Stuff B Gone!



#### Objectives:

1. Create, execute, and test stored procedures involving queries and DML statements
2. Demonstrate error checking and RAISERROR
3. SQL Transactions

#### Requirements:

Create the following stored procedures as described.

* Do not add any functionality or validation not asked for.
* Make your procedures as maintainable and efficient as possible (i.e., avoid selecting the same data more than once from the database, clear logic, etc.).
* Ensure that transactions are only used where required.
* Raise a user-friendly error if:
  + Required parameters were not passed to the procedure - if any parameters are missing, you may raise a single error
  + A DML statement fails
  + Records to be updated or deleted do not exist

An ERD has been provided for you as well as the relevant table create statements and some sample data in **Lab3.sql**. You may wish to add/remove/update the data in the tables to fully test your stored procedures.

1. Write a stored procedure called AddStaffType that accepts a Description and will add a new StaffType to the StaffType table. Duplicate descriptions are not allowed! If the description being added is already in the StaffType table give an appropriate error message. Otherwise, add the new StaffType to the StaffType table and select the new StaffTypeID. (**3 Marks**)
2. Write a stored procedure called UpdateReward that accepts the RewardID, Description and DiscountPercentage. If no errors are raised update the record for that Reward. (**2 Marks**)
3. Write a stored procedure called DeleteConsignmentDetail that will delete a single ConsignmentDetail record. If the record exists, delete the record from the ConsignmentDetail table. (**4 Marks**)
4. Write a stored procedure called LookUpCustomerHistory that will return the customer’s full name, consignment dates and totals, and descriptions of the consignment Items for a single customer. (**2 Marks**)
5. Write a stored procedure called UnusedCategories that returns the CategoryCode and CategoryDescription of all the categories that have not been used on any consignments. **Do not use a join**. (**2 Marks**)
6. Write a stored procedure called LookUpStaffType that accepts any part of a staff type description to search for. Return all the StaffType data for those staff types that have that part in their description. (**2 Marks**)
7. Write a stored procedure called AddConsignmentItem that will accept ConsignmentID, Description, StartPrice, LowPrice, and CategoryCode, to perform the following (All parameters, if passed in, will be valid):

(**8 marks**)

* Add a record to the ConsignmentDetail table. Assume that the Consignment record already exists in the Consignment table. The Line ID will start at 1 for each consignment and increment by 1 for each additional item added on to that consignment.
* Update the appropriate Consignment table data to reflect the added ConsignmentDetail record. Remember the following:
  + The cost to consign an item is determined by the Category the consigned item is in
  + Subtotal is calculated and recorded after any reward discounts have been subtracted
  + GST is calculated after the Reward Program discounts are subtracted
  + Total = SubTotal + GST

Lab Submission is to include the following:

* A single script file submitted to Moodle called “**Lab3\_LastName\_FirstName.sql**” that contains all the stored procedures with drop procedure statements at the **top** of your script
  + Use SQL comments to label and separate each stored procedure **clearly**
  + No test data, random comments or commented out code should be included
* At the beginning of your SQL script file, add a comment block with a **short** discussion about the lab including:
  + What you liked/disliked about the lab
  + How long it took you to complete the lab
  + How prepared you felt you were for the lab
  + If there are any known errors in your solution, please identify them in your discussion. Errors you have identified and simply could not find a solution for are more acceptable than undocumented errors ☺.
* Any additional requirements as specified by your instructor.
* **SELECT \* is NOT acceptable anywhere in your lab submission**
* Do not make assumptions. If you have questions about the company, ask your instructor (client). **This is not a group project. Working with another student on lab material may result in a grade of 0 for this lab.** Up to 3 Marks may be deducted for incomplete lab submission requirements, undocumented errors, or poor client communication (check the provided documentation for the answer before asking the client).

