Checking for 3NF

PilotFlownAircrafts



The table **PilotFlownAircrafts** is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key which is <u>StaffID</u>. There's only one functional dependency (FD1) and it's determinent is a super key. Therefore the table **PilotFlownAircrafts** is in 3NF.

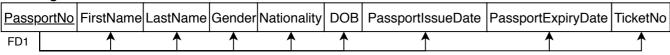
FlightAttendant



The table **FlightAttendant** is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key. There's only one functional dependency (FD1) and it's determinent is a super key.

Therefore the table FlightAttendant is in 3NF.

Passenger

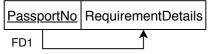


The table **Passenger** is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key.

There's only one functional dependency (FD1) and it's determinent is a super key.

Therefore the table **Passenger** is in 3NF.

SpecialRequirements



The table **SpecialRequirements** is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key. There's only one functional dependency (FD1) and it's determinent is a super key.

Therefore the table **SpecialRequirements** is in 3NF.

Minor

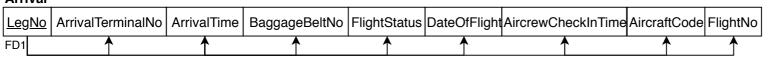


The table Minor is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key.

There's only one functional dependency (FD1) and it's determinent is a super key.

Therefore the table Minor is in 3NF.

Arrival

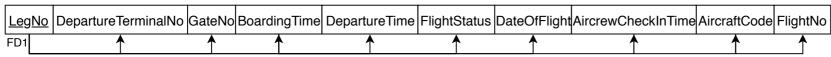


The table **Arrival** is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key.

There's only one functional dependency (FD1) and it's determinent is a super key.

Therefore the table **Arrival** is in 3NF.

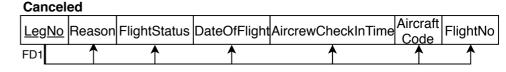
Departure



The table **Departure** is in 2NF and it does not have any transitive functional dependencies and all the non primary key attributes depend on the primary key. There's only one functional dependency (FD1) and it's determinent is a super key.

Therefore the table **Departure** is in 3NF.





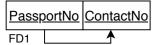
The tables **Delayed** and **Canceled** are in 2NF and they do not have any transitive functional dependencies.

All the non primary key attributes depends on the primary key.

The tables **Delayed** and **Canceled** each has a functional dependency called FD1 and their determinents are a super keys.

Therefore the table **Departure** is in 3NF.

Passenger_Contact_No

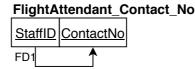


The table Passenger_Contact_No is in 2NF and it does not have any transitive functional dependencies.

The table **Passenger_Contact_No** has a functional dependency called FD1 and it's dependent is a prime attribute.

Therefore the table **Passenger_Contact_No** is in 3NF.

Pilot_Contact_No StaffID ContactNo



The tables Pilot_Contact_No and FlightAttendant_Contact_No are in 2NF and they do not have any transitive functional dependencies.

The tables Pilot_Contact_No and FlightAttendant_Contact_No each has a functional dependency called FD1 and their dependents are prime attributes.

Therefore the tables **Pilot Contact No** and **FlightAttendant Contact No** are in 3NF.