	Option
1	Dr Frank	01753487365	Rampura	50000	Edit Delete

Figure 9: Admin's Doctor Manage.

Here, admin can edit and delete new doctor's name, mobile number, address and salary.



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Doctor Information

Doctor

Dashboard

Feature 1

Feature 2

Feature 3

Feature 4

Feature 5

LogOut

Figure 10: Doctor's Page.

Here, the doctor can perform his/her features that our system is offering like can see his/her information, add patient, see salary etc.

Figure 10: Doctor's Page.



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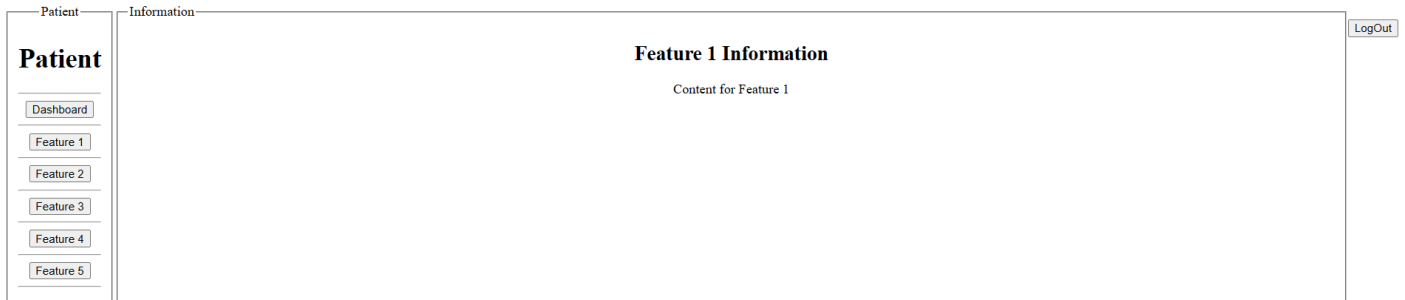


Figure 11: Patient's Page.

Here, the patient can perform his/her features that our system is offering like can see his/her information, take appointment again, payment slips, cost for different services he/she's been charged etc.

Impact of this Project:

In today's world the healthcare sector has achieved new heights. Technology is wholeheartedly necessary from disease detection to maintaining the entire healthcare system. For maintaining and managing a healthcare organization like a clinic, in a more efficient, cost effective and hassle-free way, our clinic system will add effective value. Additionally, our system will help in not wasting paper to store all the records, which will be beneficial for the environment as well.

Limitations and Possible Future Improvements:

Limitations of our system –

- Our system is not tested by users, for this, we don't know how users will accept our system.
- A proper framework is not introduced.
- GUI could be better.

Future improvements-

- We want to add better GUIs to our project.
- We want to add more users and their functionality features.
- We want to make this system a connected path for all the healthcare system exist in Bangladesh and so that government can monitor a particular clinic/hospital's performance.

