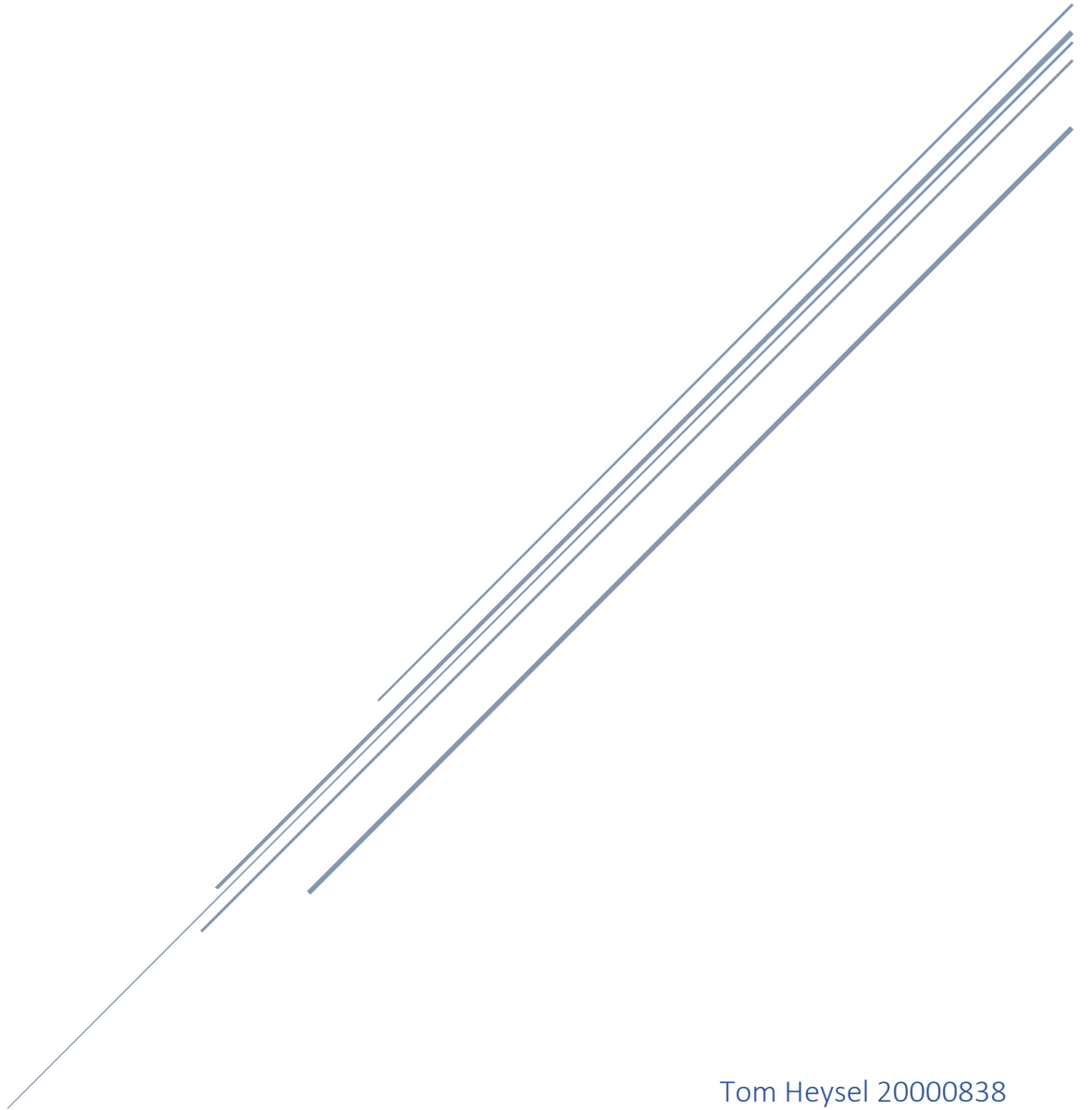# CMPE 332 - ASSINGMENT 1

Group 96

Tom Heysel 20000838

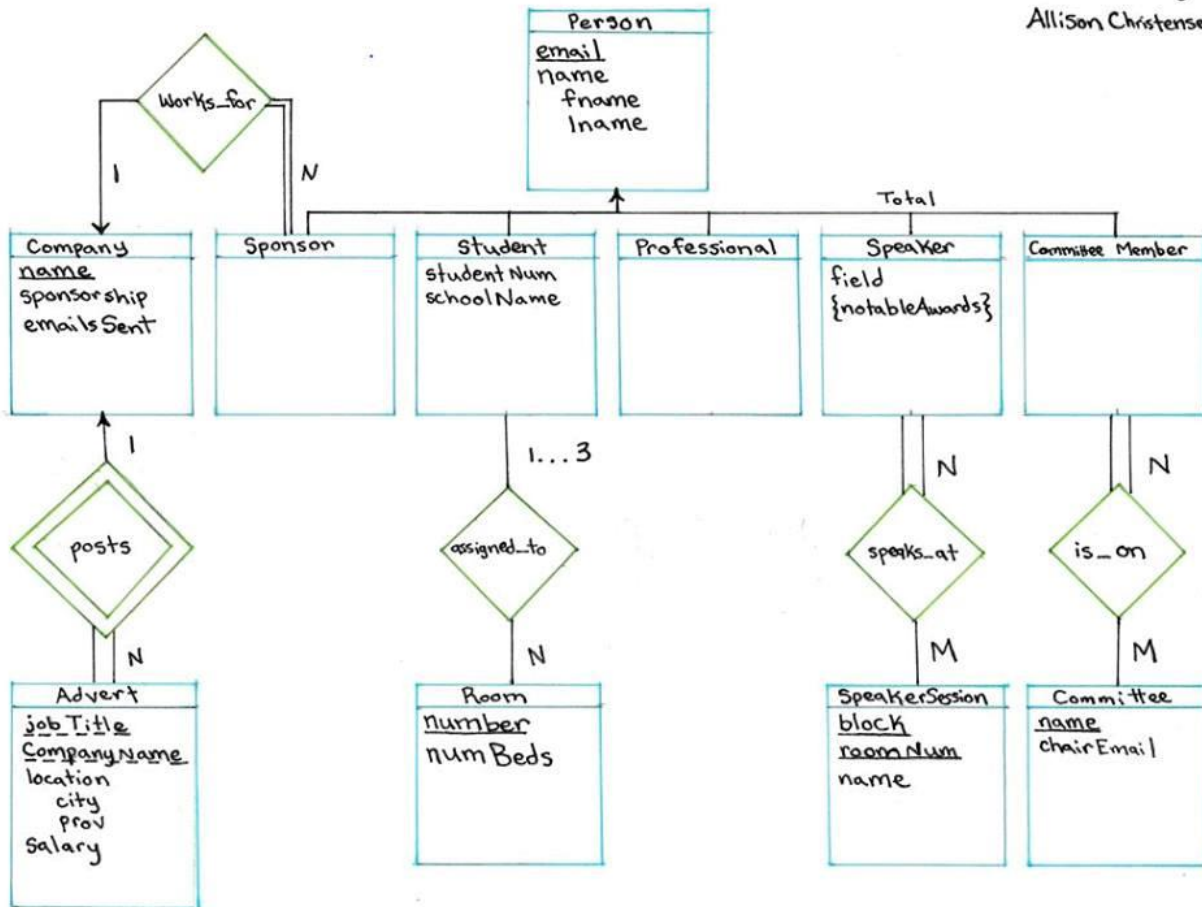Allison Christensen 10211533

Assumptions

The following is a list of assumptions that we took into consideration during the design of the ER diagram and implementation of the DDL.

1. Not every student is assigned a room.
2. Every student has a student id and associated school.
3. This conference runs over 2 days with 8 hours of speaker sessions each day. (Allows for hexadecimal representation of time and date).
4. Speaker sessions are all one hour in length.
5. Speaker sessions can have more than one speaker.
6. No company is advertising a job with a salary over $9 999 999.99.
7. Every committee must have a chair.
8. Every student number is greater than zero and less than 2147483647.
9. A person can be of multiple types (ie. a sponsor can be a speaker, a student can be a committee member etc.).
10. Speakers can have a field of expertise and notable awards.

ER Schema

CMPE 332 – Databases

Tom Heysel
Allison Christensen

Person
email
name
 fname
 lname

Works_for — 1 ... N

Company
name
sponsorship
emails Sent

Sponsor

Student
student Num
schoolName

Professional

Speaker
field
{notableAwards}

Committee Member

Total

posts — 1 / N

assigned_to — 1...3 / N

speaks_at — N / M

is_on — N / M

Advert
job Title
CompanyName
location
 city
 Prov
Salary

Room
number
num Beds

SpeakerSession
block
room Num
name

Committee
name
chairEmail

Data Definition Language

```sql
DROP DATABASE IF EXISTS Confrence;
CREATE DATABASE Confrence;
USE Confrence;

CREATE TABLE room (
      number int not null PRIMARY KEY,
      numBeds enum('1', '2') not null
);

CREATE TABLE student(
      email varchar(30) not null PRIMARY KEY,
      fname varchar(30) not null,
      lname varchar(30) not null,
      studentNum int not null,
      schoolName varchar(30) not null
);

CREATE TABLE hotelList (
      studentEmail varchar(30) not null PRIMARY KEY,
      roomNumber int not null,
      FOREIGN KEY (studentEmail) references student(email) ON DELETE CASCADE,
      FOREIGN KEY (roomNumber) references room(number) ON DELETE CASCADE
);


CREATE TABLE professional(
      email varchar(30) not null PRIMARY KEY,
      fname varchar(30) not null,
      lname varchar(30) not null
);

CREATE TABLE speaker(
      email varchar(30) not null PRIMARY KEY,
      fname varchar(30) not null,
      lname varchar(30) not null,
      field varchar(60)
);

CREATE TABLE notableAwards(
      email varchar(30) not null,
      award varchar(60) not null,
      PRIMARY KEY(email, award),
      FOREIGN KEY (email) references speaker(email)
);

CREATE TABLE speakerSession (
      block enum('0', '1', '2', '3', '4', '5', '6', '7', '8', '9', 'A', 'B',
'C', 'D', 'E', 'F') not null,
```

```sql
      roomNumber int not null,
      name varchar(30),
      PRIMARY KEY(block, roomNumber)
);

CREATE TABLE speaksAt(
      speakerEmail varchar(30) not null,
      sessionBlock enum('0', '1', '2', '3', '4', '5', '6', '7', '8', '9',
'A', 'B', 'C', 'D', 'E', 'F') not null,
      sessionRoom int not null,
      PRIMARY KEY (speakerEmail, sessionBlock, sessionRoom),
      FOREIGN KEY (speakerEmail) references speaker(email) ON DELETE CASCADE,
      FOREIGN KEY (sessionBlock) references speakerSession(block) ON DELETE
CASCADE,
      FOREIGN KEY (sessionRoom) references speakerSession(roomNumber) ON
DELETE CASCADE
);

CREATE TABLE company(
      name varchar(30) not null PRIMARY KEY,
      sponsorship enum('Platinum', 'Gold', 'Silver', 'Bronze') not null,
      emailsSent int
);

CREATE TABLE sponsor(
      email varchar(30) not null PRIMARY KEY,
      fname varchar(30) not null,
      lname varchar(30) not null,
      companyName varchar(30) not null,
      FOREIGN KEY (companyName) references company(name) ON DELETE CASCADE
);

CREATE TABLE advert(
      jobTitle varchar(30) not null,
      companyName varchar(30) not null,
      city varchar(30) not null,
      prov varchar(30) not null,
      salary float(9,2),
      FOREIGN KEY (companyName) references company(name) ON DELETE CASCADE
);

CREATE TABLE committeeMember(
      email varchar(30) not null PRIMARY KEY,
      fname varchar(30) not null,
      lname varchar(30) not null
);

CREATE TABLE committee(
      name varchar(60) not null PRIMARY KEY,
      chairEmail varchar(30) not null,
```

```
        FOREIGN KEY (chairEmail) references committeeMember(email) ON DELETE
RESTRICT
);

CREATE TABLE memberIsOn(
        memberEmail varchar(30) not null,
        committeeName varchar(60) not null,
        PRIMARY KEY(memberEmail, committeeName),
        FOREIGN KEY(memberEmail) references committeeMember(email) ON DELETE
CASCADE,
        FOREIGN KEY(committeeName) references committee(name) ON DELETE CASCADE
);

INSERT INTO student(email, fname, lname, studentNum, schoolName) VALUES
('test1@email.com', 'harry', 'potter', 693001, 'Pigfarts');
INSERT INTO student(email, fname, lname, studentNum, schoolName) VALUES
('test2@email.com', 'hermione', 'granger', 420911, 'Hogwarts');
INSERT INTO student(email, fname, lname, studentNum, schoolName) VALUES
('test3@email.com', 'ronald', 'weasley', 102455, 'Hogwarts');

INSERT INTO room(number, numBeds) VALUES (101, 1);
INSERT INTO room(number, numBeds) VALUES (102, 2);

INSERT INTO hotelList(studentEmail, roomNumber) VALUES ('test1@email', 101);
INSERT INTO hotelList(studentEmail, roomNumber) VALUES ('test2@email', 102);
INSERT INTO hotelList(studentEmail, roomNumber) VALUES ('test3@email', 102);

INSERT INTO professional(email, fname, lname) VALUES ('test4@email', 'albus',
'dumbledore');
INSERT INTO professional(email, fname, lname) VALUES ('test5@email',
'minerva', 'mcgonagall');
INSERT INTO professional(email, fname, lname) VALUES ('test6@email',
'rubeus', 'hagrid');
INSERT INTO professional(email, fname, lname) VALUES ('test11@email', 'rita',
'skeeter');

INSERT INTO speaker(email, fname, lname, field) VALUES ('test7@email',
'gilderoy', 'lockhart', 'Defense Against the Dark Arts');
INSERT INTO speaker(email, fname, lname, field) VALUES ('test8@email',
'nicholas', 'flammel', 'Alchemy');
INSERT INTO speaker(email, fname, lname, field) VALUES ('test9@email',
'bathilda', 'bagshot', 'History of Magic');

INSERT INTO notableAwards(email, award) VALUES ('test7@email', 'Witch Weeklys
Most Charming Smile Award');

INSERT INTO speakerSession(block, roomNumber, name) VALUES (1, 101,
'Victories against Vampires');
INSERT INTO speakerSession(block, roomNumber, name) VALUES (1, 102, 'The
Immortal Life');
```

```sql
INSERT INTO speakerSession(block, roomNumber, name) VALUES (1, 103, 'Hogwarts
a History');

INSERT INTO speaksAt(speakerEmail, sessionBlock, sessionRoom)
VALUES('test7@email', '0', 205);
INSERT INTO speaksAt(speakerEmail, sessionBlock, sessionRoom)
VALUES('test8@email', '0', 206);
INSERT INTO speaksAt(speakerEmail, sessionBlock, sessionRoom)
VALUES('test9@email', 'f', 102);

INSERT INTO company(name, sponsorship, emailsSent) VALUES('Weasleys Wizard
Wheezes', 'Gold', '2');

INSERT INTO sponsor(email, fname, lname, companyName) VALUES('test10@email',
'Fred', 'Weasley', 'Weasleys Wizard Wheezes');
INSERT INTO sponsor(email, fname, lname, companyName) VALUES('test11@email',
'George', 'Weasley', 'Weasleys Wizard Wheezes');

INSERT INTO advert(jobTitle, companyName, city, prov, salary)
VALUES('Wildfire Whizbang Developer', 'Weasleys Wizard Wheezes', 'Diagon
Alley', 'London', 100000.00);

INSERT INTO committeeMember(email, fname, lname) VALUES ('test2@email.com',
'hermione', 'granger');
INSERT INTO committeeMember(email, fname, lname) VALUES ('test12@email.com',
'winky', 'the elf');

INSERT INTO committee(name, chairEmail) VALUES ('society for the promotion of
elfish welfare', 'test2@email.com');

INSERT INTO memberIsOn(memberEmail, committeeName) VALUES ('test2@email.com',
'society for the promotion of elfish welfare');
INSERT INTO memberIsOn(memberEmail, committeeName) VALUES
('test12@email.com', 'society for the promotion of elfish welfare');
```