## A6 Problem 4: Airline Schemas

**Instructions:** Write the relational model schema for your airline database in this file, using the notation we have used all term. Remember to underline primary keys. Include descriptions of other candidate keys or foreign keys (if any) immediately under each relation schema.

## Example:

foo(a, b, c)

- b is also a candidate key
- c is a foreign key to bar.c

## Problem 4 Schemas:

airplane (aircraft\_code, company, model)

No foreign or candidate keys

flight (aircraft code, flight number, flight date, flight time, source, destination, domestic)

aircraft\_code is a foreign key to airplane.aircraft\_code

seat (aircraft\_code, seat\_number, seat\_class, seat\_type, exit\_row)

aircraft\_code is a foreign key to aircraft.aircraft\_code

flight\_info (seat\_number, flight\_number, flight\_date, ticket\_id, aircraft code)

- (flight\_number, flight\_date) is a foreign key to flight(flight\_number, flight\_date)
- aircraft\_code is a foreign key to aircraft.aircraft\_code
- seat\_number is a foreign key to seat.seat\_number
- ticket\_id is a foreign key to ticket.ticket\_id

ticket (<u>ticket\_id</u>, customer\_id, purchase\_id, sale\_price)

- customer\_id is a foreign key to customer.cust\_id
- purchase\_id is a foreign key to purchase.purchase\_id

customer (customer id, first name, last name, email)

No foreign or candidate keys

phone\_numbers (<u>customer\_id</u>, <u>phone\_num</u>)

customer id is a foreign key to customer.cust id

traveler (<u>customer\_id</u>, passport\_number, citizenship, emergency\_contact, emergency\_phone, frequent flyer num)

- customer\_id is a foreign key to customer.cust\_id
- passport number is a candidate key

purchaser (customer\_id, card\_number, exp\_date, ver\_code)

• customer\_id is a foreign key to customer.cust\_id

purchase (customer\_id, purchase\_id, purchase\_time, confirmation)

• customer\_id is a foreign key to customer.cust\_id