Title

Problem Statement

Abstract

Schema + constraints + sample data

ER diagram

DCL commands

List of queries

UI design

Code

SCHEMA

Student (StudentID, Name, DOB, DeptName, Year)

Club (ClubID, ClubName, Description, FacultyInCharge, Phone)

Slot (Building, RoomNo, Time)

Members (ClubID, StudentID, Post)

Events (EventNo, ClubID, Description, Building, RoomNo, EDate, Time)

Participants (EventNo, StudentID)

Finances (TransactionID, Club, Type, Amount, TDate)

DCL COMMANDS

drop table Club cascade constraints;

drop table Student cascade constraints;

drop table Slot cascade constraints;

drop table Members cascade constraints;

drop table Participants cascade constraints;

drop table Events cascade constraints;

drop table Finances cascade constraints;

create table Student

( StudentID numeric(4) primary key,

Name varchar(20),

DOB date,

DeptName varchar(20),

Year numeric(1),

check(DeptName in('CSE','EEE','MECH','CHEM')),

check(Year between 1 and 4),

check(DOB<to\_date('31121999','DDMMYYYY')));

create table Club

( ClubID numeric(4) primary key,

ClubName varchar(10) unique,

Description varchar(100),

Phone numeric(10),

FacultyInCharge varchar(20),

check(ClubName is not null),

check(Phone between 1000000000 and 9999999999));

create table Slot

( Building varchar(3),

RoomNo varchar(3),

Time varchar(4),

primary key(Building,RoomNo,Time),

check(Building in('AB1','AB2','AB3','AB4','AB5')));

create table Members

( ClubID numeric(4) references Club,

StudentID numeric(4) references Student,

Post varchar(15)

check(Post in ('Member','Management','Vice President','President')),

primary key(ClubID,StudentID));

create table Events

( EventNo numeric(4) primary key,

ClubID numeric(4) references Club,

Description varchar(200),

Building varchar(3) not null,

RoomNo varchar(3) not null,

EDate date not null,

Time varchar(4) not null,

Foreign key(Building,RoomNo,Time) references Slot,

Unique(Building,RoomNo,EDate,Time));

create table Participants

( EventNo numeric(4) references Events,

StudentID numeric(4) references Student,

primary key(EventNo,StudentID));

create table Finances

( TransactionID numeric(4) primary key,

ClubID numeric(4) references Club,

Type varchar(10),

Amount numeric(6),

TDate timestamp,

check(Type in('Grant','Deduction')),

check(Amount>0));

insert into student values ( 1400, 'Daksh', '21-Jan-1996', 'EEE', 4 );

insert into student values ( 1631, 'Qnax', '12-Jan-1998', 'CSE',2 );

insert into student values ( 1511, 'Blue', '03-Dec-1997', 'MECH',3 );

insert into student values ( 1503, 'Varsha', '23-Jul-1997', 'MECH', 3 );

insert into student values ( 1669, 'Sarah', '04-May-1999', 'EEE',2 );

insert into student values ( 1701, 'Pat', '01-March-1999', 'CHEM',1 );

insert into student values ( 1597, 'Dinsha', '13-Oct-1997', 'MECH',3 );

insert into student values ( 1580, 'Vanilla', '01-Nov-1997', 'EEE',3);

insert into student values ( 1780, 'Harsh', '01-Nov-1997', 'CHEM',1 );

insert into student values ( 1753, 'Eeshan', '23-Dec-1999', 'CSE',1 );

insert into student values ( 1721, 'Sid', '17-Aug-1999', 'EEE', 1);

insert into student values( 1501, 'Althaf', '01-Jan-1997', 'CHEM',3 );

insert into student values ( 1621, 'Reddy', '15-Aug-1998', 'CSE',2 );

insert into student values ( 1747, 'Ninaad', '01-Aug-199', 'MECH',3 );

insert into student values ( 1673, 'Raju', '25-Nov-1998', 'EEE',2 );

insert into student values ( 1612, 'Sarthak', '25-Feb-1998', 'CSE',2 );

insert into student values ( 1773, 'Abdul', '07-Jul-1999', 'CHEM',1 );

insert into student values ( 1732, 'Shalini', '13-Jan-1998', 'EEE',1 );

insert into student values ( 1733, 'Ohm', '21-Dec-1998', 'CHEM',1 );

insert into club values ( 9312, 'LoT', 'MUN and Cambiar', 9142312321, 'Giridhar' );

insert into club values ( 9715, 'Sports', 'Sports tournaments', 9001257865, 'Kempraj' );

insert into club values ( 9815, 'Council', 'Student Representatives', 8001257865, 'Prabhu' );

insert into club values ( 9513, 'LDQ', 'Writing, Quizzes and Debating', 7123257865, 'Shetty' );

insert into slot values ( 'AB5', '201', '1700' );

insert into slot values ( 'AB1', '100', '1200' );

insert into slot values ( 'AB3', '203', '1700' );

insert into slot values ( 'AB1', '100', '1500' );

insert into slot values ( 'AB3', '303', '1700' );

insert into members values ( 9312, 1400, 'President' );

insert into members values ( 9815, 1501, 'President' );

insert into members values ( 9715, 1621, 'President' );

insert into members values ( 9513, 1747, 'President' );

insert into members values ( 9513, 1673, 'Member' );

insert into members values ( 9513, 1669, 'Management' );

insert into members values ( 9312, 1511, 'Management' );

insert into members values ( 9312, 1580, 'Management' );

insert into members values ( 9815, 1612, 'Member' );

insert into members values ( 9513, 1721, 'Member' );

insert into members values ( 9312, 1721, 'Member' );

insert into members values ( 9715, 1721, 'Member' );

insert into members values ( 9815, 1580, 'Vice President' );

insert into events values ( 1234, 9815, 'First committee meeting', 'AB1', '100', '07-Aug-2017', '1200' );

insert into events values ( 2134, 9312, 'Cambiar', 'AB3', '203', '05-Sep-2017', '1700' );

insert into events values ( 2152, 9513, 'Litstock', 'AB5', '201', '25-Sep-2017', '1700' );

insert into participants values ( 1234, 1501 );

insert into participants values ( 1234, 1400 );

insert into participants values ( 2134, 1400 );

insert into participants values ( 2134, 1503 );

insert into participants values ( 2134, 1773 );

insert into participants values ( 2134, 1701 );

insert into participants values ( 2152, 1747 );

insert into participants values ( 2152, 1733 );

insert into participants values ( 2152, 1631 );

insert into Finances values ( 1000, 9815, 'Grant', 100000, '05-Aug-2017 12:00:00' );

insert into Finances values ( 1001, 9715, 'Grant', 5000, '07-Aug-2017 12:00:00' );

insert into Finances values ( 1002, 9513, 'Grant', 10000, '20-Aug-2017 12:00:00' );

insert into Finances values ( 1003, 9312, 'Grant', 25000, '24-Aug-2017 12:00:00' );

insert into Finances values ( 1004, 9815, 'Deduction', 5000, '23-Dec-2017 10:00:00' );

Transaction

Finances

TransactionID

Type

Amount

TDate

Club

ClubId

ClubName

Description

FacultyInCharge

Phone

Member

Student

StudentID

Name

DOB

DeptName

Year

Post

Conducted by

Events

EventNo

Description

EDate

Participates in

Slot

Building

RoomNo

Time

Conducted in