

## 325 Hotel Design

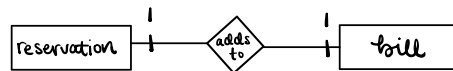
### 1-1 relationship



quest (GUEST-ID, ...)

bill (BILL-ID, ..., quest-id)

Foreign Key (quest-id) references quest

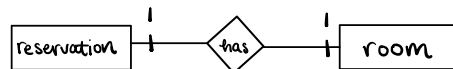


reservation (RES-ID, ...)

bill (BILL-ID, ..., quest-id, res-id)

Foreign Key (quest-id) references quest

Foreign Key (res-id) references reservation



room (ROOM-ID, ...)

reservation (RES-ID, ..., room-id)

Foreign Key (room-id) references room

### M-N relationship: define intersection table



+1 quest\_food\_order (GUEST-ID, ORDER-ID)

Foreign Key (quest-id) references quest

Foreign Key (order-id) references food\_order

### 1-N relationship



1 next to → quest (GUEST-ID, ...)

N next to → reservation (RES-ID, ..., room-id, quest-id)

Foreign Key (room-id) references room

Foreign Key (quest-id) references quest



1 next to → employee (EMPL-ID, ...)

N next to → room (ROOM-ID, ..., empl-id)

Foreign Key (empl-id) references employee



1 next to → bill (BILL-ID, ..., quest-id, res-id)

Foreign Key (quest-id) references quest

Foreign Key (res-id) references reservation

N next to → food\_order (ORDER-ID, bill-id)

Foreign Key (bill-id) references bill



1 next to → Menu (FOOD-ID, ...)

N next to → food\_order (ORDER-ID, bill-id, food-id)

Foreign Key (bill-id) references bill

Foreign Key (food-id) references Menu

1NF : true/pure relation

(eliminate mv attributes)

quest (QUEST-ID, ..., ~~quest-phone (mv)~~)

+1 phone (QUEST-ID, QUEST-PHONE)

Foreign Key (quest-id) references quest