Flight Reservation System

CST 363 Project 1

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Description: Our application is a flight reservation system that lets you register a new account, view available flights, book a reservation for a flight, as well as cancel a reservation. The first page the user is prompted to is the login page. At this point, the user is able to either log in if already registered, or create an account with their information. Once logged in, the application contains a list of the available flights in the system which also displays the amount of seats currently available in the flight. The customer can then browse flight and book and available one using the flight ID number. The information saved from the user includes their first name, last name, e-mail, and their desired username and password. The user can also cancel a reservation that has been placed using the reservation ID. Our design is normalized in a fashion that uses foreign keys to relate information from our tables. This way we minimize redundancy in the data and keep the data separated and organized.

In the second part of the project we designed an OLAP database system with a denormalized schema. In our schema our fact table is flight_reservations with dimensions tables passenger and flight. Included with the OLAP database are five queries answering types of questions a OLAP system would be used to find.

Update: After part 1 of the project, we were given feedback for things we could address in our OLTP project. The first update we made was to define all columns in our tables that were not keys as NOT NULL. Then, we made a correction at line 133 in registration.py that had a wrong name. This concluded the instructor's points on feedback.