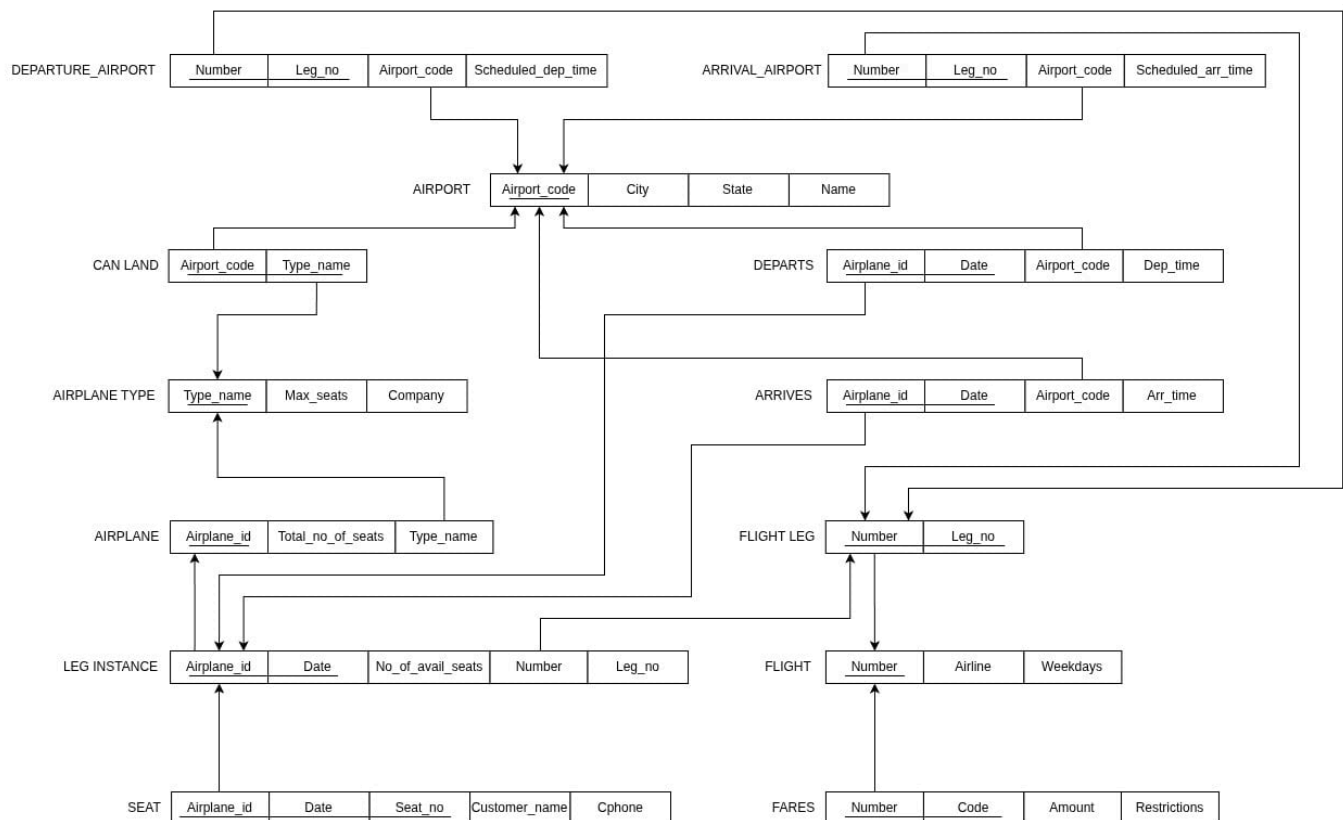# CC02_Tran-Dinh-Dang-Khoa_2211649

DATABASE SYSTEMS LAB

REPORT

LAB 3

Trần Đình Đăng Khoa - ID: 2211649
Lab Instructor: Võ Thị Kim Anh

Relational Diagram:

Airline Reservation System Requirements

1. **Airport Management**

- Store airport details (code, name, city, state)
- Track which airplane types can land at each airport

2. **Aircraft Management**
   - Catalog airplane types with specifications (manufacturer, max seats)
   - Track individual airplanes and their seating capacity

3. **Flight Schedule Management**
   - Define flights with numbers, airlines, and operating days
   - Manage flight legs (non-stop segments) with departure/arrival airports and scheduled times
   - Track actual departures and arrivals with dates and times

4. **Flight Instance Management**
   - Record specific occurrences of flight legs on particular dates
   - Track assigned aircraft and available seats for each leg instance

5. **Fare Management**
   - Store multiple fare options per flight with prices and restrictions

6. **Seat Reservation**
   - Assign specific seats to customers with contact information
   - Track seat availability on each flight leg instance

7. **Reporting & Queries**
   - Support lookups of flights between airports
   - Enable passenger manifests
   - Facilitate seat availability checking