

- ① Customer ( CustomerID, Title, First Name, Last Name, Email Address, Contact Number ), Contact Number not null,
- ② Booking ( CustomerID, BookingID, EndDateAndTime, StartDateAndTime, Number Of People, Special Requests ) Number Of People > 1  
foreign key (CustomerID) references Customer on {delete cascade; <sup>update</sup>};
- ③ Makes 关系 ④ Table ( TableID, Location, Seating Capacity, Comments )
- ⑤ Reserves ( TableID, CustomerID, BookingID ) foreign key, on <sup>delete</sup> update cascade
- ⑥ Order ( OrderID, ~~TableID~~ TableID, OrderDateTime, Total Charge ) for key, on <sup>del/up</sup> cascade, Total Charge Not Null
- ⑦ Takes 和 Order 合并 ⑧ Menu ( MenuID, Name, Description )
- ⑨ MenuItem ( MenuItemID, Name, Description, Price ) Price Not Null
- ⑩ Includes ( MenuID, MenuItemID ) for key, on del/up cas for key, on del/up cas, Charge Not Null
- ⑪ OrderItem ( OrderID, MenuItemID, LineID, Quantity, Charge, Special Request ) 504915756301);
- ⑫ Includes 关系 ⑬ Is For 关系
- ① insert into Customer values ( 1, 'Mr', 'Yuming', 'JIANG', 'cjcjiang@gmail.com', 504915756301 );
- ② insert into Booking values ( 1, 1, '11:00', '14:00', 4, 'No special request' );
- ③ insert into Table values ( 1, ~~nearest to the door~~ 'nearest to the door', 4, 'good table' );
- ④ insert into Reserves values ( 1, 1, 1, 1 );
- ⑤ insert into Order values ( 1, 1, 'order time', 50.25 );
- ⑥ insert into Menu values ( 1, 'BBQ ~~Pork~~', <sup>meat</sup> 'Pork with BBQ' );
- ⑦ insert into MenuItem ( 1, 'Pork BBQ', 'Pork with BBQ', 50.25 );
- ⑧ insert into Includes ( 1, 1 ); ⑨ insert into OrderItem ( 1, 1, 1, 1, 50.25, 'No special request' );
- ⑪ create table OrderItem ( OrderID int, MenuItemID int, LineID int, Quantity int, Charge float(2) not null, SpecialRequest varchar(100), primary key (OrderID, MenuItemID, LineID), foreign key (OrderID) references Order on delete cascade on update cascade, foreign key (MenuItemID) references MenuItem on delete cascade on update cascade );

① All dates should be Not Null

② All names should be Not Null

? ③ start date < End date

① create table Customer  
(CustomerID int,  
Title varchar(5),  
FirstName varchar(20) not null,  
LastName varchar(20) not null,  
EmailAddress varchar(50),  
ContactNumber int not null,  
primary key (CustomerID));

⑥ create table Order  
(OrderID int,  
TableID int,  
OrderDateTime timestamp not null default current\_timestamp,  
TotalCharge ~~to Amount~~ float(2) not null,  
primary key (OrderID),  
foreign key (TableID) references Table on delete cascade on update cascade);

② create table Booking  
(CustomerID int,  
BookingID int,  
EndDateAndTime timestamp not null, ~~default current\_timestamp~~,  
StartDateAndTime timestamp not null default current\_timestamp,  
NumberOfPeople int check (NumberOfPeople > 1),  
SpecialRequests varchar(100),  
primary key (CustomerID, BookingID), CHECK (EndDateAndTime > StartDateAndTime),  
foreign key (CustomerID) references Customer on delete cascade on update cascade);

⑧ create table Menu  
(MenuID int,  
Name varchar(20) not null,  
Description varchar(50),  
primary key (MenuID));

⑨ create table MenuItem  
(MenuItemID int,  
Name varchar(20) not null,  
Description varchar(50),  
Price float(2) not null,  
primary key (MenuItemID));

⑩ create table Includes  
(MenuID int,  
MenuItemID int,  
primary key (MenuID, MenuItemID),  
foreign key (MenuID) references Menu on delete cascade on update cascade,  
foreign key (MenuItemID) references MenuItem on delete cascade on update cascade);

③ create table "Table"  
(TableID int,  
Location varchar(400),  
SeatingCapacity int,  
Comments varchar(100), primary key (TableID));

④ create table Reserves  
(TableID int, foreign key (CustomerID) references Customer on delete cascade on update cascade,  
CustomerID int, foreign key (BookingID) references Booking on delete cascade on update cascade,  
BookingID int,  
primary key (TableID, CustomerID, BookingID),  
foreign key (TableID) references Table on delete cascade on update cascade);