University of British Columbia, Department of Computer Science

CPSC 304

2016 Summer Term 1

Project Part 1: Project Proposal

Group Name: Rekt Team

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above.

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

Project Description:

The project was based on an airline and airport management system. There were 2 types of users:

1) Administrators who were airline employees.
2) Normal consumers looking to book flights.

Adminstrators were capable to manipulating and querying certain information about the database that was available to customers. For example, administrators were capable of assigning Crewmembers to a certain flight but customers were not. There were statistical data that could be queried as well which is located on the statistics tab. A number of other functionalities such as deleting and adding flights, changing statuses of customers such that they are checked-in or not.

What this project accomplished is that it provides a very good basis for a robust future project. The project is designed for further improvement and we all plan on using this as a basis for further project.

Final Schema

Our final schema was the same as our formal project proposal, as we found no problems in implementing the schema as such.

List of SQL Queries:

- **insert into Customer (CusID,CusName,PhoneNum,Mileage) values (00000000,'Name',1234567890,0);**
- **Insert into Reservation (ConfirmationNum, CusID, FlightNum, Abbreviation) Values (0000, 00000000,000, 'Abbr.');**
- **delete from Reservation where ConfirmationNum =0000;**
- **Insert into CheckIn (CusID,FlightNum,CusStatus,Abbreviation) Values(00000000,000,'Status', 'Abbr.');**
- **"Insert into Luggage(LuggageID, Weight, LuggageStatus, LuggageType, CusID) values(" 000,0,'check-in','check-in',000);**
- **Insert into CheckIn (CusID,FlightNum,CusStatus,Abbreviation) Values(000,000,'check-in', 'BA');"**
- **Insert into CheckIn (CusID,FlightNum,CusStatus,Abbreviation) Values(000,000,'check-in', 'BA');**
- **Update Checkin set Cusstatus = 'Cancel' where CusID=000 and FlightNum=000 and Abbreviation = 'BA';**
- **Insert into CrewMemberFor(CrewID, CrewPosition, CrewName, Abbreviation) values (0000, 'Pilot', "Nick Haja,'BA');**
- **Insert into HasCrewMember (FlightNum, Abbreviation,CrewId)values (000, 'BA', 0000);**
- **Insert into Flight(FlightNum, Distance, ToDateTime, FromDateTime, ToWhere, FromWhere, PlaneID, Abbreviation) " +"values (000,000,0000-00-00) ,0000,'Vancouver','LA',000 ,'BA');**

- **Delete from Flight where FlightNum=000 and FromDateTime=0000-00-00 and Abbreviation= "BA";**
- **Delete from CrewMemberFor where CrewID =0000 and Abbreviation = "BA"**
- **Select ToWhere, count(FlightNum) as count from Flight group by ToWhere order by count desc**
  Select AirlineName, avg(temp.count) as NumberofFlights
  from (Select CusID, Abbreviation, count(ConfirmationNum)as count
  From Reservation natural join Flight
  Group by CusID, Abbreviation) as temp, airlines a\n" where a.Abbreviation=temp.Abbreviation
  group by AirlineName
  order by count desc
- **SELECT DISTINCT C.CusName, F.Abbreviation, F.PlaneID FROM Customer C**
  Natural JOIN Reservation R Natural Join Flight F
  GROUP BY C.CusName
  HAVING COUNT(*) = (
  SELECT COUNT(*) FROM Customer C2
  WHERE C.CusName=C2.CusName
- **Select M.Abbreviation, M.FlightNum, M.ConfirmationNum, M.CusStatus, F.FromWhere, F.ToWhere, F.fromDateTime From MyAccount M Natural Join Flight F Where CusID=0000**