Hospital Management System

A SECURED PLAYFORM TO MANAGE ANY HOSPITAL

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Project Title: Hospital Management System

Introduction:

This management system can manage the essential data of any hospital like, patients, doctors, ward and registration related data. Through this system you can add, delete, display and update the data and also can get some data which belongs to different tables but related to each other.

Problem Statement:

When it's a question to work with a huge amount of data specially which are not organized is a critical problem.

Motivation:

We know, that to handle any organization where we have to deal with various kind and huge amount of data, we have to have a way to manage and organize those data in an effective way so we could access them for further uses or query.
From this point of need the project "Hospital Management System" has been formed.

Used Programing Languages:

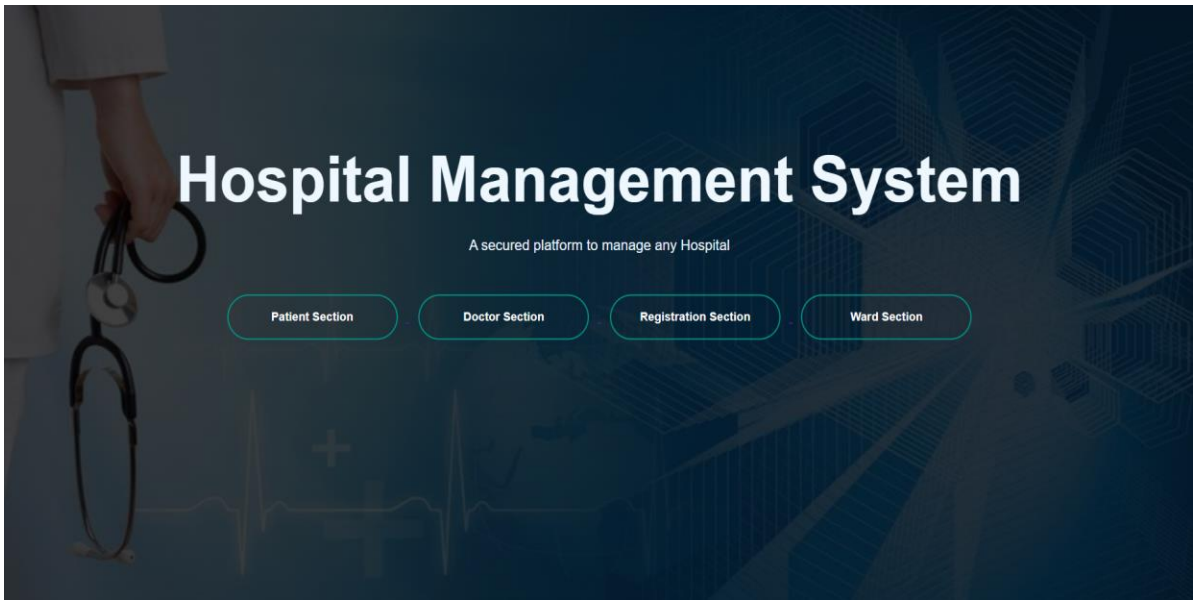
To develop this project, I have basically used 4 programing languages.

- MySQL: For the queries on the database
- HTML: For structuring the web pages
- CSS: For designing the web pages
- PHP: For make connection and retrieving data from the database.

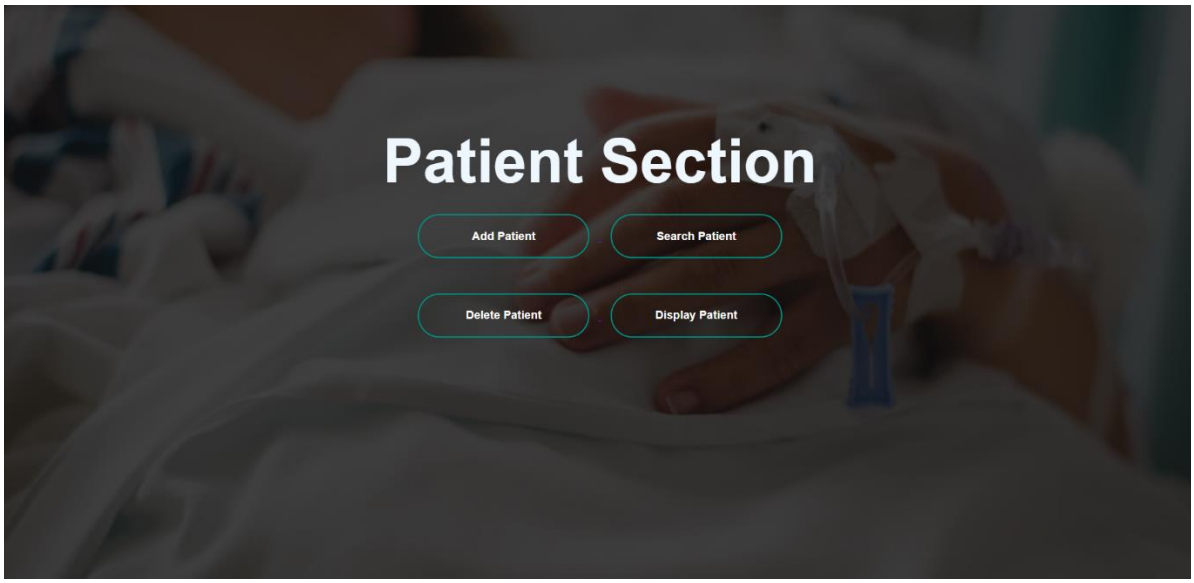
Implementation

Used Software/IDE for Development: Visual Studio Code

1.Homepage



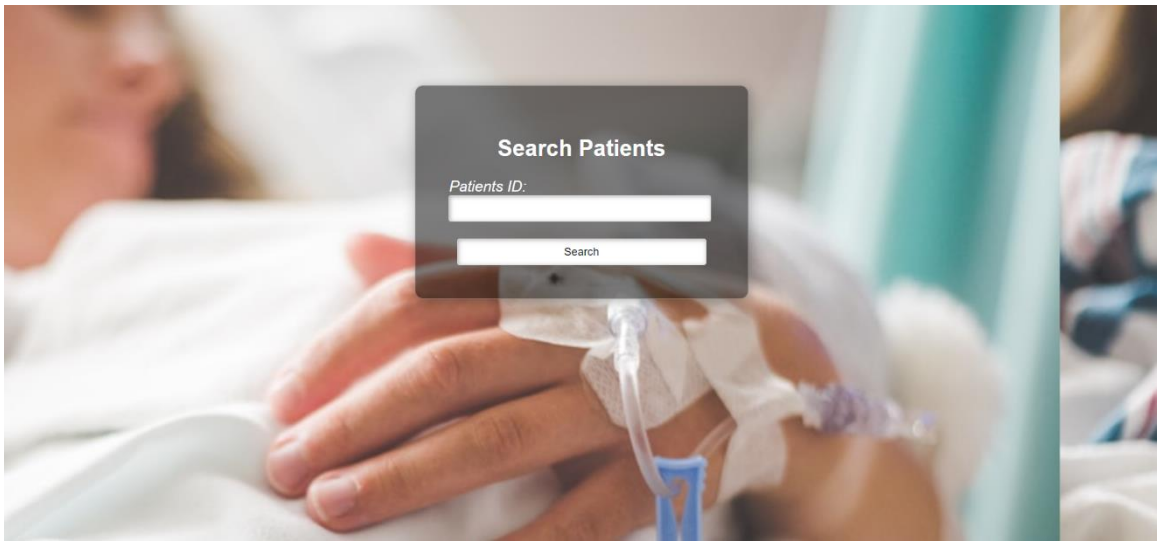
2. Patient Section



3. Add Patient:

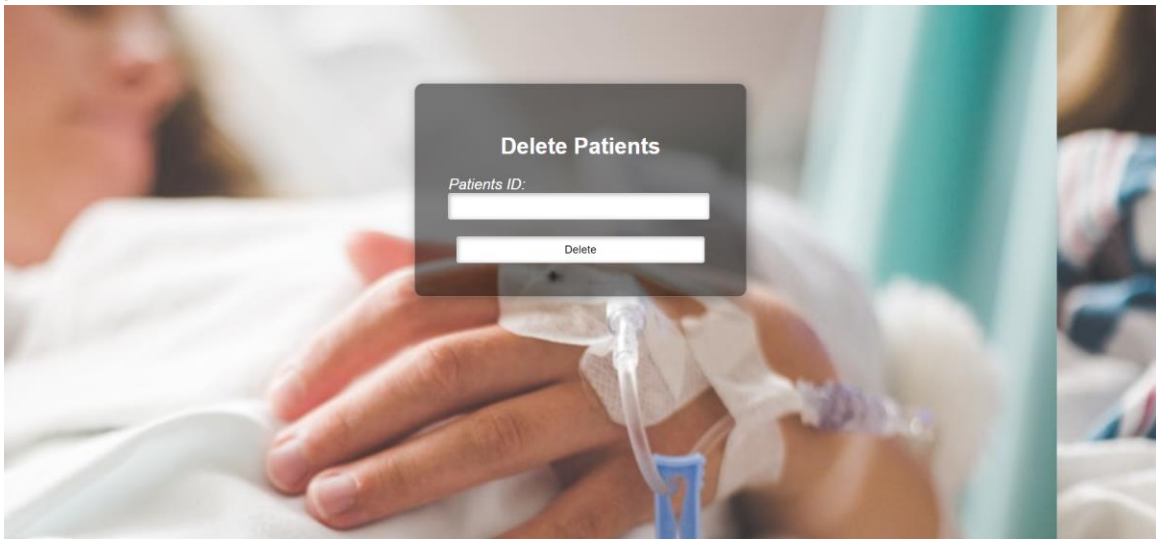
Here, I have used the SQL command,
"INSERT INTO patient(p_id,p_name,p_add,w_id) VALUES('$p_id','$p_name','$p_add','$w_id');"
To insert the values.

4. Search Patient:



Here, the used SQL command is,
"SELECT * FROM patient WHERE p_id;"

5. Delete Patient



Here, the used SQL command is,
"DELETE FROM patient WHERE p_id='$s_id';"

6. Display Patients:

Displaying Data of All Patients

Patient ID: 1 || Patient Name: Jim || Patient Address: Tangail || Ward No: 1

Patient ID: 3001 || Patient Name: Shayla || Patient Address: Dhaka || Ward No: 4

Patient ID: 3052 || Patient Name: Chowa || Patient Address: Savar || Ward No: 2

Patient ID: 3214 || Patient Name: Tumpa || Patient Address: Savar || Ward No: 2

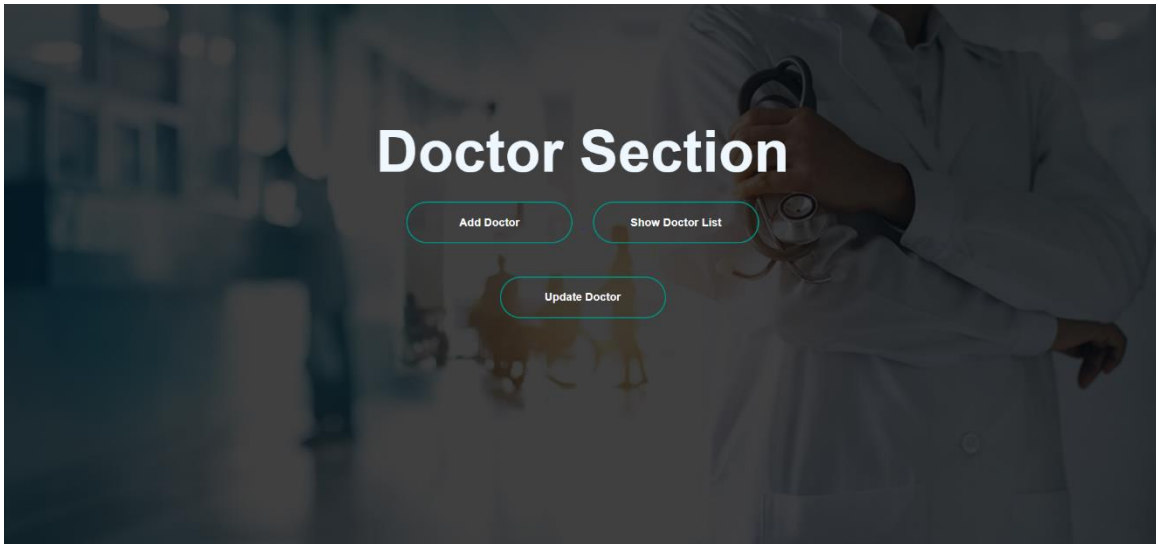
Patient ID: 3610 || Patient Name: Jaky || Patient Address: Bogura || Ward No: 6

Patient ID: 3623 || Patient Name: Rahat || Patient Address: Cumilla || Ward No: 3

Patient ID: 3675 || Patient Name: Risul || Patient Address: Tangail || Ward No: 5

Here, the used SQL command is,
"SELECT * FROM patient;"

7. Doctor Section:



8. Add Doctor:

Here, the used SQL command is,
"INSERT INTO doctor(d_id,d_name,d_add,w_id) VALUES('$d_id','$d_name','$d_add','$w_id';)"

9. Display Doctor:

Displaying Doctors Information

Doctors Name: Mofiz || Doctors Address: Bogura || Ward Name: Children ||

Doctors Name: Rakib || Doctors Address: CTG || Ward Name: General ||

Doctors Name: Latif || Doctors Address: Dinajpur || Ward Name: Cardio ||

Doctors Name: Mukul || Doctors Address: Tangail || Ward Name: Children ||

Doctors Name: Runu || Doctors Address: Dhaka || Ward Name: Maternity ||

Doctors Name: Ashraf || Doctors Address: Rajshahi || Ward Name: Medicine ||

Doctors Name: Sultana || Doctors Address: Natore || Ward Name: Autism ||

Doctors Name: Suranjana || Doctors Address: Dhaka || Ward Name: Maternity ||

Doctors Name: Azad || Doctors Address: Rangour || Ward Name: Autism ||

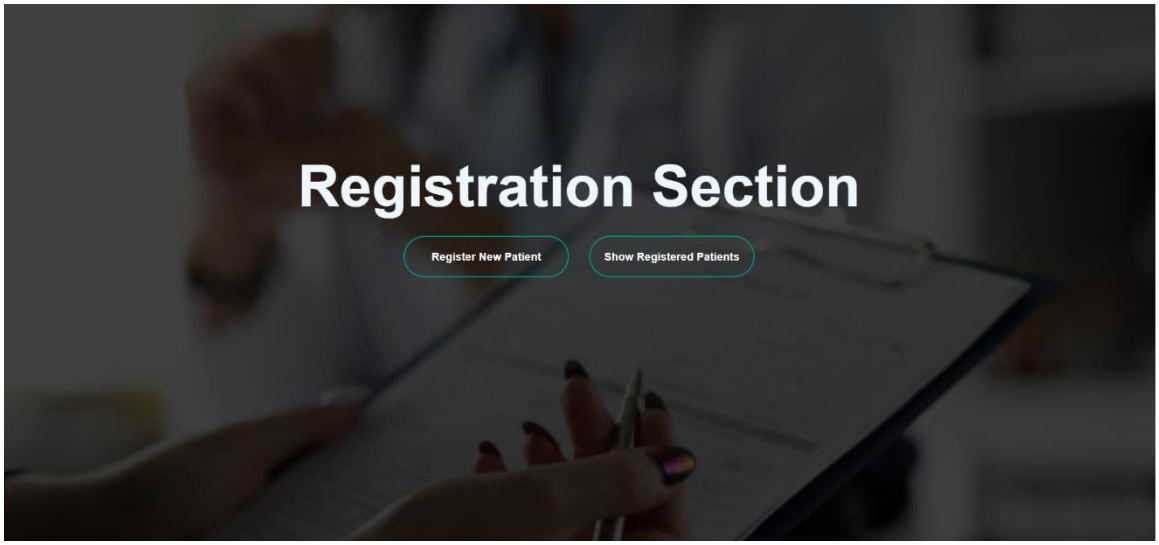
Here, the used SQL command is,
"SELECT * FROM doc_info;"
Here, the doc_info is a view table which is created on the database using JOINING concept.
The query under the view table is:

```
select `hospital_management`.`doctor`.`d_name` AS
`d_name`,`hospital_management`.`doctor`.`d_add` AS
`d_add`,`hospital_management`.`ward`.`w_name` AS `w_name` from
(`hospital_management`.`doctor` join
`hospital_management`.`ward`) where
`hospital_management`.`doctor`.`w_id` =
`hospital_management`.`ward`.`w_id`
```

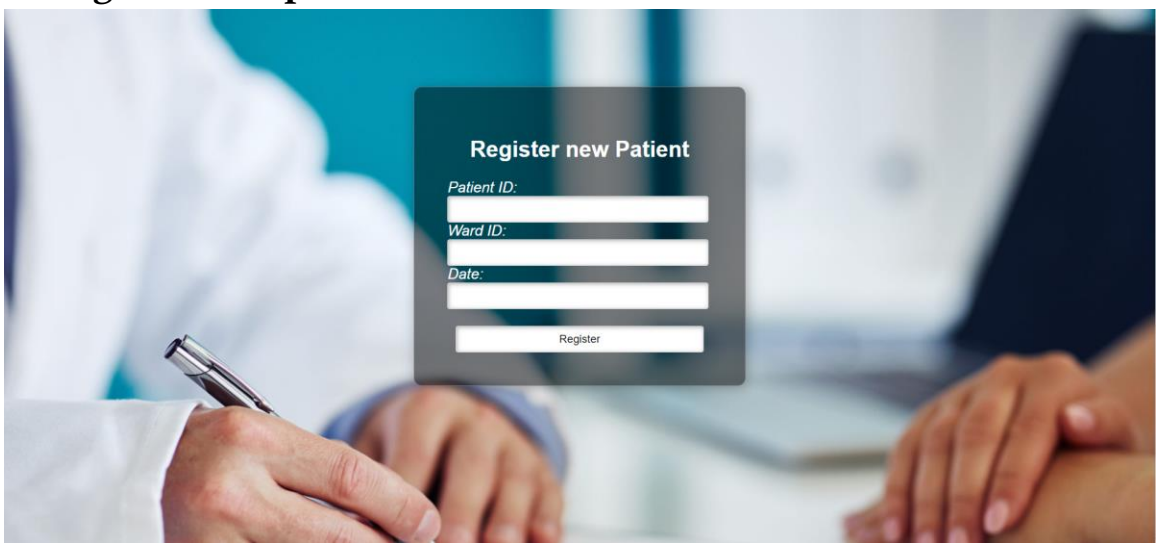
10. Update Doctor:

Here, the used SQL command is,
"UPDATE doctor SET d_name='$d_name',`d_add`='$d_add' WHERE d_id=$u_id"

11.Registration Section:



12.Register new patient/Add Patient:



Here, the used SQL command is,
"INSERT INTO registration(p_id,w_id,r_date)
VALUES('$p_id','$w_id','$r_date')"

13. Show Registered Patient:

Displaying Data of All Patients

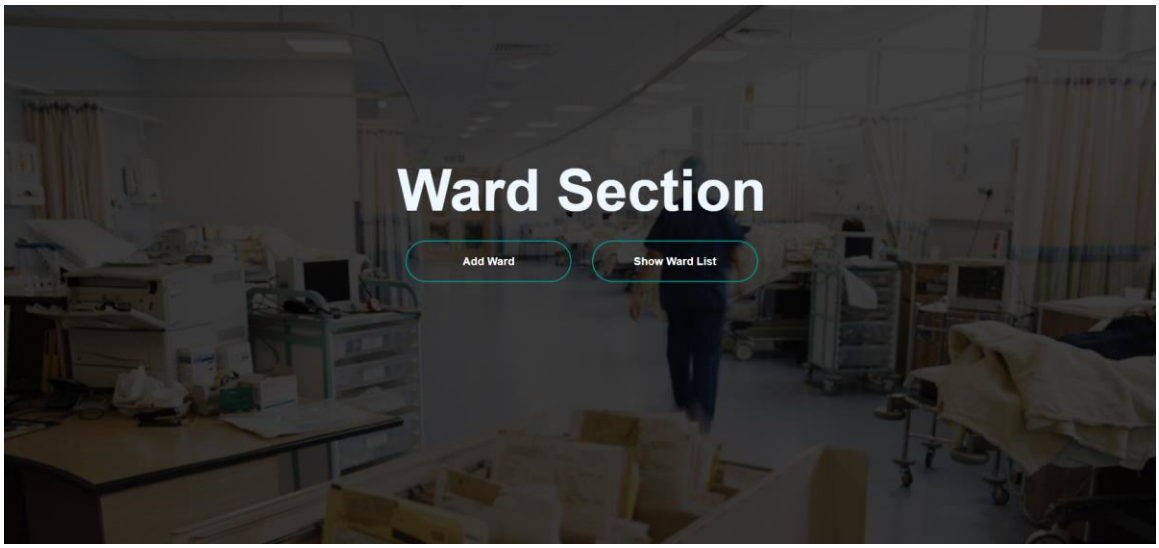
Registration ID: 1 || Patient ID: 1 || Patient Name: Jim || Patient Address: Tangail || Ward No: 1 || Registration Date: 20/03/2022

Registration ID: 2 || Patient ID: 1 || Patient Name: Jim || Patient Address: Tangail || Ward No: 2 || Registration Date: 01/04/2022

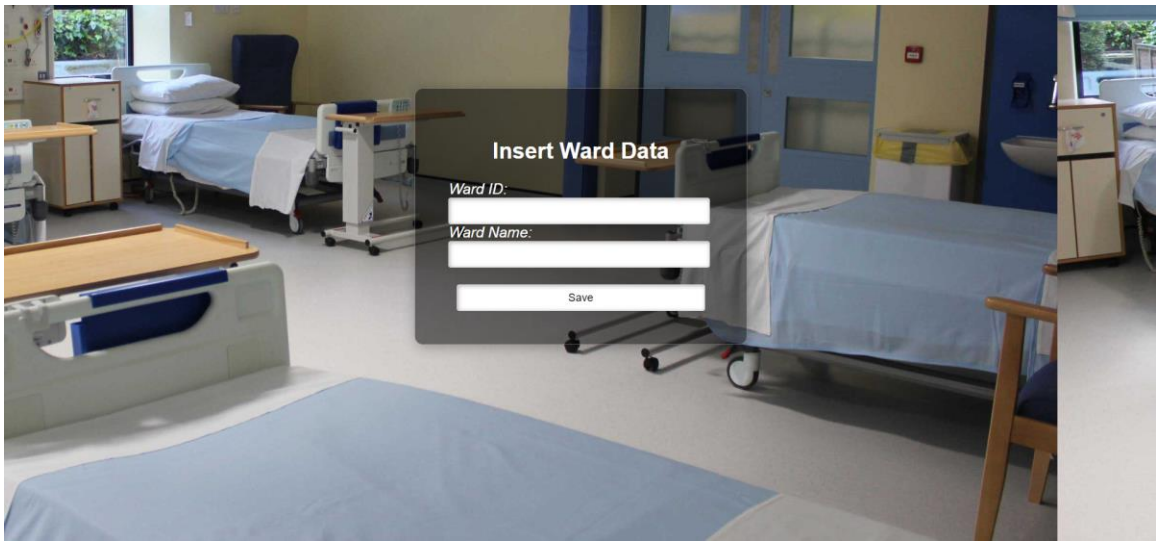
Here, the used SQL command is,
"SELECT * FROM patient INNER JOIN registration ON patient.p_id=registration.p_id;"

In this part, I also use INNER JOIN to sow the patients who are registered in any ward.

14. Ward Section:

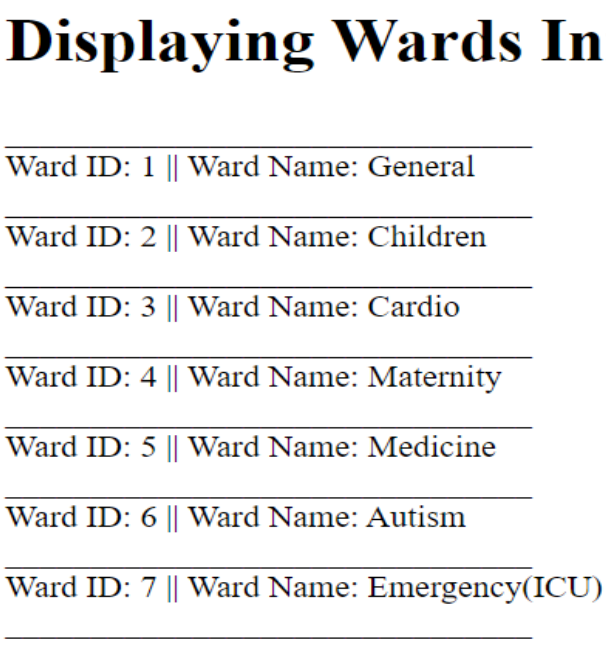


15.Add Ward:



Here, the used SQL command is,
"INSERT INTO ward(w_id,w_name) VALUES('$w_id','$w_name')"

16. Show Ward List:



Here, the used SQL command is,
"SELECT * FROM ward;"

Source Code:

The whole projects source code and the Database SQL file is given on the GitHub link: https://github.com/risul-jim/DBMS_Project.git

Conclusion

From the whole report one can get clear idea about the purpose, features and implementation process of this project. In this project I have used various terminologies of Database Management System like,

- INSERT
- DELETE
- UPDATE
- SELECT
- JOIN

In this project I haven't use the NORMALIZATION because all of my tables are already in a normalized form.

Lastly, I can say that this project can be a great solution for such a system like "Hospital Management System" and upgrading this project with advanced features the system can be more time and situation friendly according to the future requirements.