

Project-2: Database Programming

Due Date: April 8th, 2023
Instructor: Dr. Sugandha Malviya

Objective

To create an application in Programming languages such as Python/Java that interacts with MySQL database.

Description

Create an Airline Booking System to book a flight for Falcon Airlines. The booking system stores the details such as the airport, flight schedule, passengers, and their booking. You will use Python/Java and MySQL to create and manage this database.

Goals:

1. Write Python/Java program to perform CRUD(create, read, update, and delete) operations on the MySQL database.
2. Allow the passengers to book a flight and view and delete their booking.

Deliverables:

1. **[10 points]** A database schema for the airline booking system. You can export the schema from the MySQL Workbench tool.
2. **[30 points]** A Python/Java program that connects to a MySQL database and performs CRUD operations on the airline data. The main program will call the following functions:
 - a. `create_connection()` creates a connection to the Falcon airline database.
 - b. `create_table()` creates the tables for the airline booking system.
 - c. `insert_booking()` dynamically inserts a row into the booking table.
 - d. `view_booking()` allows the passengers to view their bookings.
 - e. `delete_booking()` delete booking allows the passengers to cancel their reservation.
 - f. Main function calls the above functions. Functions (c-e) will be called based on the users' selection(input). Create a menu that allows users to select from the following options:
 - i. Book
 - ii. View Reservation
 - iii. Cancel Reservation
3. **[5 points]** A Readme file that describes how to install and run the program, including any required libraries or dependencies.
4. **[5 points]** Discuss in a few lines what you learned about the database connection with other systems or applications through your work on this project.

Submission Instruction

1. Submit a zipped folder containing the schema diagram(jpg/png), source code(java/python files), readme file(doc/pdf), and answer to the discussion question(pdf).
2. Name your folder as, "Yourname_Project2.zip", where "Yourname" is your name.

Conclusion

This project provides hands-on experience with database programming. The database API allows interaction with other systems and applications.