

# Normalisation

Abhiram Aroop 30632714

## 1. Pet Ownership Details

### UNF

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_street, owner\_town, owner\_postcode, vet\_id, vet\_name, (pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_deceased))

Note: pet\_dob is the pet's birthdate

### 1NF

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_street, owner\_town, owner\_postcode, vet\_id, vet\_name)

PET (owner\_id, pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_deceased)

### Partial Dependencies:

None

### 2NF

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_street, owner\_town, owner\_postcode, vet\_id, vet\_name)

PET (owner\_id, pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_deceased)

### Transitive Dependencies:

vet\_id → vet\_name

### 3NF

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_street, owner\_town, owner\_postcode, vet\_id)

PET (owner\_id, pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_deceased)

VET (vet\_id, vet\_name)

### Full Dependencies:

owner\_id → owner\_gname, owner\_fname, owner\_street, owner\_town, owner\_postcode, vet\_id

owner\_id, pet\_id → pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_deceased

vet\_id → vet\_name

## 2. Visit Invoice

### UNF

VISIT (vet\_id, vet\_name, pet\_id, pet\_name, visit\_datetime, (service\_code, service\_desc, service\_cost), (drug\_id, drug\_name, drug\_qty, drug\_cost), total\_cost, payment\_method)

### 1NF

VISIT (vet\_id, vet\_name, pet\_id, pet\_name, visit\_datetime, total\_cost, payment\_method, service\_code, drug\_id)

SERVICE (service\_code, service\_desc, service\_cost)

DRUG (drug\_id, drug\_name, drug\_qty, drug\_cost)

### Partial Dependencies:

pet\_id → pet\_name

vet\_id → vet\_name

### 2NF

VISIT (vet\_id, pet\_id, visit\_datetime, total\_cost, payment\_method, service\_code, drug\_id)

PET (pet\_id, pet\_name)

VET (vet\_id, vet\_name)

SERVICE (service\_code, service\_desc, service\_cost)

DRUG (drug\_id, drug\_name, drug\_qty, drug\_cost)

### Transitive Dependencies:

None

### 3NF

VISIT (vet\_id, pet\_id, visit\_datetime, total\_cost, payment\_method, service\_code, drug\_id)

PET (pet\_id, pet\_name)

VET (vet\_id, vet\_name)

SERVICE (service\_code, service\_desc, service\_cost)

DRUG (drug\_id, drug\_name, drug\_qty, drug\_cost)

### Full Dependencies:

vet\_id, visit\_datetime → pet\_id, total\_cost, payment\_method, service\_code, drug\_id

pet\_id → pet\_name

vet\_id → vet\_name

service\_code → service\_desc, service\_cost

drug\_id → drug\_name, drug\_qty, drug\_cost