



Individual Relational Database Design Viva and Report

Assignment Summary: Students will undertake the design, development and implementation of the relational database system for a large commercial airline booking system. Their database system will mirror the operation of a real flight booking system for an airline operating on an international basis. Students will be expected to develop the system from first principles.

Weight: Report and Viva = 100% of module score.

You should produce a report detailing and justifying your chosen database design. The report has a soft page limit of 15 pages. I am much more interested in a slightly shorter well-thought-out submission, rather than lots of waffle.

While you have designed the database as a group, I am interested in **your** justifications for the design decisions made. For instance, if you don't agree with your group's final database design, then you should highlight the problem areas and propose sensible improvements.

The content of the report is up to you, however, as a guide, I would expect you to include at least the following:

- An overview of the database design ER diagram (if you wish to include multiple diagrams, you may include these in the appendix which will not be counted as part of the page limit);
- Information on the primary keys, foreign key constraints between tables and the data types used in your database;
- A discussion and justification for some of the important design decisions you made;
- A discussion and justification for some of the important normalisation decisions you made;
- A discussion and justification for some improvements you might make to the design;
- A discussion and justification for a database (Business Intelligence) report that you could create, along with the proposed SQL for the report.
- Evidence of your SQL queries (these can simply be pasted into the appendix)

The report is essentially a wider extension of the work you need to compete for your viva/demo. You are welcome to re-use content prepared for your individual viva/demo.

It is my general expectation that the diagrams you will include in your report will be created on a computer. However, if you wish, you may also include scanned/photographed images of your early draft database design diagrams.

The submission date for this individual report is 5pm on Friday 23rd November 2018. Please submit your report using the assignment tool on Canvas. Your report

should include a copy of the 'Declaration of Academic Integrity' form (which is not included in the page count). You may type your name in the "Student's signature" area of the form. You must submit only a single PDF document, which will contain the Declaration of Academic Integrity form, your report and the appendix.

Individual vivas will take place w/c Mon 26th November 2018 and will be bookable via Canvas. Once all the slots are taken, if you want to swap you must arrange this with another student.

Each viva will last for approx. 10 minutes. You should prepare enough material so you can talk & demonstrate your database for 10 mins.

It may help you to decide on a narrative, but don't feel you have to script every last word. However, you should pre-write your SQL Queries and bring them with you (memory stick/email/cloud/IDrive). There's no magic number for the number of queries that you should write, or how much sample data you should include, or topics you should cover, but it may help you to try a dry run of your demo and see how long it lasts.

You will be provided with a desktop computer, which has the same build as the lab machines we use each week. You can connect to your MySQL Database using PHPMyAdmin or Workbench. Alternatively, you can bring your own laptop to work from.

You might want to bring:

- Copies of your queries (pre-written)
- A (printed?) copy of your final ER diagram
- A few (printed?) screenshots from Easyjet.com (to aide your narrative)
- Any notes you made when practicing

You must bring:

- A printed copy of the report you submitted on Canvas

Important: Your viva is treated as an exam – if you miss the slot that you commit to you will need to submit an exceptional circumstances form otherwise you will have deemed yourself to be absent from the exam without mitigation.