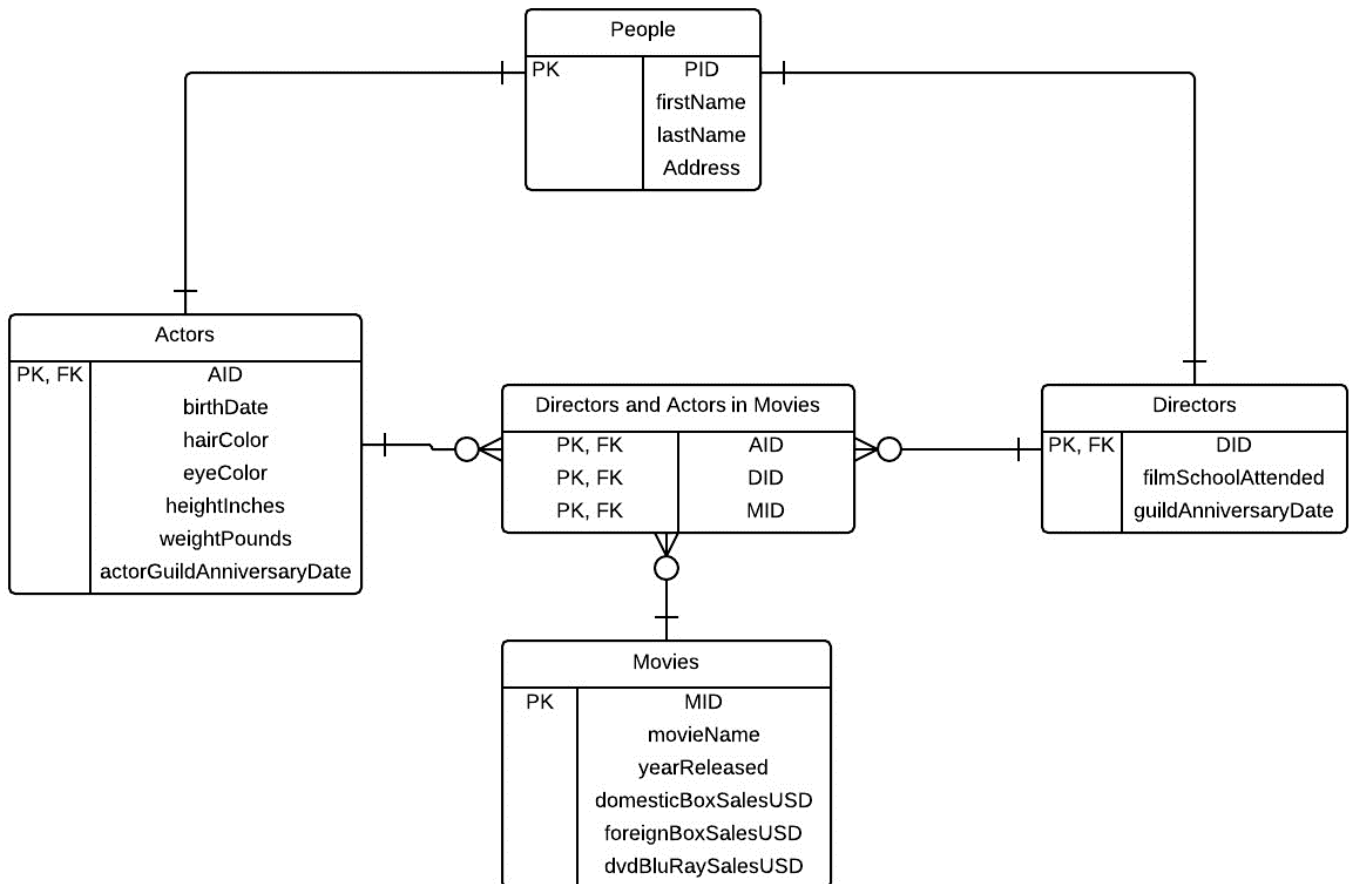


Clint Dorman

Normalization Homework 2

11/5/2013



/*Creating Tables */

drop table if exists people;

create table people

(

```
pid int not null,  
firstName char(30) not null,  
lastName char(30) not null,  
Address char(100) not null,  
primary key (pid)  
);
```

```
drop table if exists directors;  
create table directors  
(  
did int not null references people(pid),  
filmSchoolAttended char(30) not null,  
guildAnniversaryDate date not null,  
primary key (did)  
);
```

```
drop table if exists actors;  
create table actors  
(  
aid int not null references people(pid),  
birthDate date not null,  
hairColor char(30) not null,  
eyeColor char(30) not null,  
heightInches int not null,  
weightPounds int not null,
```

```
actorGuildAnniversaryDate date not null,  
primary key (aid)  
);
```

```
drop table if exists movies;
```

```
create table movies
```

```
(  
mid int not null,  
movieName char(100) not null,  
yearReleased char(4) not null,  
domesticBoxSalesUSD int not null,  
foreignBoxSalesUSD int not null,  
dvdBluRaySalesUSD int not null,  
primary key (mid)  
);
```

```
drop table if exists DirectorsAndActorsInMovies;
```

```
create table DirectorsAndActorsInMovies
```

```
(  
aid int not null references actors(aid),  
did int not null references directors(did),  
mid int not null references movies(mid),  
primary key(aid, did, mid)  
);
```

/* Insert Statements */

insert into people(pid, firstName, lastName, Address)

values ('001', 'Sean', 'Connery', '1234 Pleasant Avenue, Edinburgh, UK');

insert into people(pid, firstName, lastName, Address)

values ('002', 'Kevin', 'Costner', '1401 S Grand Avenue, Los Angeles, CA 90015');

insert into people(pid, firstName, lastName, Address)

values ('003', 'Harrison', 'Ford', '543 Richmond Street, Toronto, ON');

insert into directors (did, filmSchoolAttended, guildAnniversaryDate)

values ('001', 'LA Film School', '12/06/2008');

insert into directors (did, filmSchoolAttended, guildAnniversaryDate)

values ('002', 'Digital Film Academy', '10/08/2007');

insert into actors (aid, birthDate, hairColor, eyeColor, heightInches, weightPounds,
actorGuildAnniversaryDate)

values ('001', '02/07/1955', 'brown', 'green', 72, 170, '05/04/2007');

insert into actors (aid, birthDate, hairColor, eyeColor, heightInches, weightPounds,
actorGuildAnniversaryDate)

values ('002', '04/24/1948', 'brown', 'brown', 70, 155, '08/22/2010');

insert into movies (mid, movieName, yearReleased, domesticBoxSalesUSD, foreignBoxSalesUSD,
dvdBluRaySalesUSD)

values ('001', 'Indiana Jones Last Crusade', '1989', 97000000, 474000000, 322000000);

insert into movies (mid, movieName, yearReleased, domesticBoxSalesUSD, foreignBoxSalesUSD,
dvdBluRaySalesUSD)

values ('002', 'The Untouchables', '1987', 76000000, 109000000, 36000000);

```
insert into DirectorsAndActorsInMovies (aid, did, mid)
```

```
values ('001','002','001');
```

```
insert into DirectorsAndActorsInMovies (aid, did, mid)
```

```
values ('002','002','002');
```

```
insert into DirectorsAndActorsInMovies (aid, did, mid)
```

```
values ('001','001','002');
```

Functional Dependencies

People: pid → firstName, lastName, address

Directors: did → filmSchoolAttended, guildAnniversaryDate

Actors: aid → birthDate, hairColor, eyeColor, heightInches, weightPounds, actorGuildAnniversaryDate

Movies: mid → movieName, yearReleased, domesticBoxSalesUSD, foreignBoxSalesUSD, dvdBluRaySalesUSD

Query to return all the directors with whom actor “Sean Connery” has worked

```
select distinct p2.firstName, p2.lastName
```

```
from people p1, people p2, actors a, directors d, DirectorsAndActorsInMovies dam
```

```
where p1.pid = a.aid
```

```
and a.aid = dam.aid
```

```
and p2.pid = d.did
```

```
and d.did = dam.did
```

```
and p1.firstName = 'Sean'
```

```
and p1.lastName = 'Connery';
```