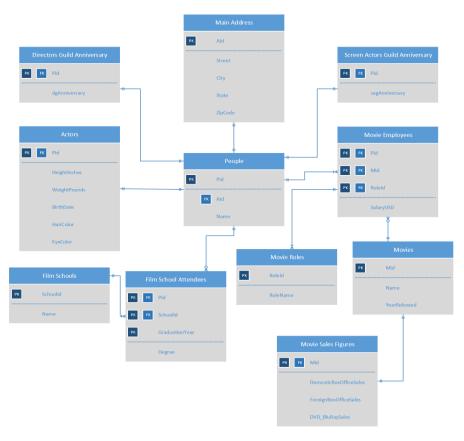
## Kevin Bruce Normalization 2 11/30/2014

1.



```
2.
       --People --
       DROP TABLE IF EXISTS people; CREATE
       TABLE people (
        pid
                 char(4) not null,
        aid
                 char(4) not null references mainAddress(aid),
                varchar(48), primary key(pid)
       name
       );
       --Main Address --
       DROP TABLE IF EXISTS mainAddress;
       CREATE TABLE mainAddress ( aid
       char(4) not null, street
       varchar(255) not null,
```

```
city
          varchar(48) not null,
         varchar(24) not null,
state
zipCode int not null, primary
key(aid)
);
-- Actors --
DROP TABLE IF EXISTS actors; CREATE
TABLE actors (
pid
                char(4) not null references people(pid),
heightInches
                real not null, weightPounds real not
                     date not null, hairColor
null, birthDate
varchar(24) not null, eyeColor
                                      varchar(24) not
null, primary key(pid)
);
-- Screen Actors Guild Anniversary -- DROP
TABLE IF EXISTS sagAnniversary; CREATE
TABLE sagAnniversary (
pid
                      char(4) not null references people(pid),
sagAnniversaryDate date not null, primary key(pid)
);
-- Directors Guild Anniversary -- DROP
TABLE IF EXISTS dgAnniversary;
CREATE TABLE dgAnniversary (
 pid
                     char(4) not null references people(pid),
dgAnniversaryDate date not null, primary key(pid)
);
-- Film Schools --
DROP TABLE IF EXISTS filmSchools;
CREATE TABLE filmSchools (
schoolld char(4) not null, name
varchar(255) not null, primary
key(schoolId)
);
-- Film School Attendees --
DROP TABLE IF EXISTS filmSchoolAttendees; CREATE
TABLE filmSchoolAttendees (
```

```
pid
                 char(4) not null references people(pid), schoolld
char(4) not null references filmSchools(schoolId), graduationYear
int not null, degree
                              varchar(24) not null,
primary key(pid,schoolId,graduationYear)
);
-- Movie Employees --
DROP TABLE IF EXISTS movieEmployees; CREATE
TABLE movieEmployees (
pid
            char(4) not null references people(pid), mid
char(4) not null references movies(mid), roleId
char(4) not null references movieRoles(roleId), salaryUSD
real not null, primary key(pid,mid,roleId)
);
-- Movies --
DROP TABLE IF EXISTS movies; CREATE
TABLE movies (
 mid
                char(4) not null,
name
                char(255) not null,
               int not null, primary
yearReleased
key(mid)
);
-- Movie Roles --
DROP TABLE IF EXISTS movieRoles; CREATE
TABLE movieRoles (
roleId
             char(4) not null,
             char(255) not null, primary
roleName
key(roleId)
);
-- Movie Sales Figures --
DROP TABLE IF EXISTS movieSalesFigures; CREATE
TABLE movieSalesFigures (
                 char(4) not null references movies(mid),
domesticBoxOfficeSales real not null, foreignBoxOfficeSales
                                                                real not null,
DVD_BluRaySales
                        real not null, primary key(mid)
);
```

```
INSERT INTO people(pid, aid, name)
 VALUES('p001', 'a001', 'Sean Connery');
INSERT INTO people(pid, aid, name)
 VALUES('p002', 'a002', 'Ben Affleck');
INSERT INTO people(pid, aid, name)
 VALUES('p003', 'a003', 'Irvin Kershner');
INSERT INTO people(pid, aid, name)
 VALUES('p004', 'a004', 'Steven Spielberg');
INSERT INTO people( pid, aid, name )
 VALUES('p005', 'a005', 'Micheal Bay');
INSERT INTO people(pid, aid, name)
 VALUES('p006', 'a002', 'Matt Damon');
--Main Address
INSERT INTO mainAddress( aid, street, city, state, zipCode )
 VALUES('a001', '1108 Eighth Street', 'Tampa', 'FL', 33604);
INSERT INTO mainAddress( aid, street, city, state, zipCode )
 VALUES('a002', '510 Keith Avenue', 'Chestnut Hill', 'MA', 12467);
INSERT INTO mainAddress( aid, street, city, state, zipCode )
 VALUES('a003', '30572 Southfield Road', 'Downingtown', 'PA', 19335);
INSERT INTO mainAddress( aid, street, city, state, zipCode )
 VALUES('a004', '280 Water Street', 'Seattle', 'WA', 98106);
INSERT INTO mainAddress( aid, street, city, state, zipCode )
 VALUES('a005', '23 Hart Drive', 'South Orange', 'NJ', 17079);
--Actors
INSERT INTO actors( pid, heightInches, weightPounds, birthDate, hairColor, eyeColor )
VALUES('p001', 75, 220, '8-25-1930', 'grey', 'brown');
```

```
INSERT INTO actors( pid, heightInches, weightPounds, birthDate, hairColor, eyeColor )
VALUES('p002', 73, 210, '8-15-1972', 'brunette', 'brown');
--Screen Actors Guild Anniversary
INSERT INTO sagAnniversary( pid, sagAnniversaryDate )
VALUES('p002', '03-08-1998');
-- Directors Guild Anniversary
INSERT INTO dgAnniversary( pid, dgAnniversaryDate )
 VALUES('p002', '01-25-2013');
INSERT INTO dgAnniversary( pid, dgAnniversaryDate )
VALUES('p004', '01-28-1976');
INSERT INTO dgAnniversary( pid, dgAnniversaryDate )
VALUES('p005', '01-27-1995');
--Film Schools
INSERT INTO filmSchools( schoolId, name )
 VALUES('s001', 'University of Southern California');
INSERT INTO filmSchools( schoolId, name )
VALUES('s002', 'Art Center College of Design');
INSERT INTO filmSchools( schoolId, name )
VALUES('s003', 'California State University');
--Film School Attendees
INSERT INTO filmSchoolAttendees( pid, schoolId, graduationYear, degree )
VALUES('p003', 's001', 1950, 'bachelors');
INSERT INTO filmSchoolAttendees(pid, schoolId, graduationYear, degree)
VALUES('p004', 's003', 1964, 'bachelors);
INSERT INTO filmSchoolAttendees(pid, schoolId, graduationYear, degree)
VALUES('p005', 's002', 1984, 'masters');
--Movie Employees
```

```
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p002', 'm001', 'r001', 6000000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p003', 'm001', 'r002', 700000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p002', 'm002', 'r002', 800000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p006', 'm002', 'r001', 6000000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p001', 'm003', 'r001', 5000000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p001', 'm004', 'r001', 600000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p001', 'm005', 'r001', 15000000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p003', 'm003', 'r002', 1000000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
 VALUES('p004', 'm004', 'r002', 5000000);
INSERT INTO movieEmployees( pid, mid, roleId, salaryUSD )
VALUES('p005', 'm005', 'r002', 2000000);
--Movies
INSERT INTO movies (mid, name, yearReleased)
VALUES('m001', 'Pearl Harbor', 2001);
INSERT INTO movies (mid, name, yearReleased)
VALUES('m002', 'Argo', 2012);
INSERT INTO movies (mid, name, yearReleased)
```

```
VALUES('m003', 'Never Say Never Again', 1983);
INSERT INTO movies (mid, name, yearReleased)
VALUES('m004', 'Indiana Jones and the Last Crusade', 1989);
INSERT INTO movies (mid, name, yearReleased) VALUES ('m005', 'The Rock', 1996);
--Movie Roles
INSERT INTO movieRoles( roleId, roleName )
VALUES('r001', 'actor');
INSERT INTO movieRoles( roleId, roleName )
 VALUES('r002', 'director');
--Movie Sales
INSERT INTO movieSales( mid, domesticBoxOfficeSales, foreignBoxOfficeSales, DVD BluRaySales
 VALUES('m001', 198539855, 250700000, 5000000);
INSERT INTO movieSales( mid, domesticBoxOfficeSales, foreignBoxOfficeSales, DVD BluRaySales
 VALUES('m002', 136025503, 85275191, 19442136);
INSERT INTO movieSales( mid, domesticBoxOfficeSales, foreignBoxOfficeSales, DVD BluRaySales
)
VALUES('m003', 55500000, 90000000, 8306014);
INSERT INTO movieSales( mid, domesticBoxOfficeSales, foreignBoxOfficeSales, DVD BluRaySales
)
VALUES('m004', 197171806, 277000000, 22874105);
INSERT INTO movieSales( mid, domesticBoxOfficeSales, foreignBoxOfficeSales, DVD_BluRaySales
 VALUES('m005', 134069511, 202000000, 0);
People: Pid → Aid, Name
Main Address: Aid → Street, City, State, ZipCode
Actors: Pid → HeightInches, WeightPounds, BirthDate, HairColor, EyeColor
```

4.

Screen Actors Guild Anniversary: Pid → SagAnniversary

Directors Guild Anniversary: Pid → DgAnniversary

Film Schools: SchoolId → Name

Film School Attendees: Pid, SchoolId, GraduationDate  $\rightarrow$  Degree

Movie Employees: Pid, Mid, RoleId → SalaryUSD

Movies: Mid  $\rightarrow$  Name, YearReleased Movie Roles: RoleId  $\rightarrow$  RoleName

Movie Sales Figures: Mid → DomesticBoxOfficeSales, ForeignBoxOfficeSales, DVD\_BluRaySales

5. select name from people where pid in ( select pid from movieEmployees where roleld in ( select roleld from movieRoles where roleName = 'director'

and mid in ( select mid from movieEmployees where pid in ( select pid from people

where name = 'Sean Connery'
)

)

)