CSDS341 Project - Airline Querying System - Initial Report

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1 Introduction

In recent decades, the growing demand for leisure and business travel leads to the prosperity of the airline market. An increasing number of people have been choosing to take flights to travel domestically or internationally. Therefore, an organized and comprehensive database that stores the airline system is critical for both travelers and crew to obtain plenty and simultaneous information.

Although there do exist several flight databases or applications for commercial airlines, it is rare to find comprehensive information - including weather at the departure airport and destination, aircraft type, the total flight hour of pilots, and the number of luggage allowed - in just one database. This information offers travelers a chance to be better prepared for traveling.

Since our airline querying system contains a relatively extensive data set, the crew members who choose to use our database are able to access the basic information about the travelers who will be on their flight and provides updates about the airline information.

2 Schemas

2.1 Entities

```
Travelers(id: double
name: String
gender: Char(1)
dob: date
)

Aeroplanes(regis_no: Char(7)
flight_age: int
aircraft_type: String
airline: String
)

Airports(iata_code: Char(3)
weather: String
)

Crew(crew_id: double
ssn: String
name: String
gender: Char(1)
dob: date
)
```

```
Flights(regist_no: Char(7)
flight_no: Char(7)
day: date
dept_time: int
ariv_time: int
status: String
)
Foreign Key (regist_no) references Aeroplanes.regist_no
```

2.2 Relationships