

# **BSc Web Technologies**

## **Database Project Due Date 07 Dec 2016**

The aim of the project is to assess the student's ability to design and construct a database that can be deployed in a commercial database management system. The initial phase of the project requires the student to design a relational database for a scenario (pick one model) given out in class or a model agreed with me. The business rules of the scenario must be developed and implemented via the database schema and queries as follows:

1. Relational Schema
  - a. Tables
  - b. Attributes
  - c. Primary Keys
  - d. Foreign Keys
2. Test Data
3. Queries
  - a. Select
  - b. Insert
  - c. Update
  - d. Delete

The second requirement of the project is to use the database created to demonstrate Codd's rules with respect to your individual database. The first 10 rules **MUST** be demonstrated using SQL including an explanation (rules 11 and 12 do not require SQL).

The above are to be submitted to Moodle as follows:

1. Relational Schema
  - a. PDF schematic of the database i.e. tables and relationships
  - b. SQL script to create the schema (CREATE COMMANDS) along with comments.
2. Test Data - SQL script to INSERT data along with comments.
3. Queries - One SQL script with each query separated along with comments.
4. PDF file with each of Codd's Rules clearly labelled and demonstrated.
5. Project Report (1 page)

Marks Awarded for the following:

1. Functionality (Working application)
2. Architecture (Data Model)
3. Complexity
4. Originality / Innovation
5. Completeness