

Checking for 2NF

PilotFlownAircrafts

StaffID	AircraftModel	FlyingHours
FD1		

The table **PilotFlownAircrafts** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **PilotFlownAircrafts** does not have any partial functional dependencies. Therefore it's in 2NF.

FlightAttendant

StaffID	FirstName	LastName	PassportNo	Adress	Gender	Designation	DateJoined	AirlineTrainingDetails	AcademicEducationDetails	TotalFlyingHours	LegNo	AirlineCode
FD1												

The table **FlightAttendant** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **FlightAttendant** does not have any partial functional dependencies. Therefore it's in 2NF.

Passenger

PassportNo	FirstName	LastName	Gender	Nationality	DOB	PassportIssueDate	PassportExpiryDate	TicketNo
FD1								

The table **Passenger** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **Passenger** does not have any partial functional dependencies. Therefore it's in 2NF.

SpecialRequirements

PassportNo	RequirementDetails
FD1	

The table **SpecialRequirements** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **SpecialRequirements** does not have any partial functional dependencies. Therefore it's in 2NF.

Minor

PassportNo	AcconpanyPassportNumber
FD1	

The table **Minor** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **Minor** does not have any partial functional dependencies. Therefore it's in 2NF.

Arrival

LegNo	ArrivalTerminalNo	ArrivalTime	BaggageBeltNo	FlightStatus	DateOfFlight	AircrewCheckInTime	AircraftCode	FlightNo
FD1								

The table **Arrival** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **Arrival** does not have any partial functional dependencies. Therefore it's in 2NF.

Departure

LegNo	DepartureTerminalNo	GateNo	BoardingTime	DepartureTime	FlightStatus	DateOfFlight	AircrewCheckInTime	AircraftCode	FlightNo
FD1									

The table **Departure** is in 1NF.
It has a functional dependency which is FD1 and it is a full functional dependency because all the non primary key attributes depend on the primary key completely.
The table **Departure** does not have any partial functional dependencies. Therefore it's in 2NF.

Delayed

LegNo	Reason	FlightStatus	DateOfFlight	AircrewCheckInTime	AircraftCode	FlightNo
FD1						

Canceled

LegNo	Reason	FlightStatus	DateOfFlight	AircrewCheckInTime	AircraftCode	FlightNo
FD1						

The tables **Delayed** and **Canceled** are in 1NF. They have functional dependencies FD1 in each. The functional dependencies of both tables are full functional dependencies because all the non primary key attributes of each table depends completely on the primary key of the respective table.
None of the tables have partial functional dependencies.
Therefore both tables are in 2NF.

Passenger_Contact_No

PassportNo	ContactNo
FD1	

The table **Passenger_Contact_No** does not have non primary key attributes. They are already in 1NF.
Therefore the table **Passenger_Contact_No** is in 2NF

Pilot_Contact_No

StaffID	ContactNo
FD1	

FlightAttendant_Contact_No

StaffID	ContactNo
FD1	

The tables **Pilot_Contact_No** and **FlightAttendant_Contact_No** do not have non primary key attributes. They are already in 1NF. Therefore both tables are in 2NF.

