

Keys

Bar

(Assuming name + state maps to unique bars, otherwise bars tab will be inaccurate for any not unique name + state combos)

PK = Name,state

Beer

PK = Name,manf (Beer names need to be unique for this project, but manf also needs to be not null, hence the inclusion in pk)

BarFood

PK = name

Bills

PK = bill_id

FKs -> drinker references Drinker(name)

bar references Bar(name)

bartender references Bartender(name)

Drinker

PK = Name,phone

Day

PK = name

Operates

PK = bar,day

FK -> day references Day(name)

bar references Bar(name)

Frequents

NO PK, Drinkers can frequent multiple bars

FK -> bar references Bar(name)

drinker references Drinker(name)

SellsItem

Primary key = Item,Bar

FK barname references bar

SellsFood

PK = food,bar

FK -> food,bar references SellsItem(item,bar)

food references BarFood(food)

SellsBeer

PK = beer,bar

FK -> beer,bar references SellsItem(beer,bar)

beer references Beer(name)

Transactions

Price is not a constraint, Sells tables could be a base price, but transactions could have special pricing applied, like limited time discounts

PK = None, duplicates

FK -> item, bar references SellsItem(item,barname)

bill_id,bar references Bills(bill_id,bar)