

CMPE 321 Summer 2017 - 3rd Project

Airline Reservation System

July 26, 2017

Customers visit/call offices of an airline company to make reservations for flights. You are supposed to design this in-house web-based reservation application using PHP.

There are 2 types of users in the system:

1. Administrators
2. Employees

Note that entities are not limited by these user types. These are the ones that can log in to the system. In addition to these, your system shall have entities such as flights, pilots, customers, etc.

Administrators can:

- Add/Edit/Delete Employees (with their login credentials. Change password, reset password, sign up options for employees are not necessary)
- Add/Edit/Delete Flights (a flight has destination, target, pilots, etc. Use your creativity)
- Add/Edit/Delete Pilots

Employees can:

- Add/Edit/Delete Reservations

Seats of an airplane have multiple rows and columns. You can assume each row goes from A to D, and there are 20 rows of seats on a plane. Needless to say multiple customers reserving the same seat on the same flight is not allowed.

Stored Procedure

You are supposed to write 2 stored procedures: past flights and future flights, both taking one argument: pilot name/ID, returning past and future flights flown by that pilot. If the argument supplied is the string **ALL**, these SPs shall return all past and future flights, respectively.

Trigger

You are supposed to write a trigger on your Reservations. If the customer making that reservation is not in the database, he/she shall be added to the corresponding table.

SQL Injection - Bonus

If you avoid SQL injection on your login page, you will be awarded bonus points.

Report

You are supposed to submit a report in pdf format. Your report shall have the following sections:

- Title Page
- Introduction
- Interface (add some screenshots. However, high quality images may bloat the size of your report. In that case, try reducing image quality before embedding them)
- Database (an ER diagram is compulsory. Use a drawing application. Do not draw it on paper and take its photograph)
- Conclusion

Submission

Deadline is **06.08.2017 23:59**. Late submissions will not accepted. Demonstrations will be on 07.08.2017. You are advised to plan ahead since we will not have time for alternative demo dates. If Monday does not fit your schedule, you can submit early and demonstrate on Friday (August 4th).

You are supposed to submit a zip file (not a rar, tar, etc.) which contains 3 folders: code, report, and database. In the database folder, there should be a single sql file which is the exported version of your working database.

Tentative grading criteria:

- Demo: 50%
- Report: 30%
- SP: 10%
- Trigger: 10%
- SQL Injection (Bonus): 10%