Database Technology

Seminar:
Database design for project

BryanAir Project

Sijin Cheng
sijin.cheng@liu.se

LINKÖPING UNIVERSITY

Content

- **Common Problems**
- **Cross-checking**
- **Discussion**

Common Problems

- **Route and airport**
  - Every route should have a departure airport and an arrival airport
  - One airport have multiple routes

- **WeeklySchedule and Flights**
  - A WeeklySchedule can have multi flights**.**
  - Weeklyschedule (2019, "Monday", "08:00:00", “STO","PAR")
  - Flight (2ed week, 2019, "Monday", "08:00:00", “STO","PAR")

- **Pricing**

TotalPrice = Routeprice * Weekdayfactor * (#BookedPassengers+1)/40 * profitfactor

✓ make sure that the annual **profit factor** can indeed be different for different years

✓ The **route price** must depend on the year.

✓ The **weekday factor** must depend on the year.

Common Problems

- **Reservations (that have not been paid yet)**
  - may not contain information about each of the passengers
  - however, they must have **the number of passengers**

- **Reservations and Passengers**
  - Every Reservation can have many passengers
  - Each passenger can be included in multiple Reservations

- **Tickets and passengers**
  - make sure that each of the **passengers** in a **booking** has her/his own ticket (**ticket number**)
  - every passenger can have multiple tickets (for different flights/bookings)
  - the **contact** must be one of the passengers in the reservation

Cross-checking

20 minutes

LINKÖPING UNIVERSITY

TDDD46		
G1	Erica Christensen Weistrand <eriwe600@student.liu.se>	athilda Moström<matmo820@student.liu.se> Sophie Ryrberg <sopry923@student.liu.se>
G2	Stephanie Persson <stepe231@student.liu.se>	
G3	Marcus Wetterberg <marwe497@student.liu.se>	Sebastian Flinck Lindström <sebli658@student.liu.se>
G4	Anton Blåberg <antbl294@student.liu.se>	Gustav Lindahl <gusli687@student.liu.se>
G5	Jesper Elgh <jesel704@student.liu.se>	Ludvig Thor <ludth083@student.liu.se>
G6	Emily Berghäll <emibe402@student.liu.se>	Matilda Engström Ericsson <mater832@student.liu.se>
G7	Alexandra Goltsis <alego025@student.liu.se>	Anna Bergström <annbe364@student.liu.se>
G8	Carl Magnus Bruhner <carbr307@student.liu.se>	Oscar Linnarsson <oscli329@student.liu.se>
G9	Albin Vogel <albvo998@student.liu.se>	Erik Kronberg <erikr271@student.liu.se>
G10	Jonas Kallhauge <jonka997@student.liu.se>	Niklas Lindström <nikli445@student.liu.se>
G11	Linus Boström <linbo150@student.liu.se>	Rami Abdul Latif <ramab817@student.liu.se>
G12	Jerome Planken <jerpl728@student.liu.se>	Theodor Fällman <thefa576@student.liu.se>
G13	Henrik Wendt <henwe331@student.liu.se>	Matteus Henriksson <mathe228@student.liu.se>
G14	Carl Ekblad <carek682@student.liu.se>	
G15	Hyab Girma Abera <hyagi891@student.liu.se>	
732A57		
G1	Farhana Chowdhury Tondra <farch587@student.liu.se>	Prudhvi Peddmallu <prupe690@student.liu.se>
G2	Phillip Hölscher <phiho267@student.liu.se>	Zijie Feng <zijfe244@student.liu.se>
G4	Julius Kittler <julki092@student.liu.se>	Pedram Kasebzadeh <pedka102@student.liu.se>
G5	Tejashree R Mastamardi <tejma768@student.liu.se>	Vinay Bengaluru Ashwath Narayan Murthy <vinbe289@student.liu.se>
G7	Mariano Francisco Maquieira Mariani <marma330@student.liu.se>	Yusur Al-Mter <yusal621@student.liu.se>
G8	Andreas Christopoulos Charitos <andch552@student.liu.se>	
TDDD37_G11	Bilal Ahmed <bilah120@student.liu.se>	Sajawal Khan <sajkh857@student.liu.se>
TDDD37_G15	Namita Gireesh Bhat <nambh713@student.liu.se>	Safeek Ahmed Tajudeen <safta476@student.liu.se>

Hand in

After modifying

- update on the Gitlab and send me an email
- No later than Dec.2

Contains:

1. **EER diagram**

Make sure that the cardinality constraints (1:1 versus 1:N versus N:M) are correct

2. **Relational model**

- Make sure that your relation model is corresponding to your EER diagram
- primary key and foreign keys

Discussion

Thank you!

www.liu.se

LINKÖPING UNIVERSITY