

**ELECTRICITY BILL MANAGEMENT SYSTEM**

**Course Name :** ADVANCED DATABASE MANAGEMENT SYSTEM

**Sec :** C

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**01. INTRODUCTIONS:**

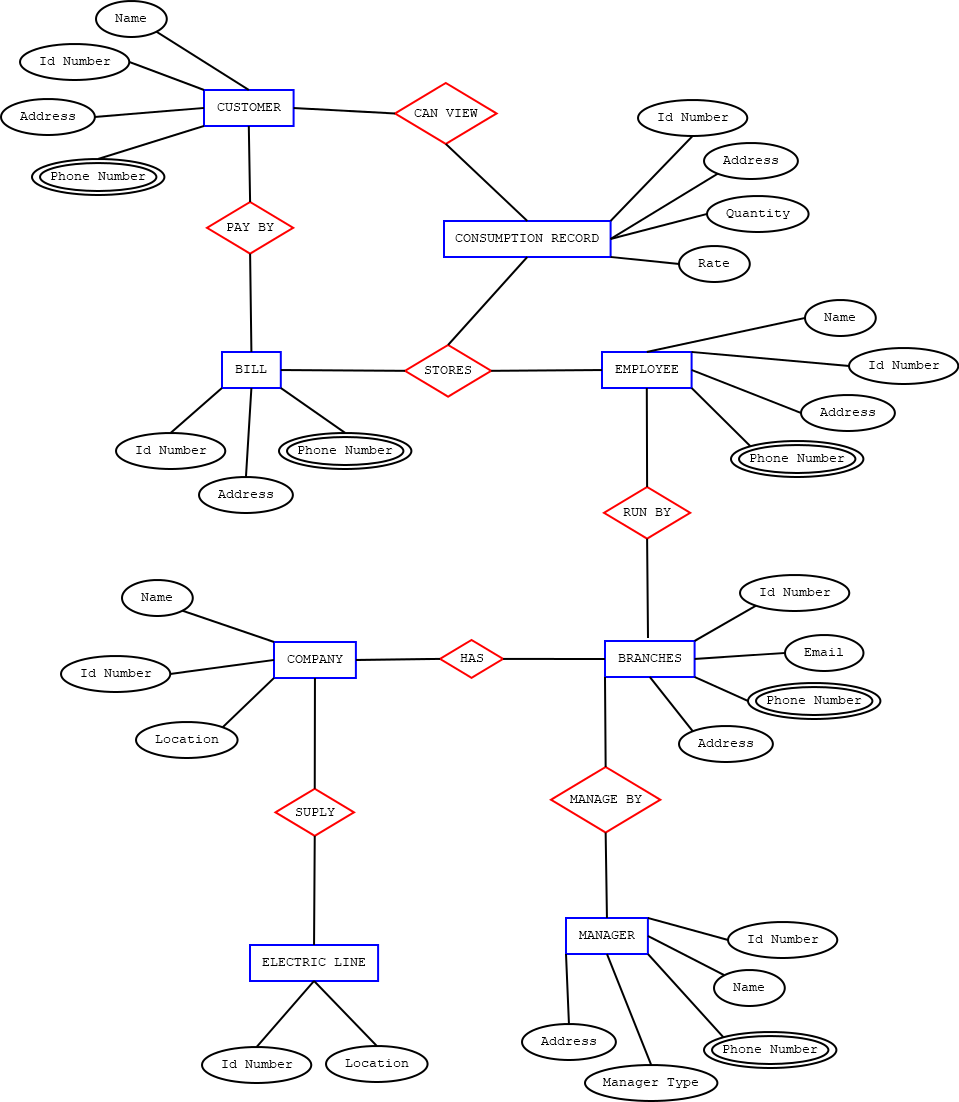
A database management system is system software for creating and managing database. The DBMS provide user and programmers with a systematic way to create, retrieve, update and manage data.

In this project, an Electricity Bill Management System is creating by the concept of ADBMS. So, the main purpose of this project is create a system using simple UI design with all database included as like a software for both users.

**02. SYSTEM SUMMARY:**

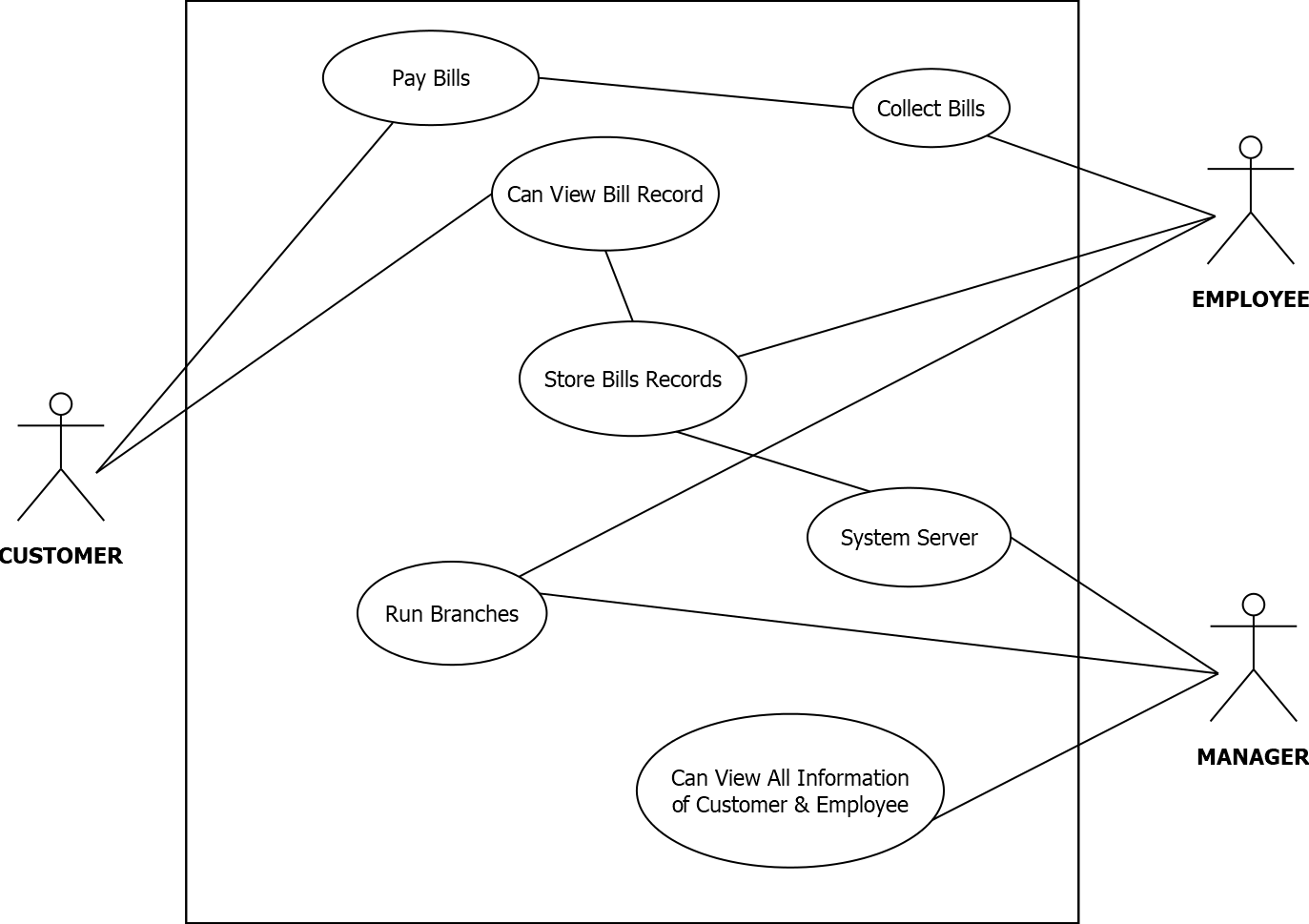
Electricity Company supply electricity to various types of customers. For maintain a good supply, Electric Company divided by many sub companies. Each company has a unique id number. Along with branch name and location. An electricity supply company has many branches. Each branch has its own id, email, phone, address. Electricity supply company is runned by employees. Employees are recognized by a unique id. Employee details containing name, phone number, address are also stored. Each branch is managed by a manager. A manager is identified by a manager id. Also the name, type, address, phone number of each manager is stored. Electricity is used by customer. Customer are recognized by customer id. Also the name, address, phone of the customer are stored. Each customer has its own consumption record. Each consumption record consist of quantity and rate. Each consumption record is counted by a meter. Bill consumption record varies on rate. Each bill is identified by a id number. Electricity bill is calculated by the employees of electricity supply company monthly from the meters. Consumers go to electricity supply office to pay the bill. Employees of the company collect the bills from the consumers. The bill payment record is also stored by the employees. Each bill record consists of user id, phone, and address.

**03. ER DIAGRAM**

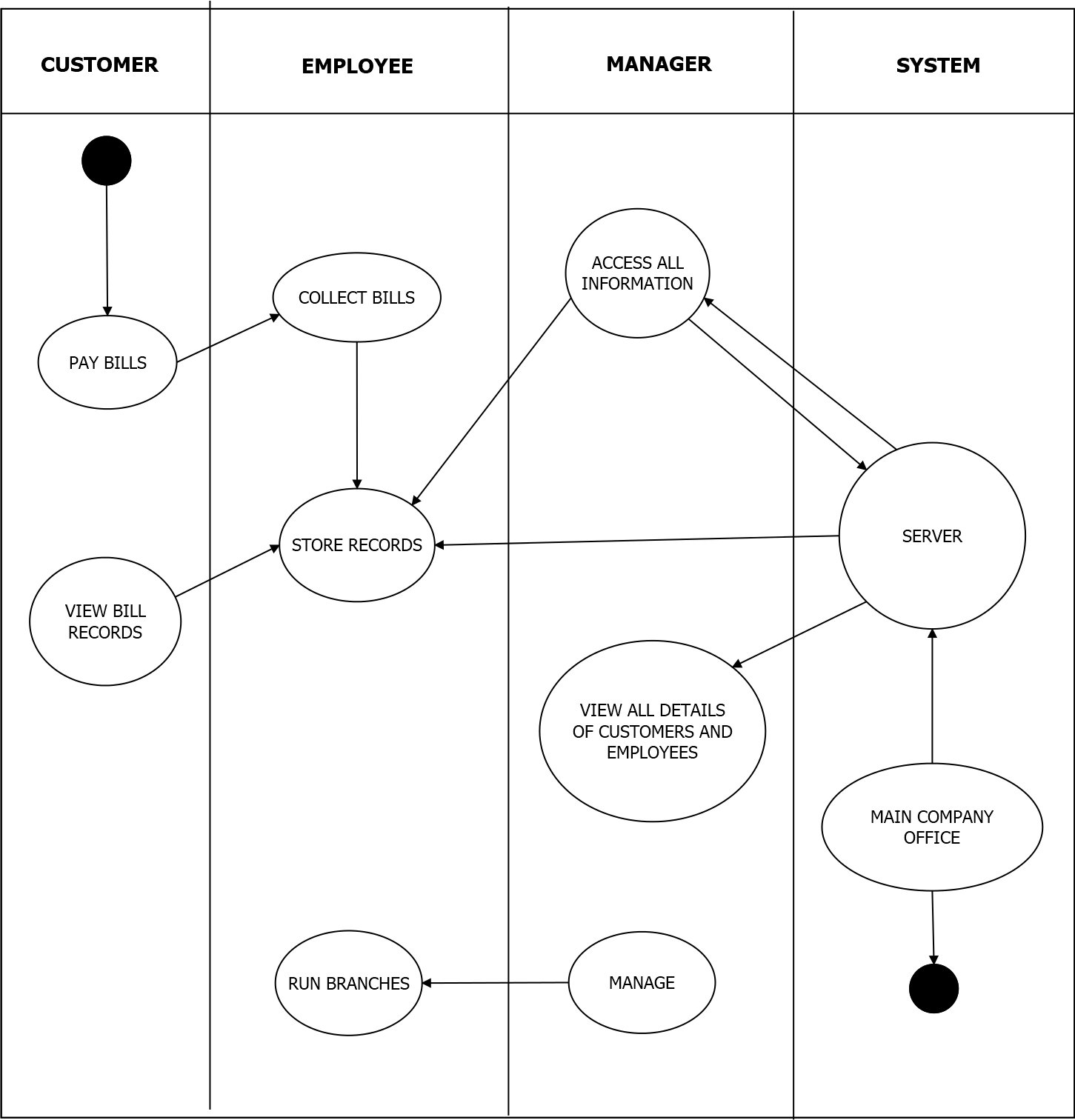


**04. CLASS DIAGRAM**

**05. USE CASE & ACTIVITY DIAGRAM**



Use Case Diagram



Activity Diagram

**06. DATABASE SCEMA DIAGRAM**

**07. SCREEN SHOTS OF DB TABLES**

**08. SQL/ PLSQL QUERIES**

1. Update monthly bill in User table after an increase in unit price. Like 5%, 7.5% & 10%.

Ans:

Declare

Cursor c1 is select Uid, MonthlyBill from user;

i number (5);

Begin

For i in c1 loop

(

if i.GNo = 10 then

i.MonthlyBill := i.MonthlyBill+((i.MonthlyBill x 5)/100);

elseif i.GNo = 20 then

i.MonthlyBill := i.MonthlyBill+((i.MonthlyBill x 7.5)/100);

elseif I.GNo = 30 then

i.MonthlyBill := i.MonthlyBill+((i.MonthlyBill x 10)/100);

ednif;

update User set MonthlyBill = i.MonthlyBill where Uid = i.Uid;

dbms\_output.put\_line(i.Uid || ´´|| i.MonthlyBill);

end loop;

end;

2. Update lowest paid employee’s salary by 1000Tk.

Ans:

Declare

Cursor c1 is select eid, sal from emp where sal = (select min(sal) from emp);

i number (5);

Begin

For i in c1 loop

i.sal := i.sal+1000;

update emp set sal = i.sal (where empno = i.empno);

dbms\_output.put\_line (i.empno || ‘ ‘ || i.sal);

endloop;

end;

3. User login page, where user try to log in if the password is correct then it will log in otherwiseit will access denied.

Ans:

Declare

UserId User.Uid%type:=:UserId;

Password User.UPass%type:=:Password;

temppass User.UPass%type;

Begin

Temppass:= select UPass from User where userId = Uid;

If (password = temppass) then

dbms\_output.put\_line(‘Access Granted’);

else

dbms\_output.put\_line(‘Access Denied’);

end if;

end;

04.

**09. SIMPLE UI DESIGN**