Project Title - Electricity Bill Management System

Team information - Group 11

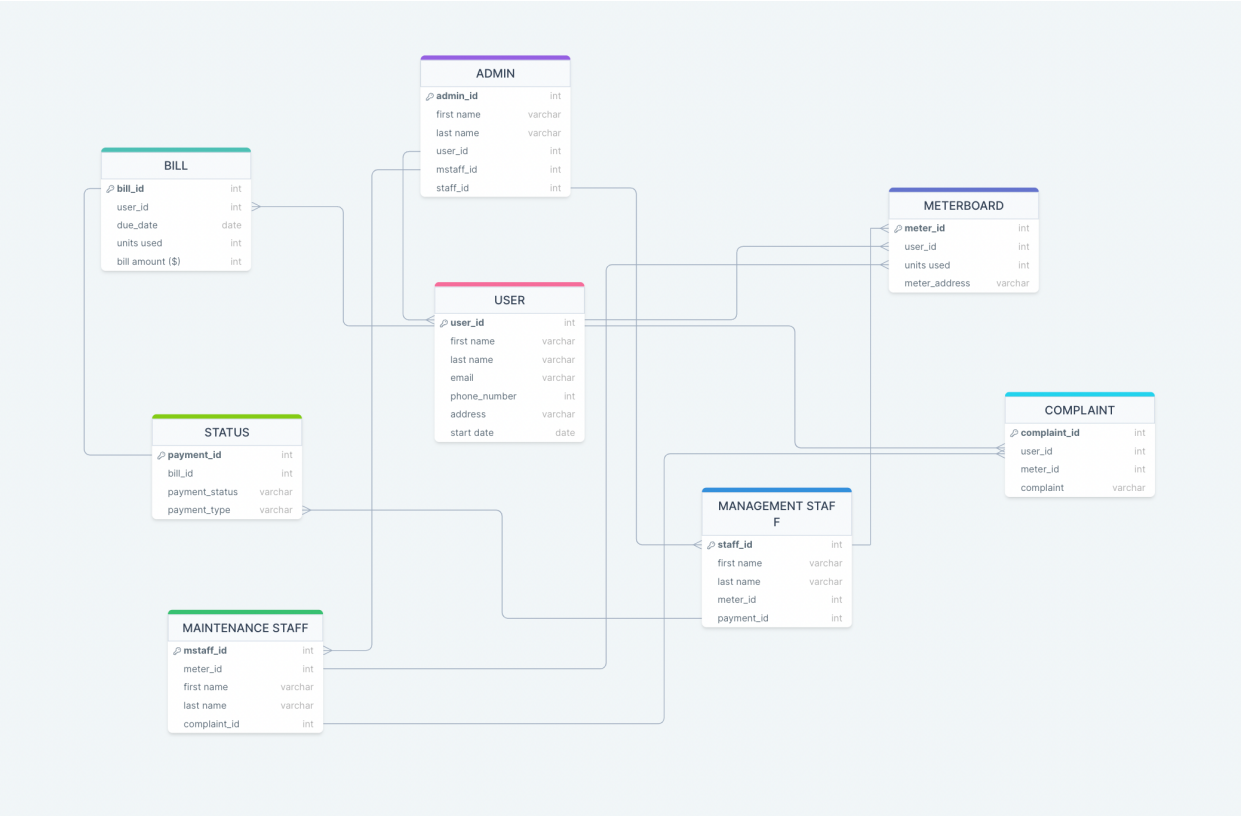| Sr.No	Name	Email id	NUID
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Problem statement:

The "Electricity Bill Management System" aids in keeping track of bills and payments while resolving issues with the already in use manual system. Additionally, this system is created to meet the demands of the company for efficient and successful operation.

Objective:

The admin Create, Update, Read, Delete users and staff. The user can view their bills and make payment. The management staff can READ meters and payment details of users. The maintenance staff can READ and UPDATE complaints and READ meter.

Entity Relationship Diagram:

ADMIN
admin_id	int
first name	varchar
last name	varchar
user_id	int
mstaff_id	int
staff_id	int

BILL
bill_id	int
user_id	int
due_date	date
units used	int
bill amount ($)	int

METERBOARD
meter_id	int
user_id	int
units used	int
meter_address	varchar

USER
user_id	int
first name	varchar
last name	varchar
email	varchar
phone_number	int
address	varchar
start date	date

STATUS
payment_id	int
bill_id	int
payment_status	varchar
payment_type	varchar

COMPLAINT
complaint_id	int
user_id	int
meter_id	int
complaint	varchar

MANAGEMENT STAFF
staff_id	int
first name	varchar
last name	varchar
meter_id	int
payment_id	int

MAINTENANCE STAFF
mstaff_id	int
meter_id	int
first name	varchar
last name	varchar
complaint_id	int

Business Rules:

Admin**:**

Admin can create multiple users

Admin can create multiple management staff

Admin can create multiple maintenance staff

User:

One user can have multiple meter

One user can raise many complaints

One user can make many payments

One user can access many bill

Maintenance:

Maintenance staff can access complaints

Maintenance staff can access meter

Management:

Management staff can access payment

Management staff can access meter

All the entities with its attributes and data types.

Enity	Attributes	Data type
USER	user_id	int
	first_name	varchar
	last_name	varchar
	user_email	varchar
	phone_number	int
	address	varchar
	start_date	date

Enity	Attributes	Data type
BILL	bill_id	int
	user_id	int
	due_date	date
	units_used	int
	bill_amount	int

Enity	Attributes	Data type
STATUS	payment_id	int
	bill_id	int
	paymen_status	varchar
	payment_type	varchar

Enity	Attributes	Data type
MAINTANANCE STAFF	mstaff_id	int
	meter_id	int
	first_name	varchar
	last_name	varchar
	complaint_id	int

Enity	Attributes	Data type
ADMIN	admin_id	int
	first_name	varchar
	last_name	varchar
	user_id	int
	mstaff_id	int
	staff_id	int

Enity	Attributes	Data type
MANAGEMENT STAFF	staff_id	int
	first_name	varchar
	last_name	varchar
	meter_id	int
	payment_id	int

Enity	Attributes	Data type
METERBOARD	meter_id	int
	user_id	int
	units_used	int
	meter_address	varchar

Enity	Attributes	Data type
COMPLAINT	complaint_id	int
	user_id	int
	meter_id	int
	complaint	varchar