FIT3171 Assignment 1B – Normalisation

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# Pet Ownership Details

## **UNF**

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_prefvet\_name, owner\_address, (pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_status))

## **1NF**

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_prefvet\_name, owner\_address)

PET (pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_status)

Partial Dependencies:

No Partial Dependency

## **2NF**

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_prefvet\_name, owner\_address)

PET (pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_status)

Transitive Dependencies:

owner\_prefvet\_id → owner\_prefvet\_name

## **3NF**

OWNER (owner\_id, owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_address)

PET (pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_status)

VET (owner\_prefvet\_id, owner\_prefvet\_name)

Full Dependencies:

owner\_id → owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_address

pet\_id → pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_status

owner\_prefvet\_id → owner\_prefvet\_name

# Visit Invoice

## **UNF**

INVOICE (pet\_id, pt\_name, vet\_id, vet\_name, invoice\_amount\_due, invoice\_payment\_method, serv\_date, serv\_time, (serv\_code,serv\_desc,serv\_cost), (drug\_id,drug\_name,drug\_qty\_supplied,drug\_cost))

## **1NF**

INVOICE (pet\_id, vet\_id, serv\_time, serv\_date pet\_name, vet\_name, invoice\_amount\_due, invoice\_payment\_method)

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

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

Partial Dependencies:

pet\_id → pet\_name

vet\_id → vet\_name

## **2NF**

INVOICE (pet\_id, vet\_id, serv\_time, serv\_date, invoice\_amount\_due, invoice\_payment\_method)

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

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

PET (pet\_id, pet\_name)

VET (vet\_id, vet\_name)

Transitive Dependencies:

No transitive dependencies

## **3NF**

INVOICE (pet\_id, vet\_id, serv\_time, serv\_date, invoice\_amount\_due, invoice\_payment\_method)

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

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

PET (Pet\_id, pet\_name)

VET (vet\_id, vet\_name)

## **Full Dependencies:**

Pet\_id, vet\_id, serv\_time, serv\_date → invoice\_amount\_due, invoice\_payment\_method

serv\_code → serv\_desc,serv\_cost

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

Pet\_id → pet\_name

vet\_id → vet\_name

# COLLECTED 3NF RELATIONS.

1. OWNER (owner\_id, owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_address)

2. PET (pet\_id, pet\_gender, pet\_name, pet\_type, pet\_dob, pet\_status)

3. VET (owner\_prefvet\_id, owner\_prefvet\_name)

4. INVOICE (pet\_id, vet\_id, serv\_time, serv\_date , invoice\_amount\_due, invoice\_payment\_method)

5. SERVICE (serv\_code, serv\_desc,serv\_cost)

6. DRUG (drug\_id, drug\_name,drug\_qty\_supplied,drug\_cost)

7. PET (pet\_id, pet\_name)

8. VET (vet\_id, vet\_name)

# ATTRIBUTE SYNTHESIS

1. OWNER (owner\_id, owner\_gname, owner\_fname, owner\_prefvet\_id, owner\_address)

2 & 7 PET (pet\_id, pet\_name, pet\_gender, pet\_type, pet\_dob, pet\_status)

3 & 8. VET (vet\_id, vet\_name)

4. INVOICE (pet\_id, vet\_id, serv\_time, serv\_date, invoice\_amount\_due, invoice\_payment\_method)

5. SERVICE (serv\_code, serv\_desc,serv\_cost)

6. DRUG (drug\_id, drug\_name,drug\_qty\_supplied,drug\_cost)