

Student ID: 30884128

Name: George Tan Juan Sheng

Pet owner details

UNF

OWNER (owner_id, owner_givname, owner_famname, owner_street, owner_town, owner_postcode, vet_id, vet_title, vet_givname, vet_famname, (animal_id, animal_gender, animal_name, animal_type, animal_birthdate, animal_deceased))

1NF

OWNER (owner_id, owner_givname, owner_famname, owner_street, owner_town, owner_postcode, vet_id, vet_title, vet_givname, vet_famname)

ANIMAL (animal_id, owner_id, animal_gender, animal_name, animal_type, animal_birthdate, animal_deceased)

Partial Dependencies:

No partial dependencies present

2NF

OWNER (owner_id, owner_givname, owner_famname, owner_street, owner_town, owner_postcode, vet_id, vet_title, vet_givname, vet_famname)

ANIMAL (animal_id, owner_id, animal_gender, animal_name, animal_type, animal_birthdate, animal_deceased)

Transitive Dependencies:

vet_id -> vet_title, vet_givname, vet_famname

3NF

OWNER (owner_id, owner_givname, owner_famname, owner_street, owner_town, owner_postcode, vet_id)

VET (vet_id, vet_title, vet_givname, vet_famname)

ANIMAL (animal_id, owner_id, animal_gender, animal_name, animal_type, animal_birthdate, animal_deceased)

Full Dependencies:

owner_id -> owner_givname, owner_famname, owner_street, owner_town, owner_postcode, vet_id

vet_id -> vet_title, vet_givname, vet_famname

animal_id -> owner_id, animal_gender, animal_name, animal_type, animal_birthdate, animal_deceased

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ANIMAL DOCTORS

UNF

VISIT (animal_id, animal_name, vet_id, vet_title, vet_givname, vet_famname, visit_datetime, (service_code, service_description, service_cost), (drug_id, drug_name, prescription_drug_qty-supplied, prescription_drug_cost), visit_total_amount, visit_paidby)

1NF

VISIT (vet_id, visit_datetime, animal_id, animal_name, vet_title, vet_givname, vet_famname, visit_total_amount, visit_paidby)

SERVICE (service_code, vet_id, visit_datetime, service_description, service_cost)

PRESCRIPTION (drug_id, vet_id, visit_datetime, drug_name, prescription_drug_qty-supplied, prescription_drug_cost)

Partial Dependencies:

animal_id -> animal_name

vet_id -> vet_title, vet_givname, vet_famname

drug_id -> drug_name

service_code -> service_description

2NF

VISIT (vet_id, visit_datetime, animal_id, visit_total_amount, visit_paidby)

SERVICE (service_code, vet_id, visit_datetime, service_cost)

SERVICE_DETAILS (service_code, service_description)

PRESCRIPTION (drug_id, vet_id, visit_datetime, prescription_drug_qty-supplied, prescription_drug_cost)

DRUG (drug_id, drug_name)

ANIMAL (animal_id, animal_name)

VET (vet_id, vet_title, vet_givname, vet_famname)

Transitive Dependencies:

No transitive dependencies present

3NF

VISIT (vet_id, visit_datetime, animal_id, visit_total_amount, visit_paidby)

SERVICE (service_code, vet_id, visit_datetime, service_cost)

SERVICE_DETAILS (service_code, service_description)

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PRESCRIPTION (drug_id, vet_id, visit_datetime, prescription_drug_qty-supplied,
prescription_drug_cost)

DRUG (drug_id, drug_name)

ANIMAL (animal_id, animal_name)

VET (vet_id, vet_title, vet_givname, vet_famname)

Full Dependencies:

vet_id, visit_datetime -> animal_id, visit_total_amount, visit_paidby

service_code, vet_id, visit_datetime -> service_cost

service_code -> service_description

drug_id, vet_id, visit_datetime -> prescription_drug_qty-supplied, prescription_drug_cost

drug_id -> drug_name

animal_id -> animal_name

vet_id -> vet_title, vet_givname, vet_famname

COLLECTED 3NF RELATIONS:

1. OWNER (owner_id, owner_givname, owner_famname, owner_street, owner_town,
owner_postcode, vet_id)
2. VET (vet_id, vet_title, vet_givname, vet_famname)
3. ANIMAL (animal_id, owner_id, animal_gender, animal_name, animal_type, animal_
birthdate, animal_deceased)
4. VISIT (vet_id, visit_datetime, animal_id, visit_total_amount, visit_paidby)
5. SERVICE (service_code, vet_id, visit_datetime, service_cost)
6. SERVICE_DETAILS (service_code, service_description)
7. PRESCRIPTION (drug_id, vet_id, visit_datetime, prescription_drug_qty-supplied,
prescription_drug_cost)
8. DRUG (drug_id, drug_name)
9. ANIMAL (animal_id, animal_name)
10. VET (vet_id, vet_title, vet_givname, vet_famname)

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ATTRIBUTE SYNTHESIS

1.

OWNER (owner_id, owner_givname, owner_famname, owner_street, owner_town, owner_postcode, vet_id)

2. & 10.

VET (vet_id, vet_title, vet_givname, vet_famname)

3. & 9.

ANIMAL (animal_id, owner_id, animal_gender, animal_name, animal_type, animal_birthdate, animal_deceased)

4.

VISIT (vet_id, visit_datetime, animal_id, visit_total_amount, visit_paidby)

5.

SERVICE (service_code, vet_id, visit_datetime, service_cost)

6.

SERVICE_DETAILS (service_code, service_description)

7.

PRESCRIPTION (drug_id, vet_id, visit_datetime, prescription_drug_qtysupplied, prescription_drug_cost)

8.

DRUG (drug_id, drug_name)