CSDS 341 HW 1

1

CK	SK	K	\rightarrow
		Α	A
		В	A,B
√	✓	С	A,B,C,D,E
		D	D
		E	D,E
		AB	A,B
	✓	AC	A,B,C,D,E
		AD	A,D
	✓	AE	A,B,C,D,E
	✓	BD	A,B,C,D,E
	✓	BE	A,B,C,D,E
		DE	D,E
	✓	ABD	A,B,C,D,E
	✓	ABE	A,B,C,D,E
	✓	BDE	A,B,C,D,E

r

A table may only have one Primary Key, which will be a selection from (sometimes) multiple Candidate Keys.

2

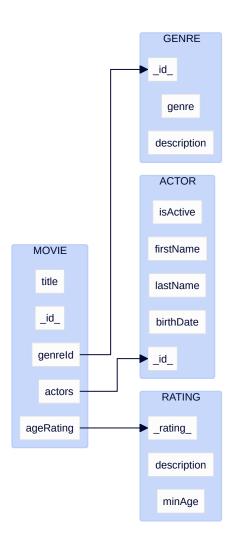
a

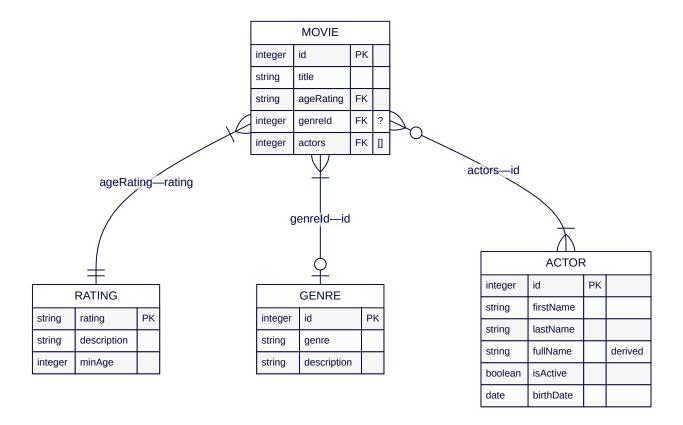
i

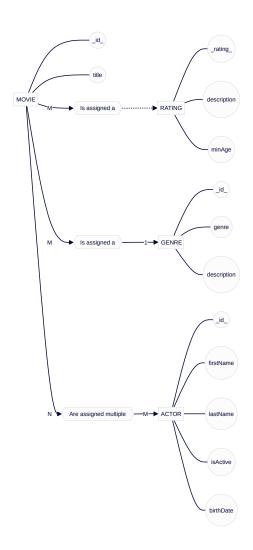
 $\begin{aligned} & MOVIE(\underline{id}, title, ageRating, genreId, actors) \\ & RATING(\underline{rating}, description, minAge) \\ & GENRE(\underline{id}, genre, description) \\ & ACTOR(\underline{id}, firstName, lastName, isActive, birthDate) \end{aligned}$

- 1. I've renamed a few of the attributes, especially the id's in order to have a more consistent and clear description of the model
- 2. I changed the type of status from string to boolean as there is only two possible values and no point of storing a string
- 3. I split the name attribute into first and last name as it would be useful for generating the checks for payment, with a derived field for fullName
- 4. I added an actors attribute to the movie table in order to connect actors to movies. This attribute does not need to exist on the actor table as that would be redundant

ii







V

1

2

rom

sci-fi

MOVIES					
id	title	age	eRating	genreId	actors
1	Lost	G		1	[1,2,3]
2	Found	R		2	[2,4,5]
RATING					
rating	description		minAge	•	
G	General		0		
R	Restricted		18		
GENRE					
id	genre	description			

Romance

Science Fiction

ACTOR				
id	firstName	lastName	isActive	birthDate
1	John	Doe	true	1950-01-01

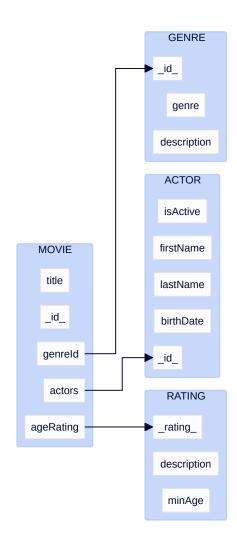
ACTOR				
2	Johnny	Dohe	true	1953-03-01
3	Jon	Do	true	1959-02-01
4	Jhon	Dhoe	false	1955-08-01
5	Joe	Dohn	true	1952-04-01
6	Joey	Doey	true	1957-01-01

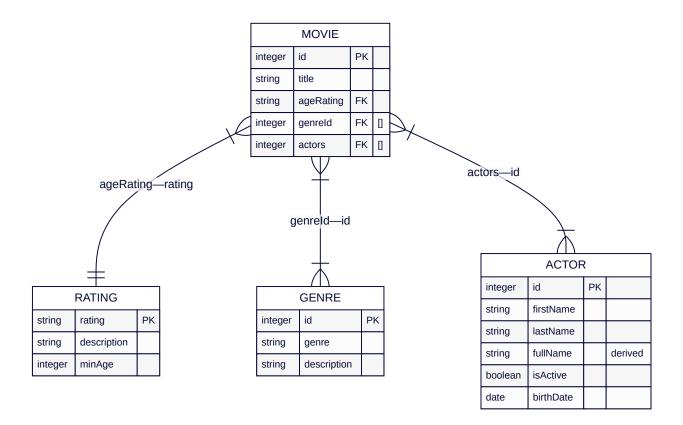
b

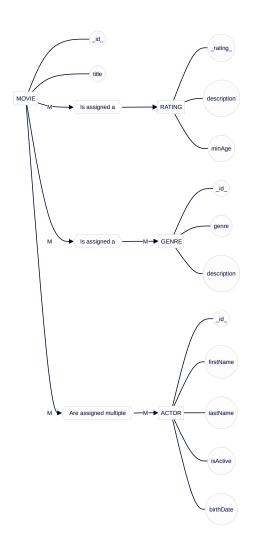
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 $\begin{aligned} & MOVIE(\underline{id}, title, ageRating, genreId, actors) \\ & RATING(\underline{rating}, description, minAge) \\ & GENRE(\underline{id}, genre, description) \\ & ACTOR(\underline{id}, firstName, lastName, isActive, birthDate) \end{aligned}$

ii







V

id

1

firstName

John

MOVIES					
id	title	age	eRating	genreId	actors
1	Lost	G		[1,2]	[1,2,3]
2	Found	R		[2]	[2,4,5]
RATING					
rating	descrip	tion	minAge	•	
G	Genera	al	0		
R	Restric	ted	18		
GENRE					
id	genre	desc	cription		
1	rom	Romance			
2	sci-fi	Scie	nce Ficti	on	
ACTOR					

lastName

Doe

isActive

true

birthDate

1950-01-01

ACTOR				
2	Johnny	Dohe	true	1953-03-01
3	Jon	Do	true	1959-02-01
4	Jhon	Dhoe	false	1955-08-01
5	Joe	Dohn	true	1952-04-01

