Laura Purcell
04/17/2013
CSC 305

Database Concepts Final Project
Part I

FIRST NORMAL FORM

Table: MOVIES

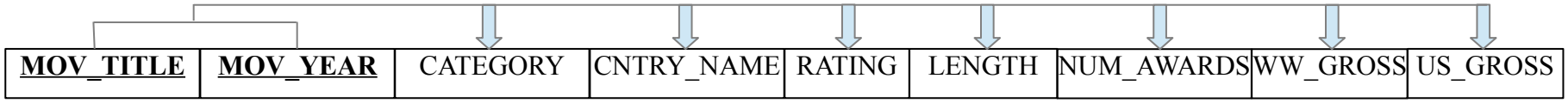


Table: DIRECTORS

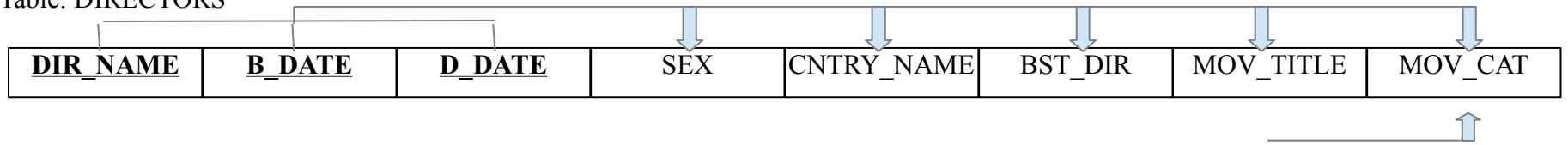


Table: OSCAR BEST ACTOR

Table: OSCAR BEST SUPPORTING ACTOR

Table: STARS

Table: CUSTOMERS

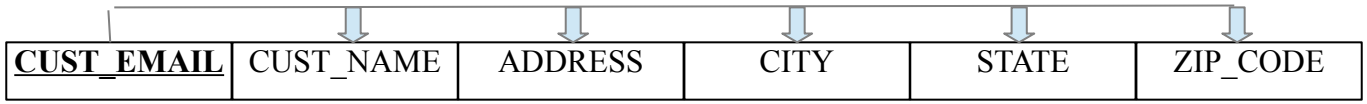
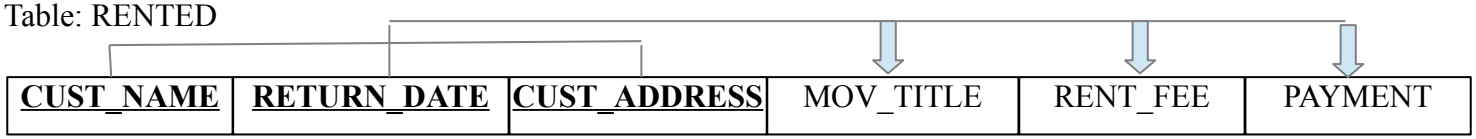


Table: RENTED



SECOND NORMAL FORM

There are not any partial dependencies, therefore the diagram is already in second normal form.

THIRD NORMAL FORM

Table: MOVIES

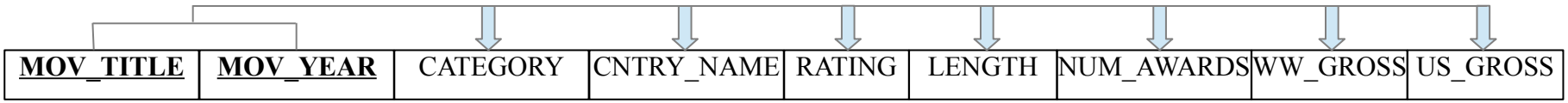


Table: DIRECTORS

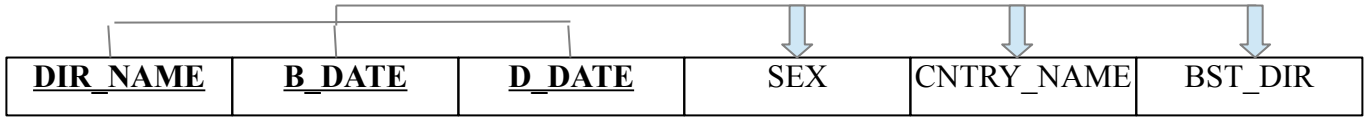


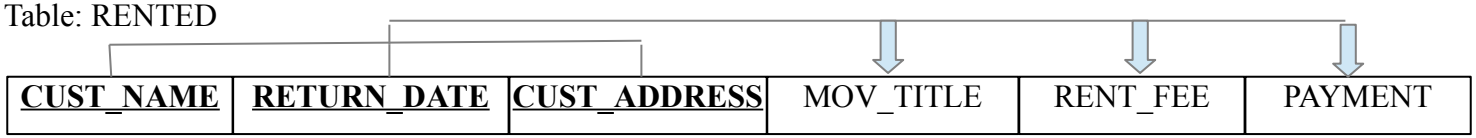
Table: OSCAR BEST ACTOR

Table: OSCAR BEST SUPPORTING ACTOR

Table: STARS

Table: CUSTOMERS

Table: RENTED



FINAL DEPENDENCY DIAGRAM

Table: MOVIES

Table: DIRECTORS

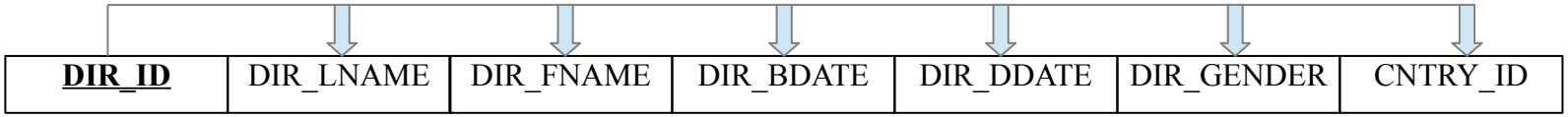


Table: STAR AWARDS

Table: DIRECTOR AWARDS

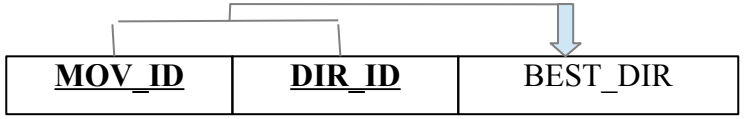


Table: STARS

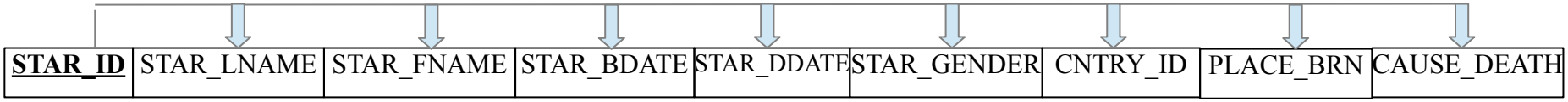


Table: CUSTOMERS

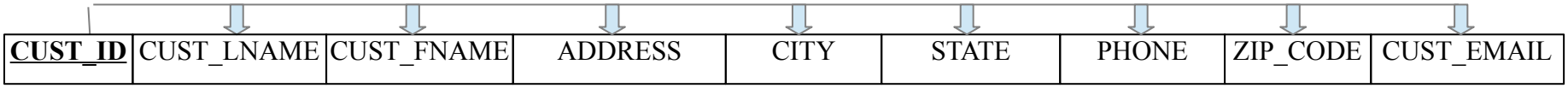


Table: INVOICE

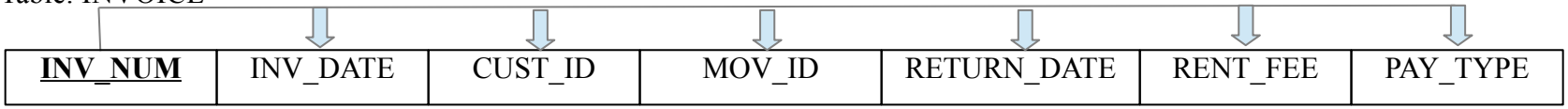


Table: RENTED

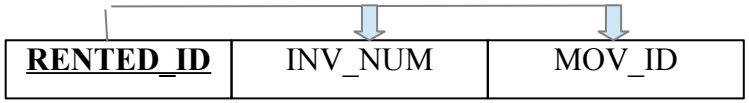


Table: COUNTRY

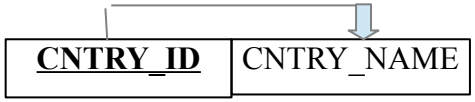
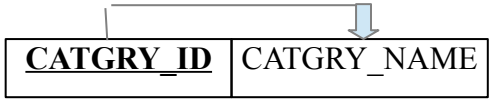


Table: CATEGORY



DATA DICTIONARY

TABLE NAME	ATTRIBUTE NAME	CONTENTS	TYPE	FORMAT	RANGE	REQUIRED	PK OR FK	FK REFERENCED TABLE
MOVIES	MOV_ID	Movie identification number	INT(6)	######	10000-99999	Y	PK	
	MOV_TITLE	Title of the movie	VARCHAR(30)	Xxxxxx	NA	Y		
	MOV_YEAR	Year that the movie was made	INT(4)	####	1920-2050	Y		
	MOV_RATING	Rating for the movie	CHAR(4)	####	NA	Y		
	MOV_LENGTH	Movie length in minutes	INT(3)	###	000-400			
	NUM_AWARDS	Number of awards the movie received	INT(2)	##	0-15			
	WW_GROSS	How much money received world wide	NUMBER (19,2)	###,###,###,###.##	0.00-999,999,999,999.99			
	US_GROSS	How much money received in the U.S.	NUMBER (19,2)	###,###,###,###.##	0.00-999,999,999,999.99			
	CATGRY_ID	Identifier for the type of movie (horror, action, romance)	INT(3)	###	100-999	Y	FK	CATEGORY
	CNTRY_ID	Identifier for the country where the movie was filmed	INT(3)	###	100-999	Y	FK	COUNTRY

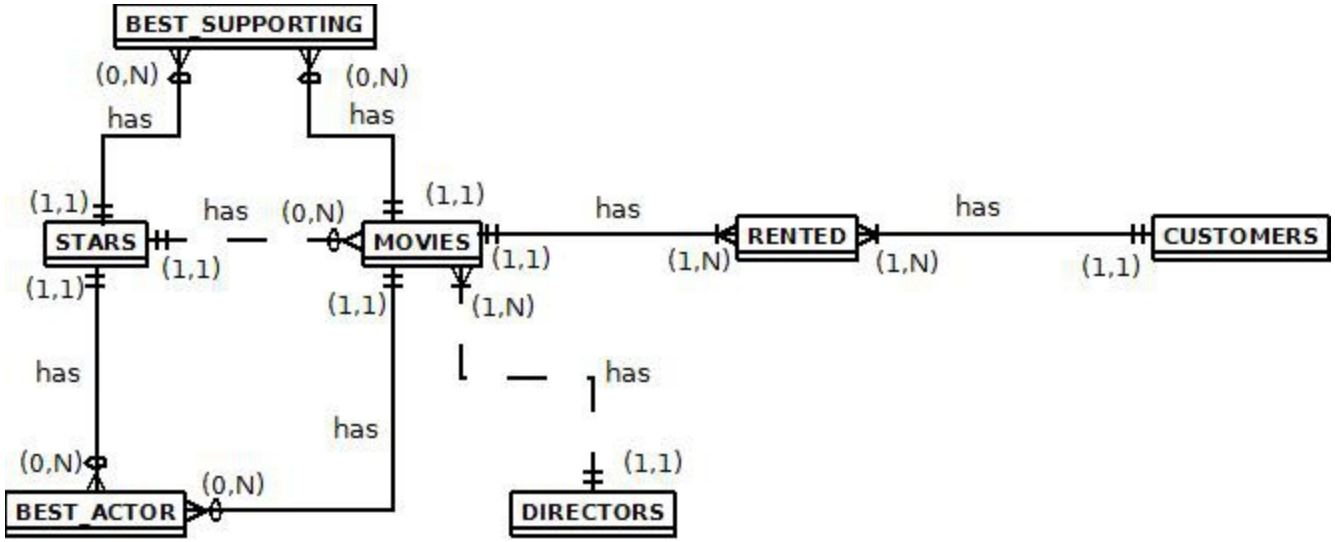
	DIR_ID	Director identification number	INT(6)	######	100000-999999	Y	FK	DIRECTORS
STARS	STAR_ID	Star identification number	INT(6)	######	100000-999999	Y	PK	
	STAR_LNAME	Last Name of the person	VARCHAR(15)	Xxxxxx	NA	Y		
	STAR_FNAME	First Name of the person	VARCHAR(15)	Xxxxxx	NA	Y		
	STAR_BDATE	Birth date of the person	DATE	dd-mmm-yyyy	NA	Y		
	STAR_DDATE	Date of death of the person	DATE	dd-mmm-yyyy	NA			
	STAR_GENDER	Male or Female(M or F)	CHAR(1)	X	M or F	Y		
	CNTRY_ID	Identifier for the country the person was born	INT(3)	###	100-999	Y	FK	COUNTRY
	PLACE_BRN	City the person was born	VARCHAR(20)	Xxxxxx	NA			
	CAUSE_DEATH	Reason why person died	VARCHAR(100)	Xxxxxx	NA			
DIRECTORS	DIR_ID	Director identification number	INT(6)	######	100000-999999	Y	PK	
	DIR_LNAME	Last name of the person	VARCHAR(15)	Xxxxxx	NA	Y		
	DIR_FNAME	First name of the person	VARCHAR(15)	Xxxxxx	NA	Y		
	DIR_BDATE	Birth date of the person	DATE	dd-mmm-yyyy	NA	Y		
	DIR_DDATE	Date of death of the person	DATE	dd-mmm-yyyy	NA			
	DIR_GENDER	Male or Female(M or F)	CHAR(1)	X	M or F	Y		
	CNTRY_ID	Identifier for the country the person was born	INT(3)	###	100-999	Y	FK	COUNTRY

COUNTRY	CNTRY_ID	Country identification number	INT(3)	###	100-999	Y	PK	
	CNTRY_NAME	Name of the country the movie was filmed OR country where the person was born	VARCHAR(20)	Xxxxxx	NA	Y		
CATEGORY	CATGRY_ID	Category identification number	INT(3)	###	100-999	Y	PK	
	CATGRY_NAME	Name of the category (ex: horror, action)	VARCHAR(20)	Xxxxxx	NA	Y		
STAR_AWARDS	MOV_ID	Movie identification number	INT(6)	######	10000-99999	Y	FK	MOVIES
	STAR_ID	Star identification number	INT(6)	######	100000-999999	Y	FK	STARS
	BEST_MALE	Oscar Best Male Actor Award W=won N=Nominated	CHAR(1)	X	W or N	Y		
	BEST_FEMALE	Oscar Best Female Actress Award W=won N=Nominated	CHAR(1)	X	W or N	Y		
	SUPPORT_MALE	Oscar Best Supporting Male Actor Award W=won N=Nominated	CHAR(1)	X	W of N	Y		
	SUPPORT_FEMALE	Oscar Best Supporting Female Actress Award W=won N=Nominated	CHAR(1)	X	W or N	Y		
DIR_AWARDS	MOV_ID	Movie identification number	INT(6)	######	10000-99999	Y	FK	MOVIES

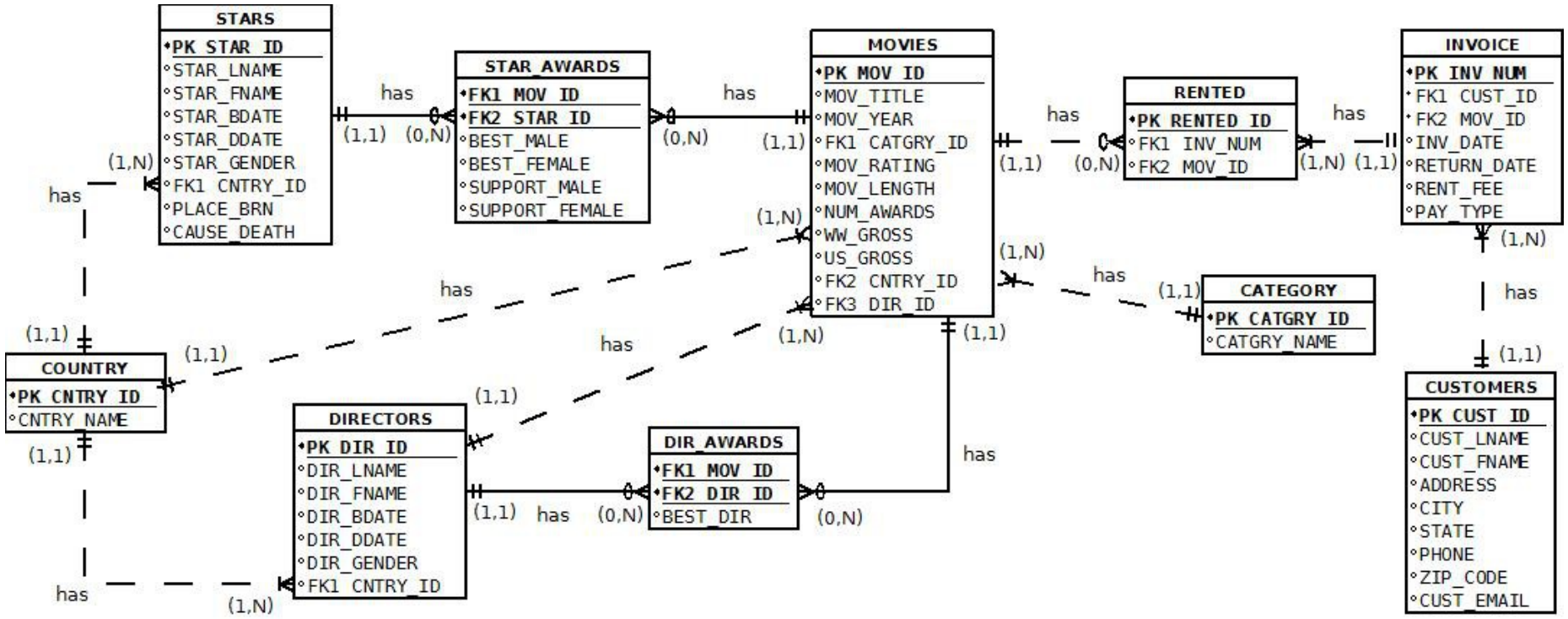
	STAR_ID	Star identification number	INT(6)	######	100000-999999	Y	FK	STARS
	BEST_DIR	Oscar Best Director Award W=won N=Nominated	CHAR(1)	X	W or N	Y		
CUSTOMERS	CUST_ID	Customer identification number	INT(6)	######	100000-999999	Y	PK	
	CUST_LNAME	Last name of the customer	VARCHAR(15)	Xxxxxx	NA	Y		
	CUST_FNAME	First name of the customer	VARCHAR(15)	Xxxxxx	NA	Y		
	ADDRESS	Home address of the customer	VARCHAR(25)	Xxxxxx	NA	Y		
	CITY	City of where the customer lives	VARCHAR(15)	Xxxxxx	NA	Y		
	STATE	State of where the customer lives	CHAR(2)	XX	NA	Y		
	PHONE	Phone number of the customer	CHAR(12)	###-###-####	NA	Y		
	ZIP_CODE	Zip code for the customer's address	CHAR(5)	#####	00000-99999	Y		
	CUST_EMAIL	Email for the customer	VARCHAR(20)	Xxxxxx	NA			
INVOICE	INV_NUM	Invoice identification number	INT(6)	######	100000-999999	Y	PK	
	CUST_ID	Customer identification number	INT(6)	######	100000-999999	Y	FK	CUSTOMERS
	MOV_ID	Movie identification number	INT(6)	######	10000-99999	Y	FK	MOVIES
	INV_DATE	Date of the invoice	DATE	dd-mmm-yyyy	NA	Y		

	RETURN_DATE	Return date for the rentals	DATE	dd-mmm-yyyy	NA	Y		
	RENT_FEE	Cost of the rental	NUMBER(7,2)	###.##	0.00-999.99	Y		
	PAY_TYPE	How the customer paid the invoice CC=credit card, DC=debit card, CK=check, CH=cash	CHAR(2)	XX	DC, CC, CK, or CH	Y		
RENTED	RENTED_ID	Identification for what has been rented	INT(6)	######	100000-999999	Y	PK	
	INV_NUM	Invoice identification number	INT(6)	######	100000-999999	Y	FK	INVOICE
	MOV_ID	Movie identification number	INT(6)	######	10000-99999	Y	FK	MOVIES

INTIAL ERD


BEST_SUPPORTING
(0,N)
has
(0,N)
has
(1,1)
STARS
has
(0,N)
(1,1)
MOVIES
has
RENTED
has
CUSTOMERS
(1,1)
(1,1)
(1,1)
(1,N)
(1,N)
(1,N)
(1,1)
(1,1)
has
has
has
(0,N)
(0,N)
BEST_ACTOR
(1,1)
DIRECTORS

FINAL ERD


STARS
PK STAR_ID
STAR_LNAME
STAR_FNAME
STAR_BDATE
STAR_DDATE
STAR_GENDER
FK1 CNTRY_ID
PLACE_BRN
CAUSE_DEATH
STAR_AWARDS
FK1 MOV_ID
FK2 STAR_ID
BEST_MALE
BEST_FEMALE
SUPPORT_MALE
SUPPORT_FEMALE
MOVIES
PK MOV_ID
MOV_TITLE
MOV_YEAR
FK1 CATGRY_ID
MOV_RATING
MOV_LENGTH
NUM_AWARDS
WW_GROSS
US_GROSS
FK2 CNTRY_ID
FK3 DIR_ID
RENTED
PK RENTED_ID
FK1 INV_NUM
FK2 MOV_ID
INVOICE
PK INV_NUM
FK1 CUST_ID
FK2 MOV_ID
INV_DATE
RETURN_DATE
RENT_FEE
PAY_TYPE
CATEGORY
PK CATGRY_ID
CATGRY_NAME
COUNTRY
PK CNTRY_ID
CNTRY_NAME
DIRECTORS
PK DIR_ID
DIR_LNAME
DIR_FNAME
DIR_BDATE
DIR_DDATE
DIR_GENDER
FK1 CNTRY_ID
DIR_AWARDS
FK1 MOV_ID
FK2 DIR_ID
BEST_DIR
CUSTOMERS
PK CUST_ID
CUST_LNAME
CUST_FNAME
ADDRESS
CITY
STATE
PHONE
ZIP_CODE
CUST_EMAIL
has
(1,1)
(0,N)
(1,N)