Name: Hongliang Tang

ID: 27135519

LICENCED DRIVER REPORT

UNF

DRIVER (lic_num, lic_status, f_name, l_name, address_street, address_town, address_postcode, d_of_birth, lic_exp_date, (lic_type), (date_sus, end_date), (date_cancelled, cancellation_period, reason_cancelled))

1NF

LICENSE_TYPE(<u>lic_num</u>, <u>lic_type</u>)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

SUSPENSION (<u>lic_num</u>, <u>date_sus</u>, end_date)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

CANCELLATION (<u>lic_num</u>, <u>date_cancelled</u>, cancellation_period, reason_cancelled)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no partial dependencies.

DRIVER (<u>lic_num</u>, lic_status, f_name, l_name, address_street, address_town, address_postcode, d_of_birth, lic_exp_date)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

2NF

LICENSE_TYPE(<u>lic_num</u>, <u>lic_type</u>)

SUSPENSION (<u>lic_num</u>, <u>date_sus</u>, end_date)

CANCELLATION (<u>lic_num</u>, <u>date_cancelled</u>, cancellation_period, reason_cancelled)

DRIVER (<u>lic_num</u>, lic_status, f_name, l_name, address_street, address_town, address_postcode, d_of_birth, lic_exp_date)

3NF

LICENSE_TYPE(<u>lic_num</u>, <u>lic_type</u>)

SUSPENSION (<u>lic_num</u>, <u>date_sus</u>, end_date)

CANCELLATION (<u>lic_num</u>, <u>date_cancelled</u>, cancellation_period, reason_cancelled)

DRIVER (<u>lic_num</u>, lic_status, f_name, l_name, address_street, address_town, address_postcode, d_of_birth, lic_exp_date)

Driver License Cancellation Report

UNF

LICENSE_DRIVER (lic_num,f_name,l_name, (date_cancelled, reason_cancelled, hearing_date, reinstatement_date))

1NF

CANCEL_DETAIL (<u>lic_num</u>, <u>date_cancelled</u>, reason_cancelled, hearing_date, reinstatement_date)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

LICENSE_DRIVER(<u>lic_num</u>,f_name,l_name)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

2NF

CANCEL_DETAIL(<u>lic_num</u>, <u>date_cancelled</u>, reason_cancelled, hearing_date, reinstatement_date)

LICENSE_DRIVER(<u>lic_num</u>,f_name,l_name)

3NF

CANCEL_DETAIL (<u>lic_num</u>, <u>date_cancelled</u>, reason_cancelled, hearing_date, reinstatement_date)

LICENSE_DRIVER(**lic_num**,f_name,l_name)

VEHICLE REPORT-Vehicle Details

UNF

VEHICLE (v_in, v_type, v_model, m_name, manu_year, v_colour, (regis_date, regis_num, deregis_date))

1NF

VEHICLE (<u>v in</u>, v_type, model_name, manu_year, v_colour)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

REGISTRATION (v_in, regis_date, regis_num, deregis_date)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

2NF

VEHICLE (<u>v_in</u>, v_type, model_name, manu_year, v_colour)

REGISTRATION (v_in, regis_date, regis_num, deregis_date)

3NF

VEHICLE (<u>v_in</u>, v_type, model_name, manu_year, v_colour)
REGISTRATION (<u>v_in</u>, <u>regis_date</u>, regis_num, deregis_date)

VEHICLE REPORT-Model Details

UNF

VEHICLE_MODEL(<u>model_name</u>, model_transmission, engine_size, (e_type), laden_height, unladen_height, manu_code, manu_name, manu_country_name, manu_country_iso)

1NF

ENGINE_TYPE (model_name, e_type)

Show Dependencies:

PARTIAL: no partial dependencies.

TRANSITIVE: no transitive dependencies.

VEHICLE_MODEL(<u>model_name</u>, model_transmission, engine_size, laden_height, unladen_height, manu_code, manu_name, manu_country_name, manu_country_iso)

Show Dependencies:

PARTIAL:

no partial dependencies.

TRANSITIVE:

manu_country_iso -> manu_country_name

manu_code -> manu_name

2NF

ENGINE_TYPE (model_name, e_type)

VEHICLE_MODEL (<u>model_name</u>, model_transmission, engine_size, laden_height, unladen_height, manu_code, manu_name, manu_country_name, manu_country_iso)

3NF

MANUFACTURER (<u>manu_code</u>, manu_name)

COUNTRY (<u>manu_country_iso</u>, manu_country_name)

ENGINE_TYPE (model_name, e_type)

VEHICLE_MODEL (<u>model_name</u>, model_transmission, engine_size, laden_height, unladen_height)

COLLECTED 3NF Relations:

- 1.MANUFACTURER (<u>manu_code</u>, manu_name)
- 2.COUNTRY (<u>manu_country_iso</u>, manu_country_name)
- 3. ENGINE_TYPE (<u>model_name</u>, <u>e_type</u>)
- 4.VEHICLE_MODEL (<u>model_name</u>, model_transmission, engine_size, laden_height, unladen_height)
- 5.VEHICLE (<u>v_in</u>, v_type, model_name, manu_year, v_colour)
- 6.REGISTRATION (v_in, regis_date, regis_num, deregis_date)
- 7.LICENSE_TYPE(lic_num, lic_type)
- 8.SUSPENSION (<u>lic_num</u>, <u>date_sus</u>, end_date)
- 9.CANCELLATION (<u>lic_num</u>, <u>date_cancelled</u>, cancellation_period, reason_cancelled)
- 10.DRIVER (<u>lic_num</u>, lic_status, f_name, l_name, address_street, address_town, address_postcode, d_of_birth, lic_exp_date)
- 11.CANCEL_DETAIL (<u>lic_num</u>, <u>date_cancelled</u>, reason_cancelled, hearing_date, reinstatement_date)
- 12.LICENSE DRIVER(lic num,f_name,l_name)

ATTRIBUTE SYNTHESIS

```
1.
MANUFACTURER (manu_code, manu_name)
2.
COUNTRY (manu_country_iso, manu_country_name)
3.
ENGINE_TYPE (model_name, e_type)
4.
VEHICLE_MODEL (model_name, model_transmission, engine_size,
laden_height, unladen_height)
5.
VEHICLE (v_in, v_type, model_name, manu_year, v_colour)
6.
REGISTRATION (v_in, regis_date, regis_num, deregis_date)
7.
LICENSE_TYPE( <u>lic_num</u>, <u>lic_type</u> )
8.
SUSPENSION (lic_num, date_sus, end_date)
9 & 11.
CANCELLATION (<u>lic_num</u>, <u>date_cancelled</u>, cancellation_period,
reason_cancelled, hearing_date, reinstatement_date)
10 & 12.
```

DRIVER (<u>lic_num</u>, lic_status, f_name, l_name, address_street, address_town, address_postcode, d_of_birth, lic_exp_date)