**CASE STUDY:**

**1] Shweta chavan.**

**2] Aartee chimate**

**3] Sachin bagoriya**

**PROJECT TITLE:** TELECOMMUNICATION MANAGEMENT SYSTEM

AIM:

The telecommunication management system facilities the customer to pay bills, choose

the connection as per their requirement and seek help or enquire about new offers or plans

from the employee of the company.

**Table description:**

Following are the tables along with constraints used in Telecommunication Management System database.

1] CUSTOMER : This table consist of detail of the various customer related to these company.

This information stored in the table include customer id, customer name, customer mobile,

Customer email, customer username, customer password, customer address.

CONSTRAINT: customer id is the *primary key(which holds an unique and no null values)* in the

Customer table customer username is unique key and customer password is not null.

2] ACCOUNT: This table consist of detail of the various type of account hold by the customer.

This account information stored in the table include account id,plan type and plan expire data.

Account has a specialization relation to the pre-paid account and post-paid account. The

Prepaid having the paid date and postpaid having the data consumed

(check>=0)

CONSTRAINT: data consumed (check>=0).here we used check constraints for data consumed

To check whether the data is greater than equal to zero.

RELATION: Depositer relation to the customer table.

3] BILLS: This table consist of detail of the bill paid by the customers. This information stored

In the table include bill id and bill customer id.

CONSTRAINT:bill id is the primary key and bill customer id is the *foreign key* from the customer

table.

RELATION: [(has) relation with payment

4] PAYMENT: Payment entity is the weak entity has relation with bills.This table consist of the

Information about the Payments done by the customer. This payment information stored in the

Table include the Payment id, payement customer id,payement amount,payement date,payement number.

CONSTRAINT: Payment customer id is the *foreign key* from the

Customer table. Payment amount we used check constraints to check the

payement amount is greater than equal to 10. Check (payement amt>=10)

Payment number is the discriminating attribute from weak entity.

5] COMPANY: This table consist of the detail of the company. this information stored in the

Table include company name,company city.

CONSTRAINT: company name is primary key and company city is not null.

6] EMPLOYEE: This table consist of the detail of the various type of employee who was work

For the company. This information stored in the table include employee id, department name,

Employee experience, start year, mobile number, employee name.

CONSTRAINT: Employee id is the primary key . start year is not null

constraint .

RELATION: customer service relation to the customer.comapny provides

The connection and customer wants connection.

7] CONNECTION: This table consist of the various type of connection provided by the company.

This information stored in the table include connection id, connection customer id and

Connection company name.

This connection has a specialization relation to the hardware and network. The attribute

Of the hardware is hardware type and installation. In the hardware type we choose the broadband and the giggafiber subtype.The attribute of the network is

The network type. In the network type we choose the 2G,3G,4G network

type.

CONSTRAINT: Connection id is the *primary key* . the connection customer id is the *foreign*

*Key* from customer table and connection company id is the foreign key from

company table.

In the hardware type we also used the check Constraints to check whether

the hardware type is broadband or giga fiber.

RELATION: [customer (wants) connection, company (provides) connection.]

8]cust\_service ( m to n relation between customer and employee) :

This table consists of service type provide to customers by the employee of the company.

Constraints: customer\_id is foreign key from customer table, employee\_id is foreign key from employee table.