CMPE 332 Project Part 1

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Assumption

Assume all IDs are within 10 characters in length - Committee ID, Attendee ID, Job ID, Speech Session ID

Assume all room number are within 5 characters in length

Assume all first/last name are within 100 characters in length

Only one speaker for each conference session

Staff will not allow more than 3 people inside one hotel room

Student of all genders can sleep in the same hotel room

Parallel sessions cannot be hold at the same location

One member can only be chair for one committee, but can be a member of other committees

Assume all the functions for dealing parallel condition (eg: same name with different ID for attendee, same time with different location for conference schedule) works with future study in course.

ER Schema

The ER Schema can be found as figure 1 shown.

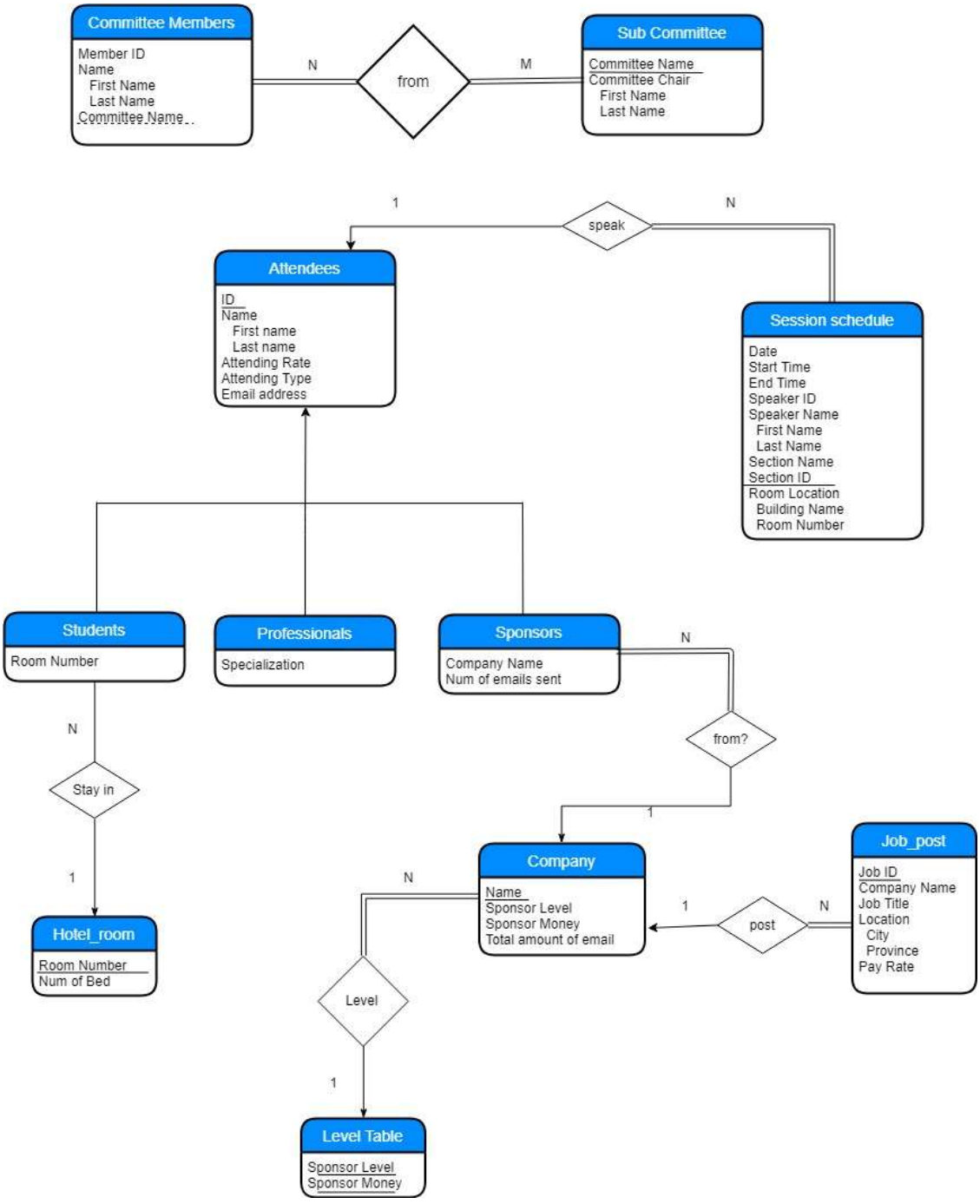

Figure 1: ER Schema

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###Part 3: DDL for relational Schema
Create Table Sub_Committee(
     committee_name varchar(20) not null,
     committee_chair_fname varchar(50),
     committee_chair_lname varchar(50),
     primary key (committee_name));

Create Table Committee_Members(
     member_id varchar(10) not null,
     first_name varchar(50) not null,
     last_name varchar(50) not null,
     committee_name varchar(20) not null,
     primary key(member_id,first_name,last_name),
     foreign key(committee_name) references sub_committee(committee_name) on delete
     cascade
     );

create table membersFromCommittee(
    member_id varchar(10) not null,
    first_name varchar(50) not null,
    last_name varchar(50) not null,
    committee_name varchar(20) not null,
    foreign key(member_id, first_name, last_name) references Committee_Members
    (member_id, first_name, last_name) on delete cascade,
    foreign key(committee_name) references Sub_Committee (committee_name) on delete
    cascade
    );

Create Table Attendees(
     ID varchar(10) not null,
     first_name varchar(100) not null,
     last_name varchar(100) not null,
     email varchar(255) not null,
     attendee_type varchar(100) not null,
     attending_rate varchar(100) not null,
     primary key(ID)
     );

Create Table Hotel_Room(
    room_number varchar(5) not null ,
    num_of_bed integer not null,
    primary key(room_number)
    );

Create Table Students(
    ID varchar(10) not null,
    first_name varchar(100) not null,
    last_name varchar(100) not null,
    room_number varchar(5),
    primary key(ID),
    foreign key(ID) references attendees(ID) on delete cascade,
    foreign key(room_number) references Hotel_Room (room_number) on delete set null
    );

Create Table Level_Table(
    sponsor_level varchar(30) not null,
    amount_of_money varchar(9) not null,
    total_mail integer not null,
    primary key (sponsor_level)
    );

Create Table Company(
     company_name varchar(100) not null,
     sponsor_level varchar(30)not null,
     amount_of_money integer not null,
     total_mail integer not null,
     primary key(company_name),
     foreign key(sponsor_level) references Level_Table(sponsor_level)
     );

Create Table Job_Post(
     job_id varchar(10) not null,
     company_name varchar(100),
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71        title varchar(50),
72        city varchar(50),
73        province varchar(50),
74        pay_rate varchar(20),
75        primary key(job_id),
76        foreign key(company_name) references Company (company_name) on delete cascade
77        );
78
79    Create Table Sponsors(
80        ID varchar(10) not null,
81        first_name varchar(100) not null,
82        last_name varchar(100) not null,
83        company_name varchar(10) not null,
84        num_of_mails_sent integer not null,
85        foreign key(company_name) references Company (company_name) on delete cascade,
86        foreign key(ID) references attendees(ID) on delete cascade
87        );
88
89    Create Table Professionals(
90        ID varchar(10) not null,
91        first_name varchar(100) not null,
92        last_name varchar(100) not null,
93        specialization varchar(100),
94        foreign key(ID) references attendees(ID) on delete cascade
95        );
96
97    Create Table Conference_Schedule(
98        date date,
99        start_time time,
100       end_time time,
101       speaker_id varchar(10),
102       speaker_front_name varchar(100),
103       speaker_last_name varchar(100),
104       section_id varchar(10) not null,
105       section_name varchar(100) not null,
106       building varchar(100),
107       room_num varchar(5),
108       primary key(section_id),
109       foreign key(speaker_id) references attendees (id) on delete cascade
110       );
111
```

```
##Data input:

#Insert sub committee information
insert into Sub_Committee values("Registration", "Xinbo", "Chen");
insert into Sub_Committee values("Promotion", "Zhen", "Meng");
insert into Sub_Committee values("Program", "Jianan", "Lin");

#Insert committee member information
insert into Committee_Members  values ('R01', 'Xinbo', 'Chen', 'Registration');
insert into Committee_Members  values ('R02', 'Meng', 'Zhen', 'Registration');
insert into Committee_Members  values ('P01', 'Meng', 'Zhen', 'Promotion');

insert into membersFromCommittee values('R01', 'Xinbo', 'Chen', 'Registration');
insert into membersFromCommittee values ('R02', 'Meng', 'Zhen', 'Registration');


#Insert attendees information
insert into attendees values('S01','Tom','Wang','asd@gmail.com','Student','50');
insert into attendees values('S02','Xinbo','Chen','akg@gmail.com','Student','50');
insert into attendees
values('P01','Josh','Mart','mjosh@gmail.com','Professional','100');
insert into attendees
values('SP01','Steve','Jobs','apple@apple.com','Sponsor','free');

#Insert Hotel room information
insert into Hotel_Room values ('101','2');
insert into Hotel_Room values ('102','1');

#Insert student information
insert into Students values('S01','Tom','Wang','101');
insert into Students values('S02','Xinbo','Chen','102');

#Insert Level of sponsor
insert into Level_Table values('Platinum','10000',5);
insert into Level_Table values('Gold','5000',4);
insert into Level_Table values('Silver','3000',3);
insert into Level_Table values('Bronze','5000',0);

#Insert company information
insert into Company values('Apple','Platinum','10000', 5);
insert into Company values('HP','Gold','5000', 4);

#Insert Job information
insert into Job_Post values( 'A01', 'Apple', 'Software Developer','Waterloo','ON',
'120');
insert into Job_Post values( 'H01', 'HP', 'Hardware tester','Ottawa','ON', '50');

#Insert sponsors information
insert into Sponsors values('SP01','Steve','Jobs','Apple', 2);

#Insert professionals information
insert into Professionals values('P01','Josh','Mart','Robotics');

#Insert conference schedule information
insert into Conference_Schedule values('2019-02-07', '13:00:00', '14:30:00',
'P01','Josh','Mart', '001', 'Into to Robotics', 'Goodwin', '201');
insert into Conference_Schedule values('2019-02-07', '13:00:00', '14:30:00',
'S01','Tom','Wang', '002', 'Into to CS', 'Goodwin', '203');
```