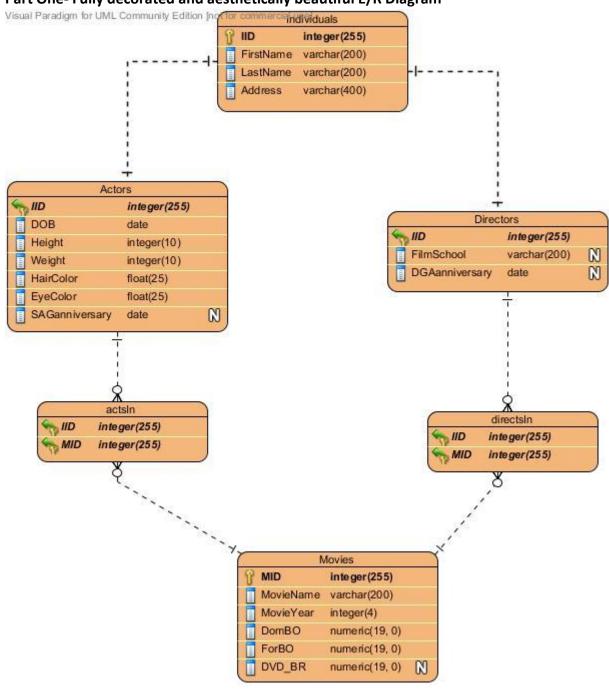
Steven O'Meara Professor Labouseur Normalization 2 11/2/13

Part One- Fully decorated and aesthetically beautiful E/R Diagram



Part Two- SQL create statements for each table

```
--Individuals
CREATE TABLE Individuals
       IID int NOT NULL PRIMARY KEY,
       FirstName varchar(200) NOT NULL,
       LastName varchar(200) NOT NULL,
       Address varchar (400) NOT NULL
);
---Actors
CREATE TABLE Actors
       IID int NOT NULL PRIMARY KEY,
       DOB date NOT NULL,
       Height float(10) NOT NULL,
       Weight float(10) NOT NULL,
       HairColor varchar(25) NOT NULL,
       EyeColor varchar(25) NOT NULL,
       SAGanniversary DATE,
       FOREIGN KEY (IID) REFERENCES Individuals(IID)
);
--Directors
CREATE TABLE Directors
       IID int NOT NULL PRIMARY KEY,
       FilmSchool varchar (200),
       DGAanniversary DATE,
       FOREIGN KEY (IID) REFERENCES Individuals(IID)
);
--Movies
CREATE TABLE Movies(
       MID int NOT NULL PRIMARY KEY,
       MovieName varchar(200) NOT NULL,
       MovieYear int NOT NULL,
       DomBO numeric(18,0) NOT NULL,
       ForBO numeric(18,0) NOT NULL,
       DVD_BR numeric(18,0)
       );
```

```
-- ActsIn
CREATE TABLE actsin
       IID int NOT NULL,
       MID int NOT NULL,
       PRIMARY KEY(IID, MID),
       FOREIGN KEY (IID) REFERENCES actors(IID),
       FOREIGN KEY (MID) REFERENCES Movies(MID)
);
--DirectsIn
CREATE TABLE directsIn
IID int NOT NULL,
MID int NOT NULL,
PRIMARY KEY(IID, MID),
FOREIGN KEY (IID) REFERENCES Directors(IID),
FOREIGN KEY (MID) REFERENCES Movies(MID)
);
Part 3- Insert statements
--Individuals
INSERT INTO Individuals (IID,LastName, FirstName, Address)
VALUES ('1','Connery','Sean','2000 Avenue of Stars, Los Angeles, CA');
INSERT INTO Individuals (IID,LastName,Firstname,Address)
VALUES ('2', 'Young', 'Terence', '232 Cherry Lane, Seattle, WA');
INSERT INTO Individuals (IID,LastName,Firstname,Address)
VALUES ('3','Hamilton', 'Guy', '489 Alan Drive, Los Angeles, CA');
INSERT INTO Individuals (IID, LastName, FirstName, Address)
VALUES ('4','Lazenby','George','426 Wave Place, Santa Monica, CA');
INSERT INTO Individuals (IID,LastName, FirstName,Address)
VALUES ('5', 'Moore', 'Roger', '888 Run Street, Honolulu, HI');
INSERT INTO Individuals (IID,LastName,Firstname,Address)
VALUES ('6', 'Gilbert', 'Lewis', '78 Castle Lane, Chicago, IL');
```

```
INSERT INTO Individuals (IID,LastName,Firstname,Address)
VALUES ('7','Hunt', 'Peter','478 Washington Place, Los Angeles, CA');
```

--Actors Inserts

INSERT INTO Actors (IID, DOB, Height, Weight, HairColor, EyeColor, SAGanniversary) VALUES ('1','19300825','74','150','White','Brown','20130111');

INSERT INTO Actors (IID, DOB, Height, Weight, HairColor, EyeColor, SAGanniversary) VALUES ('4','19390905','70','160','White','Brown','20130520');

INSERT INTO Actors (IID, DOB, Height, Weight, HairColor, EyeColor, SAGanniversary) VALUES ('5','19271014','75','165','Brown','Blue','20130726');

--Director Inserts

INSERT INTO Directors (IID, FilmSchool, DGAanniversary) VALUES ('2', 'University of Cambridge', '20130215');

INSERT INTO Directors (IID, FilmSchool, DGAanniversary) VALUES ('3', 'University of Rome', '20131025');

INSERT INTO Directors (IID, FilmSchool, DGAanniversary) VALUES ('6', 'New Zeland University', '20130215');

INSERT INTO Directors (IID, FilmSchool, DGAanniversary) VALUES ('7', 'Downing College', '20131105');

--Movie Inserts

INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD_BR) VALUES ('1', 'Dr.No', '1962', '1000000', '2500000', '500000');

INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD_BR) VALUES ('2', 'From Russia with Love', '1963', '5000000', '6500000','1000000');

INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD_BR) VALUES ('3', 'Goldfinger', '1964', '15000000', '10000000', '350000');

INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD_BR) VALUES ('4', 'Thunderball', '1965', '7500000', '3500000', '2000000');

```
INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD BR)
VALUES ('5', 'You Only Live Twice', '1967', '4050000', '3075000', '1025000');
INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD BR)
VALUES ('6', 'On Her Majestys Secret Service', '1969', '1055000', '750000', '250000');
INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD BR)
VALUES ('7', 'Diamonds Are Forever', '1971', '18000000', '11000000', '9000000');
INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD BR)
VALUES ('8', 'Live and Let Die', '1973', '15000000', '10000000', '5500000');
INSERT INTO Movies (MID, MovieName, MovieYear, DomBO, ForBO, DVD BR)
VALUES ('9', 'The Man with the Golden Gun', '1974', '4500000', '2000000', '750000');
--actsIn
INSERT INTO actsIn(MID,IID)
VALUES ('1','1');
INSERT INTO actsIn(MID,IID)
VALUES ('2','1');
INSERT INTO actsIn(MID,IID)
VALUES ('3','1');
INSERT INTO actsIn(MID,IID)
VALUES ('4','1');
INSERT INTO actsIn(MID,IID)
VALUES ('5','1');
INSERT INTO actsIn(MID,IID)
VALUES ('6','4');
INSERT INTO actsIn(MID,IID)
VALUES ('7','1');
INSERT INTO actsIn(MID,IID)
VALUES ('8','5');
INSERT INTO actsIn(MID,IID)
```

```
VALUES ('9','5');
--directsIn
INSERT INTO directsIn(MID,IID)
VALUES ('1','2');
INSERT INTO directsIn(MID,IID)
VALUES ('2','2');
INSERT INTO directsIn(MID,IID)
VALUES ('3','3');
INSERT INTO directsIn(MID,IID)
VALUES ('4','2');
INSERT INTO directsIn(MID,IID)
VALUES ('5','6');
INSERT INTO directsIn(MID,IID)
VALUES ('6','7');
INSERT INTO directsIn(MID,IID)
VALUES ('7','3');
INSERT INTO directsIn(MID,IID)
VALUES ('8','3');
INSERT INTO directsIn(MID,IID)
VALUES ('9','3');
```

Part 4- Functional Dependencies

Individuals: IID → FirstName, LastName, Address

Actors: IID → DOB, Height, Weight, HairColor, EyeColor, SAGanniversary

Directors: IID → FilmSchool, DGAanniversary

Movies: MID → MovieName, MovieYear, DomBO, ForBO, DVD_BR

ActedIn: (IID,MID) → DirectedIn(IID,MID)→

Part 5- Sean Connery Query

SELECT distinct a.FirstName, a.LastName FROM Individuals a, Individuals b, Actors, Directors, actsIn, directsIn WHERE a.IID = directors.IID

AND

directors.IID = directsIn.IID

AND

b.IID = actors.IID

AND

actors.IID = actsIn.IID

AND

actsIn.MID = directsIn.MID

AND

b.FirstName = 'Sean'

AND

b.LastName = 'Connery';