# DATABASE MANAGEMENT SYSTEM

PROJECT PRESENTATION

# PROJECT: DIU MEDICAL CENTER MANAGEMENT SYSTEM



#### project discription

"Our medical center management system helps students and staff at our university access medical services efficiently. Students can schedule appointments, request medications, and manage their health records. Each appointment is associated with a specific date and time and is assigned to a department and a doctor. Diagnoses and prescribed medications are recorded for each visit. Our system also maintains a database of doctors, including their names and contact information. With easy access to medical care, our system aims to promote the well-being of our university community."

# PROPOSED PROJECT

STUDENTID: 1010

STUDENTPHONE: +8801799900011

STUDENTNAME: ELIYAS

STUDENTMAIL: ELIYAS1010@DIU.COM

**DEPARTMENTID: 51** 

DEPARTMENTNAME: ITM

DEPARTMENTLOCATION: 5TH FLOOR KNOWLEDGE TOWER

| diagonosisid | diagonosisdate | sickness | medication | doctorid | doctorname | doctormail     |
|--------------|----------------|----------|------------|----------|------------|----------------|
| 1001         | 1/2/24         | fever    | napa       | 5001     | Alim       | alim@doc.com   |
| 1003         | 8/2/24         | fever    | napa       | 5001     | Alim       | alim@doc.com   |
| 1007         | 12/3/24        | headache | napa       | 5006     | Sabbir     | sabbir@doc.com |

**UNF:** studentid, studentname, studentphone, studentmail, departmentid, departmentname, departmentlocation, diagonosisid, diagonosis date, sickness, medication, doctorid, doctorname, doctormail.

# **1NF:** Remove repeating groups

studentid, studentname, studentphone, studentmail, departmentid, department ntname, departmentlocation,

<u>studentid</u>, <u>diagonosisid</u>, <u>diagonosisdate</u>, <u>sickness</u>, <u>medication</u>, <u>doctorid</u>, <u>doctorname</u>, <u>doctormail</u>. ( add primary key and make it composit key )

studentid, studentname, studentphone, studentmail, departmentid, department ntname, departmentlocation, studentid, diagonosisid, diagonosisdate,, sickness, medication, doctorid, doctorname, doctormail. (add primary key and make it composit key)

# 2NF: Remove partial dependency

studentid, studentname, studentphone, studentmail, departmentid, department ntname, departmentlocation,

<u>studentid, diagonosisid, sickness, medication, doctorid, doctorname, doctormail.</u>

diagonosisid, diagonosis date,

# **3NF:** Transitive dependency

studentid, studentname, studentphone, studentmail, departmentid (fk)

departmentid(pk),departmentname,departmentlocation

studentid, diagonosisid, sickness, medication, doctorid (fk)

doctorid(pk),doctorname,doctormail

diagonosisid, diagonosis date

#### **Student table**

| Studentid | studentname | studentphone | studentmail    | departmentid |
|-----------|-------------|--------------|----------------|--------------|
| 1001      | ali         | 9990009900   | ali@gmail.com  | 51           |
| 1002      | robi        | 3000400400   | robi@gmail,com | 51           |

## **Department table**

| departmentid | departmentname | departmentlocation        |  |
|--------------|----------------|---------------------------|--|
| 51           | ITM            | 5th floor knowledge tower |  |
| 51           | ITM            | 5th floor knowledge tower |  |

#### **Medication record table**

| studentid | diagonosisid | sickness | medication | doctorid |
|-----------|--------------|----------|------------|----------|
| 1001      | 7070         | fever    | napa       | 121      |
| 1002      | 7077         | fever    | napa       | 121      |

#### **Doctor table**

| doctorid | doctorname | doctormail      |  |
|----------|------------|-----------------|--|
| 121      | mofiz      | mofiz@doc.com   |  |
| 122      | shamshu    | shamshu@doc.com |  |

## Diagnosis table

| diagnosisid | diagnosisdate |
|-------------|---------------|
| 712         | 12/3/24       |
| 718         | 16/3/24       |

# **ER DIAGRAM**

