Assignment / Assessment Specification

Module

Title	Lecturer	Class group
Databases 1	Patricia O'Byrne	DT211C/2

Assignment

Name	Worth: 30% of module	Due date/time
ERD and SQL	Estimate of time required: 30 hours	Week 11 Thursday midnight 23rd April 2020

Submission mechanism *(Only submit through mechanisms listed here – other submissions will be ignored)* Brightspace	Individual Brightspace submission	Late submission penalty 10% per week for 1 week. No submissions allowed after that.

Pick a Case Study:

Sign up for a specific case study on the google sheet provided. You are expected to stick to your choice once you have signed up.

ERD (12 OF 30):

Using ERWin, design an Entity Relationship Diagram using IE notation, to hold the persistent data for your case study. From this, generate SQL. NOTE: submit a .png of your ERD, not the ERWin model. Also submit the created SQL statements in a single script that will run independently of your schema. Prior to creating the tables, your script should drop the current version of those tables.

Run the SQL in your own schema, to create the tables.

SQL(10 of 30):

Populate your tables by inserting rows. Each table should have at least 4 rows, with weak entities having a lot more. Make your data persistent by committing. Submit your INSERT statements in a single script, separate to the creation script.

Write SELECT statements to get the information back from them. The SELECT statements should show your mastery of SELECT, PROJECT, UNION, INTERSECT, MINUS, JOIN (inner and outer), sub-queries complex queries (see week 9) and aggregation. Please note that when your queries are checked, marks will be deducted if there is no data to satisfy the query. Submit a separate script with your queries in it.

TRANSACTION(8 of 30)

Write a transaction to manipulate (i.e. change) the data in the database and leave it in a consistent state. It should run as a single script. It should prompt the user to enter a value and use that value in the transaction. To test this, grant the appropriate privileges to another person in your class and allow them to run it from their account. Submit the grant statements in one script and the transaction in another.

Submission:

1. Submit a Word document with a readable **picture** of your ERD, showing your thought process while creating your ERD and designing your transactions and queries.
2. Submit 5 x SQL well commented scripts as outlined above.
3. DEMONSTRATE your submitted work to the lab supervisor.