

Normalization for form 1

### UNF

**TRAINING**(training\_id, training\_name, training\_duration, training\_startdate, training\_starttime, clinic\_id, clinic\_name, training\_vetid, training\_vetname (vet\_id, home\_clinic\_id, vet\_given\_name, vet\_family\_name, completed\_status, expiry\_date))

### 1NF

**TRAINING**(training\_id, training\_name, training\_duration, training\_startdate, training\_starttime, clinic\_id, clinic\_name, training\_vetid, training\_vetname)

**VET**(vet\_id, home\_clinic\_id, vet\_given\_name, vet\_family\_name, completed\_status, expiry\_date)

No CK

Partial dependencies:

course\_vetid -> course\_vetname

clinic\_id -> clinic\_name

vet\_id -> home\_clinic\_id, vet\_given\_name, vet\_family\_name

training\_id -> training\_vetid, training\_vetname

### 2NF

**TRAINING**(training\_id, training\_name, training\_duration, training\_startdate, training\_starttime)

**CLINIC**(clinic\_id, clinic\_name)

**TRAINING\_INSTRUCTOR**(training\_id, training\_vetid, training\_vetname)

**VET**(vet\_id, home\_clinic\_id, vet\_given\_name, vet\_family\_name, completed\_status, expiry\_date)

No transitive dependencies

### 3NF

**TRAINING**(training\_id, training\_name, training\_duration, training\_startdate, training\_starttime)

**CLINIC**(clinic\_id, clinic\_name)

**TRAINING\_INSTRUCTOR**(training\_id, training\_vetid, training\_vetname)

**VET**(vet\_id, home\_clinic\_id, vet\_given\_name, vet\_family\_name, completed\_status, expiry\_date)

No transitive dependencies

Full Dependencies:

training\_id -> training\_name, training\_duration, training\_startdate, training\_starttime,  
training\_vetid, training\_vetname

clinic\_id -> clinic\_name

vet\_id -> home\_clinic\_id, vet\_given\_name, vet\_family\_name, completed\_status, expiry\_date

Normalization for form 2

## UNF

**INVOICE**(pet\_id, pet\_name, vet\_id, vet\_given\_name, vet\_family\_name, owner\_id, owner\_gname, owner\_fname, service\_startdate, service\_starttime, service\_code, service\_description, service\_linecost, drug\_id, drug\_name, drug\_qty, drug\_linecost, total\_cost, pay\_method)

## 1NF

**INVOICE**(pet\_id, pet\_name, vet\_id, vet\_given\_name, vet\_family\_name, owner\_id, owner\_gname, owner\_fname, service\_startdate, service\_starttime, service\_code, service\_description, service\_linecost, drug\_id, drug\_name, drug\_qty, drug\_linecost, total\_cost, pay\_method)

CK: (animal\_id, vet\_id, service\_startdate, service\_starttime)

Partial dependencies:

pet\_id -> pet\_name

vet\_id -> vet\_given\_name, vet\_family\_name

owner\_id -> owner\_gname, owner\_fname

service\_code -> service-description, service\_linecost

drug\_id -> drug\_name

## 2NF

**PET**(pet\_id, pet\_name)

**VET**(vet\_id, vet\_given\_name, vet\_family\_name)

**OWNER**(owner\_id, owner\_gname, owner\_fname)

**SERVICE**(service\_code, service\_description, service\_linecost)

**DRUG**(drug\_id, drug\_qty, drug\_linecost)

**INVOICE**(pet\_id, vet\_id, service\_startdate, service\_starttime, total\_cost, pay\_method)

No Transitive dependencies

## 3NF

**PET**(pet\_id, pet\_name)

**VET**(vet\_id, vet\_given\_name, vet\_family\_name)

**OWNER**(owner\_id, owner\_gname, owner\_fname)

**SERVICE**(service\_code, service\_description, service\_linecost)

**DRUG**(drug\_id, drug\_qty, drug\_linecost)

**INVOICE**(pet\_id, vet\_id, service\_startdate, service\_starttime, total\_cost, pay\_method)

Full Dependencies:

pet\_id -> pet\_name

vet\_id -> vet\_given\_name, vet\_family\_name

owner\_id -> owner\_gname, owner\_fname

service\_code -> service-description, service\_linecost

drug\_id, drug\_qty -> drug\_linecost

pet\_id, vet\_id, service\_startdate, service\_starttime -> total\_cost, pay\_method