

**Books Galore**

**Objectives:**

1. Create Database Triggers
2. Alter tables
3. Use DMIT1508Lab4DatabaseE01.sql to create and populate the tables

#### Requirements:

Create the following SQL Database Triggers:

1. Create a trigger called Lab4\_Q1 that will ensure that the SuggestedPrice will not increase by more than 25%. If this happens raise an error and do not allow the increase. (3.5 marks)
2. Create a trigger called Lab4\_Q2 that will ensure that there is enough NumberInStock for the new SaleDetail record. If there is not enough, raise an error and do not allow the SaleDetail record to be saved. (3 marks)
3. Create a trigger called Lab4\_Q3 that will ensure that a category does not have any titles when trying to delete it. If the category has titles raise an error and do not allow the delete. Disable the constraint(s) required to test this trigger. Show all the code required to do this. (3.5 marks)
4. Create a trigger called Lab4\_Q4 to add record(s) to the LogPriceChange table when the SuggestedPrice of titles change. It will record the date and time of the change, the ISBN, the old SuggestedPrice and the new SuggestedPrice. Only add records where the SuggestedPrice changes values. (3 marks)

ERD



**Submission Requirements**

Lab Submission will include the following:

* A single script file called “Lab4\_LastName\_FirstName.sql” that contains all your trigger code and other requirements with drop trigger statements at the **top** of your script. Use SQL comments to label and separate each trigger clearly. No tests or test data should be included. Select \* is unacceptable anywhere in your submission.
* All triggers must be created in your DMIT-SQL1 database.
* A professional-looking printed document in a swing-clip folder including:
* A title page displaying the lab number, student name, instructor name, and section number
* A **single-sided** printout of your script file
* 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
  + Recommendations for future labs (if any)
  + If there are any known errors in your solution, please identify them in your discussion
* Any additional requirements as specified by your instructor.
* The electronic copy of your script file (not compressed) will be submitted to Moodle.
* The printed copy of your script file will be submitted to your instructor.
* The printed copy MUST match the electronic copy exactly.

**Other Considerations**

Do not make assumptions. If you have questions about the lab, ask your instructor. This is not a group project. Working with another student on lab material will result in a grade of **zero (0)** for both students. Up to 5 Marks may be deducted for incomplete/incorrect lab submissions.