

Programming Project #1

CS-6360 Database Design

Airline Reservation System – SQL Application with GUI

This programming project involves developing a Airline Reservation System for use by travel professionals (i.e. not passengers). It should be a Java-based GUI application that interfaces with a backend MySQL database to manage its data¹. Your GUI may be either a native application or browser-based (e.g JSP, ASP).

Your database schema should be based on Figure 3.8 (page 82) in your textbook. A description of the high-level functionality can be found in Exercise 3.12 (page 81). An ER diagram can be found in Figure 7.20 (page 236), which provides a conceptual model.

You must provide a GUI interface of your own design to implement the required Use Cases. You do not have to provide a GUI interface for importing bulk data sets. You may assume that this task can be done by a DBA via the command line. You will be provided with a data set for grading.

Use Cases

- Display the flight numbers and weekdays of all flight
 - Given a Departure Airport Code and Arrival Airport Code
- Display information for all legs
 - Given a flight number
- Display the number of available seats on a particular flight
 - Given a flight number and Date
- Display all Fare information
 - Given a flight number
- User shall be able to query a passenger² manifest
 - Display list of passengers on a given flight
 - Display a light of flights for a particular passenger name

Note: Requirements may be³ added or modified before the due date.

¹ You may also use C# for your application language and/or MS SQL Server for your back end database.

² "Passenger" is the same as Customer

³ *will be* ☺