

Project Report

EMR System for University Student Clinic

Introduction

Project Overview

This project is built for the Electronic Medical Record Database system for university student clinic.

Its facilities storing, retrieving patient and medical staff data. It manages all university student clinic records.

What is an EMR exactly? Electronic Medical Recording – All the data in a doctor's office is usually collected in the form of charts and forms on papers. Using the paper record creates piles of papers and it is difficult to manage and utilize these records. Electronic Medical Record is the term given to medical record of patients collected in electronic format. Electronic records are easily portable and accessible anytime and from anywhere. It is easy to transfer electronic records to several different entities at a time. This helps patients and doctors who can access previous health records quickly and plan a treatment process quickly.

Project Purpose

The purpose of the EMR system for university student clinic is to manage patient and clinic records by using a database. This system gives easy access to store and retrieve patient's data clinic staff shifts and book appointments for specific procedures.

Scope of the Project

This project has several functionalities for university student clinic, Scope of project is limited to track records of university student clinic. .

System Features and Requirements

Functional Requirements

The designed database facilitates following functionalities.

- 1.It has a separate table to store patient records with all required information like address, contact numbers, emergency contacts, insurance details.
2. To maintain the appointment lists we designed a separate appointment table which keep tracks of all the appointment details information.
- 3.System also provides doctors information along with their specialization and schedule of each doctors. This will help in booking appointments based on availability.
- 4.It stores records of payments and method of payments also, it will help to resolve further payments issues.
5. It also stores the availability of medicines and inventory information . In inventory table we also store the medicine stock remaining information.

Design constraints:

All tables are in BCNF , so this system is without any data anomalies.

Tools used:

- 1.MySQL 8.0 to build our system.

Name: Darshan Puttanna

ID: 801169012

Database schema:

Following are tables created:

1) appointments:

The screenshot shows the configuration for the 'appointments' table in the 'university_student_clinic' schema. The table is using the InnoDB engine and utf8mb4 character set. The columns are defined as follows:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
appointment_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
patient_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
patient_fname	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
patient_lname	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
appointment_time	DATETIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
doctor_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
patient_description	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

The interface also includes fields for Column Name, Data Type, Charset/Collation, and Comments, along with storage options like Virtual, Stored, Primary Key, Not Null, Unique, Binary, Unsigned, Zero Fill, Auto Increment, and Generated. The 'Columns' tab is selected at the bottom.

2) billing_info

The screenshot shows the configuration for the 'billing_info' table in the 'university_student_clinic' schema. The table is using the InnoDB engine and utf8mb4 character set. The columns are defined as follows:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
receipt_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
visitor_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
total_bill	FLOAT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
payment_by	VARCHAR(150)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
payment_method	VARCHAR(150)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

The interface also includes fields for Column Name, Data Type, Charset/Collation, and Comments, along with storage options like Virtual, Stored, Primary Key, Not Null, Unique, Binary, Unsigned, Zero Fill, Auto Increment, and Generated. The 'Columns' tab is selected at the bottom.

Name: Darshan Puttanna
ID: 801169012

3) checkup

createtablesproject1 insertproject1* SQL File 8* SQL File 9* appointments - Table billing_info - Table **checkup - Table** x

Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
checkup_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
visitor_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
symptoms_desc	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
procedure_id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
doctor_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
result	VARCHAR(20)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
doctor_comment	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name: Data Type:

Charset/Collation: Default:

Comments:

Storage: ☐ Virtual ☐ Stored
☐ Primary Key ☐ Not Null ☐ Unique

4) doctor_schedule

createtablesproject1 insertproject1* SQL File 8* SQL File 9* appointments - Table billing_info - Table checkup - Table **doctor_schedule - Table** x

Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
availability_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Doctor_id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
in_time	TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
out_time	TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name: Data Type:

Charset/Collation: Default:

Comments:

Storage: ☐ Virtual ☐ Stored
☐ Primary Key ☐ Not Null ☐ Unique
☐ Binary ☐ Unsigned ☐ Zero Fill
☐ Auto Increment ☐ Generated

Name: Darshan Puttanna

ID: 801169012

5) Doctors













Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 doctor_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 first_name	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 last_name	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	*
 gender	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 age	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 email_id	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 address	VARCHAR(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 contact_number	VARCHAR(255)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 specialization	VARCHAR(255)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

CharSet/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply Revert

6) doctors_specilization








Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 specialization_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 doctor_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 responsibility	VARCHAR(20)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 procedure_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name:

CharSet/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply Revert

Name: Darshan Puttanna

ID: 801169012

7) insurance_company

Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
insurance_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
company_name	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
insurance_plan	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
company_website	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
contact_number	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name: Data Type:

Charset/Collation: Default:

Comments:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns | Indexes | Foreign Keys | Triggers | Partitioning | Options

Apply Revert

8) inventory

Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
inventory_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
medicine_id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
stock_remaining	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name: Data Type:

Charset/Collation: Default:

Comments:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns | Indexes | Foreign Keys | Triggers | Partitioning | Options

Name: Darshan Puttanna

ID: 801169012

9) medicene








Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 medicene_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 medicene_name	VARCHAR(255)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 manufacture	VARCHAR(255)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 amount	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

CharSet/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored
☐ Primary Key ☐ Not Null ☐ Unique
☐ Binary ☐ Unsigned ☐ Zero Fill
☐ Auto Increment ☐ Generated

Columns | Indexes | Foreign Keys | Triggers | Partitioning | Options

Apply | Discard

10) patient information











Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 patient_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 address	VARCHAR(200)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 social_security_number	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 emergencycontact_name	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 emergency_contact_number	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 insurance_number	VARCHAR(15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 insurance_company_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name:

CharSet/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored
☐ Primary Key ☐ Not Null ☐ Unique

Name: Darshan Puttanna

ID: 801169012

11) patients










Table Name:

Schema: **university_student_clinic**

CharSet/Collation:

Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 patient_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 first_name	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 last_name	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	*
 gender	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 email_id	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 contact_number	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name:

CharSet/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns | Indexes | Foreign Keys | Triggers | Partitioning | Options

12) prescription








Table Name:

Schema: **university_student_clinic**

CharSet/Collation:

Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 prescription_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 visitor_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 medicine_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 prescription_comment	VARCHAR(200)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name:

CharSet/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns | Indexes | Foreign Keys | Triggers | Partitioning | Options

Name: Darshan Puttanna

ID: 801169012

13) procedure_list






Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 procedure_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 procedure_name	VARCHAR(30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

Data Type:

14) symptoms







Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 symptoms_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 visitor_id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 symptoms_desc	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name:

Data Type:

Charset/Collation:

Default:

Comments:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Name: Darshan Puttanna

ID: 801169012

15) visitors_info








Table Name: Schema: **university_student_clinic**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 visitor_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 appointment_id	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
 visitor_description	VARCHAR(100)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 visited_time	DATETIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

Charset/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☐ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns

Indexes

Foreign Keys

Triggers

Partitioning

Options

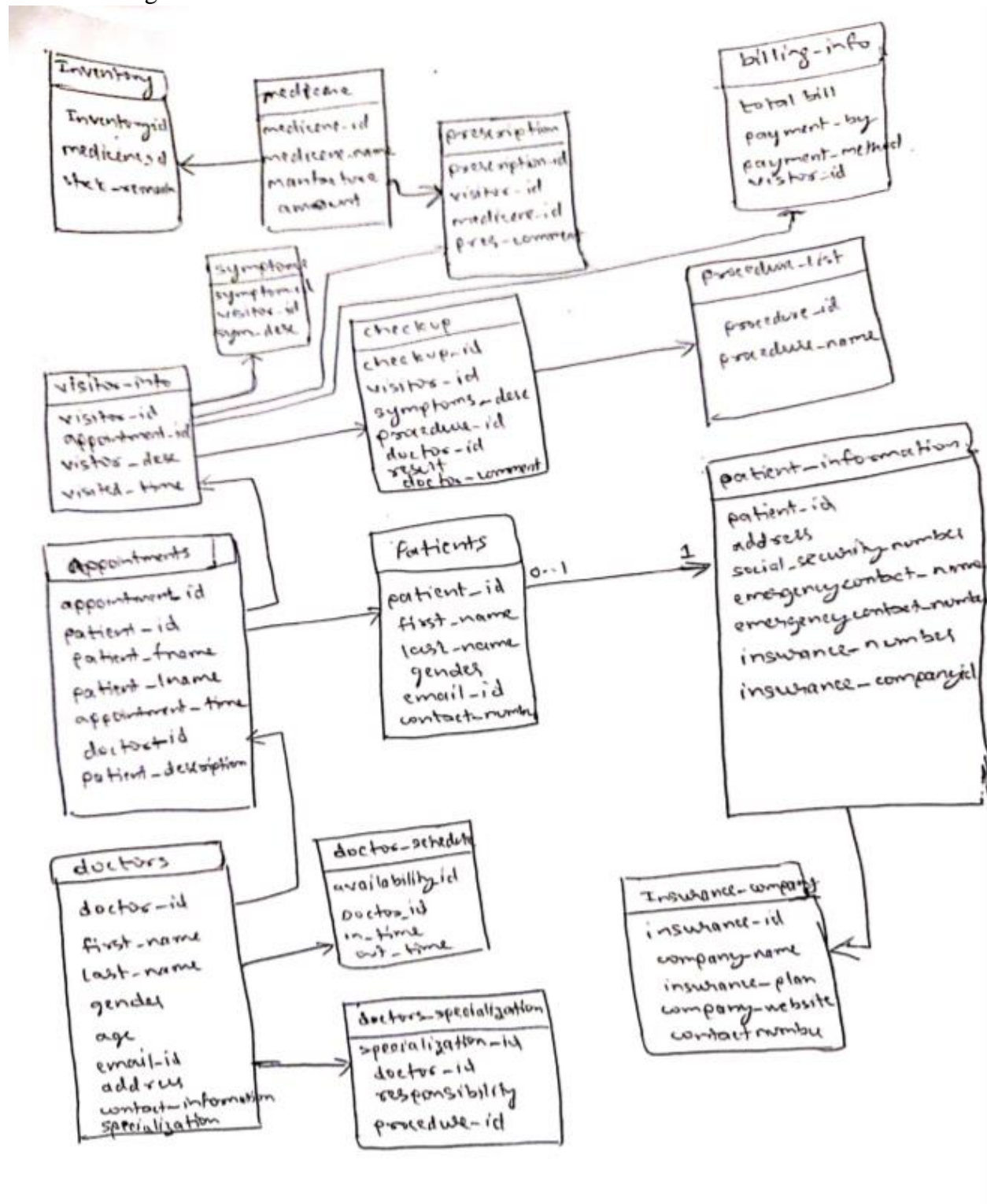
Apply

Revert

Name: Darshan Puttanna

ID: 801169012

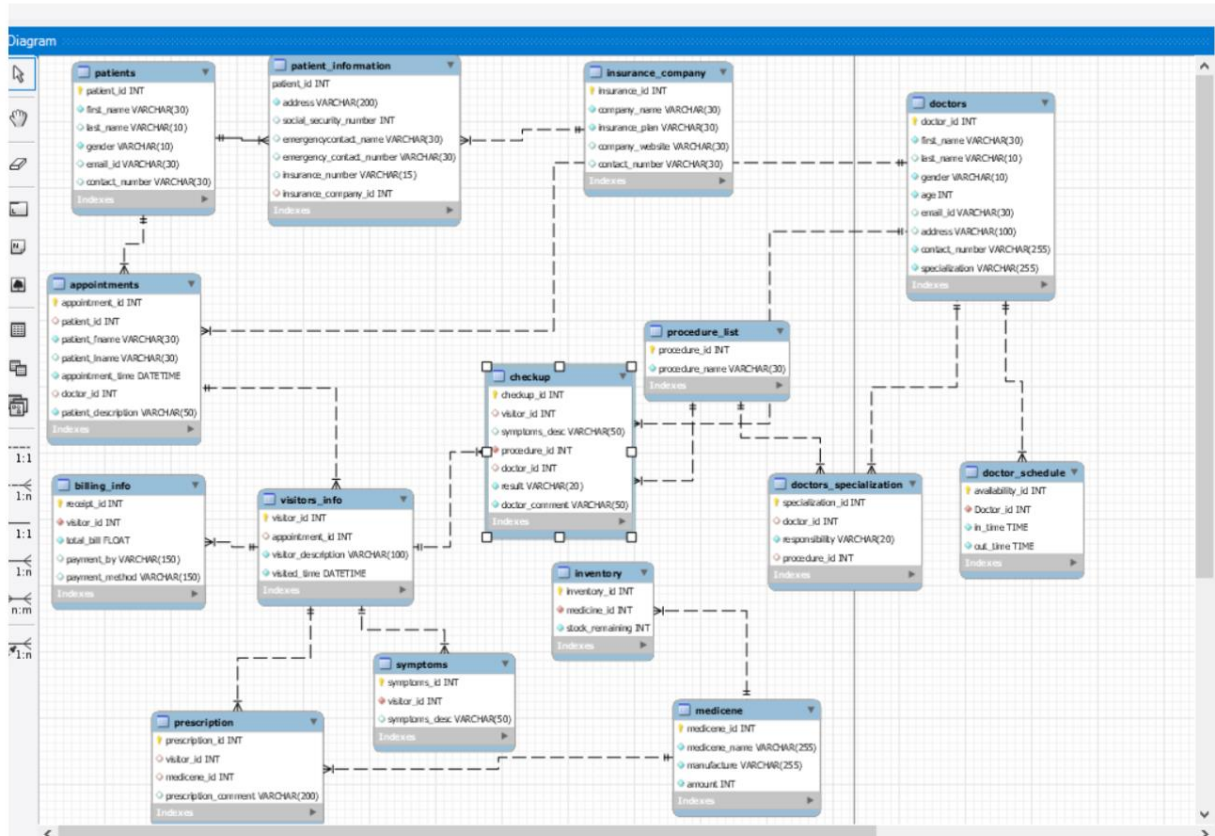
UML Diagram:



Name: Darshan Puttanna

ID: 801169012

EER Diagram:



Name: Darshan Puttanna
ID: 801169012

Records Retrieval:

select the patients name whos insurance company name is ISO from visitors_info

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 select concat(first_name, " ", last_name)
2 as patient_name, gender, p.contact_number
3 from patients p inner join patient_information pi on p.patient_id = pi.patient_id
4 inner join insurance_company i on
5 i.insurance_id = pi.insurance_company_id
6 where company_name='ISO';
```

The Result Grid shows the following data:

patient_name	gender	contact_number
Alex Hales	Male	(214) 555-8834
Natalie Portman	Female	(214) 999-2035
Joe Bill	Male	(559) 555-9375

The bottom panel shows the Action Output with the following details:

#	Time	Action	Message	Duration / Fetch
245	20:02:11	INSERT INTO inventory VALUES(12,1012,220)	1 row(s) affected	0.016 sec
246	20:02:28	select total_bill, concat (a.patient_name, " ", a.patient_ha...	3 row(s) returned	0.015 sec / 0.000 sec
247	20:02:45	select m.medicene_id,medicene_name,manufacture.stock_...	Error Code: 1054. Unknown column 'stock_remaining' in field list	0.000 sec
248	20:06:41	select m.medicene_id,medicene_name,manufacture.invent...	Error Code: 1054. Unknown column 'inventory.stock_remaining' in field list	0.000 sec
249	20:06:54	select m.medicene_id,medicene_name,manufacture from m...	4 row(s) returned	0.000 sec / 0.000 sec
250	21:29:22	select concat(first_name, " ", last_name) as patient_name...	3 row(s) returned	0.015 sec / 0.000 sec

Retriving the patients name from billing table using visitor id

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1
2 # Retriving the patients name from billing table visitor id
3
4 select total_bill, concat (a.patient_name, " ", a.patient_iname ) as patient_name
5 from billing_info b
6 inner join visitors_info v on b.visitor_id=v.visitor_id
7 inner join appointments a on v.appointment_id = a.appointment_id
8 where v.visitor_id=6;
```

The Result Grid shows the following data:

total_bill	patient_name
750	Natalie

The bottom panel shows the Action Output with the following details:

#	Time	Action	Message	Duration / Fetch
246	20:02:28	select total_bill, concat (a.patient_name, " ", a.patient_ha...	3 row(s) returned	0.015 sec / 0.000 sec
247	20:02:45	select m.medicene_id,medicene_name,manufacture.stock_...	Error Code: 1054. Unknown column 'stock_remaining' in field list	0.000 sec
248	20:06:41	select m.medicene_id,medicene_name,manufacture.invent...	Error Code: 1054. Unknown column 'inventory.stock_remaining' in field list	0.000 sec
249	20:06:54	select m.medicene_id,medicene_name,manufacture from m...	4 row(s) returned	0.000 sec / 0.000 sec
250	21:29:22	select concat(first_name, " ", last_name) as patient_name...	3 row(s) returned	0.015 sec / 0.000 sec
251	21:31:58	select total_bill, concat (a.patient_name, " ", a.patient_ina...	1 row(s) returned	0.015 sec / 0.000 sec

Name: Darshan Puttanna
ID: 801169012

Retriving patients doctor details

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
11 # Retriving patients doctor details
12
13 select CONCAT( p.first_name, ' ', p.last_name) as Patient_Name,
14 concat(d.first_name, ' ', d.last_name) as Doctor_Name,
15 pr.procedure_name as Procedure_Done
16 FROM
17 visitors_info v join appointments a on v.appointment_id=a.appointment_id
18 join patients p on p.patient_id=a.patient_id
19 join doctors d on d.doctor_id=a.doctor_id
20 join checkup c on c.visitor_id=v.visitor_id
21 join procedure_list pr on pr.procedure_id=c.procedure_id;
```

The result grid shows the following data:

Patient_Name	Doctor_Name	Procedure_Done
Duane Bravo	Edward Jenner	Body Checkup
Alex Hales	Elizabeth Blackwell	Radiational
Lana Lukas	Daniel Williams	EEG
Quinton Boucher	Alexander Fleming	Body Checkup
Mark Knight	Helen Brooke	ECG
Natalie Portman	Jonathon Trott	XRAY

The output pane shows the execution log with the following messages:

- 247 20:02:45 select m.medicone_id,medicone_name,manufacture.stock_... Error Code: 1054. Unknown column 'stock_remaining' in field list
- 248 20:06:41 select m.medicone_id,medicone_name,manufacture.invent... Error Code: 1054. Unknown column 'inventory.stock_remaining' in field list
- 249 20:06:54 select m.medicone_id,medicone_name,manufacture from m... 4 row(s) returned
- 250 21:29:22 select concat(first_name, " ", last_name) as patient_name... 3 row(s) returned
- 251 21:31:58 select total_bill, concat (a.patient_name, " ", a.patient_ha... 1 row(s) returned
- 252 21:32:55 select CONCAT(p.first_name, " ", p.last_name) as Patient_N... 10 row(s) returned

List of patients name whose appointment is after April 3 2021

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
1 # List of patients name whose appointment is after April 3 2021
2
3 select p.patient_id, concat(p.first_name, " ", p.last_name) AS "Patient Name", a.appointment_time
4 from appointments a join doctors d on a.doctor_id=d.doctor_id
5 join patients p on p.patient_id=a.patient_id
6 where appointment_time>"2021-04-03" order by appointment_time;
```

The result grid shows the following data:

patient_id	Patient Name	appointment_time
1	Duane Bravo	2021-04-03 12:30:00
2	Alex Hales	2021-04-04 12:30:00
6	Natalie Portman	2021-04-04 12:30:00
10	Joe Bill	2021-04-04 12:30:00
4	Quinton Boucher	2021-04-05 14:10:00
5	Mark Knight	2021-04-06 11:40:00

The output pane shows the execution log with the following messages:

- 248 20:06:41 select m.medicone_id,medicone_name,manufacture.invent... Error Code: 1054. Unknown column 'inventory.stock_remaining' in field list
- 249 20:06:54 select m.medicone_id,medicone_name,manufacture from m... 4 row(s) returned
- 250 21:29:22 select concat(first_name, " ", last_name) as patient_name... 3 row(s) returned
- 251 21:31:58 select total_bill, concat (a.patient_name, " ", a.patient_ha... 1 row(s) returned
- 252 21:32:55 select CONCAT(p.first_name, " ", p.last_name) as Patient_N... 10 row(s) returned
- 253 21:34:04 select p.patient_id, concat(p.first_name, " ", p.last_name) A... 9 row(s) returned

Name: Darshan Puttanna
ID: 801169012

Update Records: /* Update Doctor schedule timings*/

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 /* Update Doctor schedule timings*/  
2 update doctor_schedule  
3 set out_time = '20:00:00' where doctor_id=3;  
4 select * from doctor_schedule;
```

The Navigator panel on the left shows the database schema for 'university_student_clinic'. The 'doctor_schedule' table is highlighted. The 'Table: visitors_info' is also visible in the Information panel.

The Output panel shows the results of the query execution:

availability_id	Doctor_id	in_time	out_time
1	1	09:00:00	17:00:00
2	2	09:00:00	20:00:00
3	3	09:00:00	20:00:00
4	4	09:00:00	16:00:00
5	5	09:00:00	18:00:00
6	6	09:00:00	18:00:00

The Action Output panel shows the execution details:

#	Time	Action	Message	Duration / Fetch
250	21:29:22	select concat(first_name, ' ', last_name) as patient_name...	3 row(s) returned	0.015 sec / 0.000 sec
251	21:31:58	select total_bill, concat(a.patient_name, ' ', a.patient_ha...	1 row(s) returned	0.015 sec / 0.000 sec
252	21:32:55	select CONCAT(p.first_name, ' ', p.last_name) as Patient_N...	10 row(s) returned	0.000 sec / 0.000 sec
253	21:34:04	select p.patient_id, concat(p.first_name, ' ', p.last_name) A...	9 row(s) returned	0.000 sec / 0.000 sec
254	21:35:22	update doctor_schedule set out_time= '20:00:00' where doc...	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
255	21:35:22	select * from doctor_schedule LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec

/* Update patient information-address and emergency contact name*/

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 /* Update patient information-address and emergency contact name*/  
2 update patient_information  
3 set address = '9519 University Terrace Dr Apt G Charlotte', emergencycontact_name = 'Pat Cummins'  
4 where patient_id=6;  
5 select * from patient_information;
```

The Navigator panel on the left shows the database schema for 'university_student_clinic'. The 'patient_information' table is highlighted. The 'Table: visitors_info' is also visible in the Information panel.

The Output panel shows the results of the query execution:

patient_id	address	social_security_number	emergencycontact_name	emergency_contact_number	insurance_number	insurance_c...
1	9543 UTD APT A, Charlotte, North Carolina, US...	224466	Albert	(810) 555-1205	test123456	1
2	9544 UTD APT B, Charlotte, North Carolina, US...	764523	Watson	(810) 555-1205	test223456	2
3	9545 UTD APT C, Charlotte, North Carolina, US...	263641	Lee	(810) 555-1205	test923456	3
4	9546 UTD APT D, Charlotte, North Carolina, US...	464523	Shane	(810) 555-1205	test226456	4
5	9547 UTD APT A, Charlotte, North Carolina, US...	964523	Hayden	(810) 555-1205	test225656	1
6	9519 University Terrace Dr Apt G Charlotte	564523	Pat Cummins	(810) 555-1205	test283456	2
7	9549 UTD APT G, Charlotte, North Carolina, US...	664523	Mills	(810) 555-1205	test220156	3
8	9554 UTD APT F, Charlotte, North Carolina, US...	794523	Travis	(810) 555-1205	test123056	4
9	9555 UTD APT D, Charlotte, North Carolina, US...	891523	Clarke	(810) 555-1205	test111456	1
10	9556 UTD APT B, Charlotte, North Carolina, US...	994523	Symonds	(810) 555-1205	test299456	2

The Action Output panel shows the execution details:

#	Time	Action	Message	Duration / Fetch
252	21:32:55	select CONCAT(p.first_name, ' ', p.last_name) as Patient_N...	10 row(s) returned	0.000 sec / 0.000 sec
253	21:34:04	select p.patient_id, concat(p.first_name, ' ', p.last_name) A...	9 row(s) returned	0.000 sec / 0.000 sec
254	21:35:22	update doctor_schedule set out_time= '20:00:00' where doc...	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec

Name: Darshan Puttanna

ID: 801169012

/* Update insurance_company insurance plan*/

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 /* Update insurance_company insurance plan*/
2 update insurance_company
3 set insurance_plan='United Health Secure' where insurance_id='1';
4 select * from insurance_company where insurance_id='1';
```

The result grid shows the data for the insurance_company table:

insurance_id	company_name	insurance_plan	company_website	contact_number
1	United Health care	United Health Secure	www.unitedhc.com	(312) 555-4800

The Action Output pane shows the execution results:

#	Time	Action	Message	Duration / Fetch
258	21:38:31	update insurance_company set insurance_plan='United He...	0 row(s) affected Rows matched: 1 Changed: 0 Warnings: 0	0.000 sec
259	21:38:31	select * from insurance_company where insurance_id='1' LI...	1 row(s) returned	0.000 sec / 0.000 sec

/* Update manufacturer of medicine in medicine table */

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 /* Update manufacturer of medicine in medicine table */
2 update medicine
3 set manufacture='Manufacturer 9' where medicine_id=1008;
4 select * from medicine where medicine_id=1008;
```

The result grid shows the data for the medicine table:

medicine_id	medicine_name	manufacture	amount
1008	Medicine2	Manufacturer 9	4

The Action Output pane shows the execution results:

#	Time	Action	Message	Duration / Fetch
260	21:39:43	update medicine set manufacture='Manufacturer 9' where m...	0 row(s) affected Rows matched: 1 Changed: 0 Warnings: 0	0.000 sec
261	21:39:43	select * from medicine where medicine_id=1008 LIMIT 0 ...	1 row(s) returned	0.000 sec / 0.000 sec