ER schema

CUSTOMER = (c_id , cname (fname, surname), caddress , {c_tel})

RESERVATION = (res# , deadline, checkin, checkout, state)

room = (room# , Type)

makes = (c_id , res#)

To book = (res# , room# , price)

Relational Scheme

CUSTOMER = (c_id , cname , caddress)

cust_tel = (c_id , c_tel)

< The rest is the same >

RESERVATION

res #	deadline	checkin	checkout	state
res 1	09.10.14	10.10.14	11.10.14	c
res 10	01.11.14	02.11.14	03	a
res 5	15.12.14	16.12.14	17	a
res 4	01.10.15	02.01.15	10.01	c

room

room #	Type
room 08	single
room 07	double
room 01	single

Obs 1.
← Never booked
④ partial

Snapshot

CUSTOMER

Cid	cname	caddress
c01	Ece Oz	XXX
c10	Oya Eren	XX
c05	Joa Smith	yy
c 20	Oya Ece	y

cust_tel

cid	c_tel
c10	0212 111
c10	0535 222
c10	0531 333
c01	0212 111
c05	0212 111

Obs: M:N

makes

Cid	res#
c01	res 1
c01	res 10
c05	res 5
c05	res 4

Obs 2: Not all customer make reservation
① partial

To book (Obs. M:N)

res #	room #	price
res 1	room 08	50
res 1	room 07	100
res 10	room 08	60
res 5	room 08	40
res 4	room 07	70

Obs 3 = Every reserv. must book at least 1 room /

Obs 4. The same reservation cannot book same room in + time!!!

Cardinality constraint:

"makes" is M:1 because:

simply put a sign in a question sheet!

{ A customer can make more than 1 reserv
AND
1 reservation is made by only 1 cust }

"to book" is M:N because:

Also this sentence is written in the question sheet. Simply put a ⊗

{ One reservation can book more than 1 room
AND
the same room can be booked by more than 1 reservation }

Participation constraint

① partial because not every customer book a room
② Total because every reservation needs a customer
③ Total because every reservation books at least 1 room
④ partial because some rooms may not be booked.

Q = How would your answer change if you want to be able to select all customers by surname

Obs4: Every reservation has its own (check in, check out) time !!!
To reserve the same room in # times you need # reserv !!!