

GROUP PROJECT

Purpose: The purpose of this assignment is to help you:

1. Apply your comprehensive database knowledge to solve practical problems.
2. Become familiar with Cursors, Exceptions, Procedures, Functions, Packages, Triggers, etc.

Instructions: Be sure to read the following general instructions carefully:

- a. This is a group-based project. Only one group member submits the solution **through the dropbox**.
- b. Your submission should include script file(s) to create table(s) and Word document.
- c. Requirements, ERD, Sample data to the database, Table, Records, PL/SQL code, and the screenshot of code execution result, the submission must be named according to the following rule: **Group#(lastname1_lastname2).docx**

[15 marks]

Create domain-specific e-Commerce website back-end database. Customers can search for products, add to a cart, place orders, and input shipping details.

1. Content of your database [3 marks]
 - a. Understanding the problem domain by studying websites, e.g., for mobile <https://www.bestbuy.ca/en-ca> or other websites
 - b. Tables
 - c. The number of tables should be between 5 and 10
 - d. ER diagram.
2. Sequence [1 mark]
 - a. Create at least one sequence.
 - b. Use it to insert sample data.
3. Indexes [2 mark]
 - a. Search is one of the common functionalities, index plays a critical role in search.
 - b. create a few indexes for those tables where the search is performed frequently.
4. Triggers [3 marks]
 - a. Create at least 3 triggers for table entry/updating behind the scenes.
 - b. Provide screenshots to demonstrate that the triggers can work properly.
5. Packages [5 marks]
 - a. Implement at least 2 procedures.
 - b. Implement at least 2 functions.
 - c. Include an exception section.
 - d. Demonstrate your ability to use the cursor.
 - e. Use TYPE attribute and/or ROWTYPE attribute whenever it is appropriate.
6. Complete and correct submission [1 mark]

DATABASE AND TABLES REQUIREMENTS:

1. Use the column prefix_ as per table names. (e.g. Table: Student , Attributes:Student_id, Student_name etc.
2. All products must belong to a category and products can have attributes.
3. Products must include prices.
4. The shopping cart must indicate products, prices and quantities and a status, i.e., checked out or not.
5. Customers must have relevant contact information
6. Shipping may be to the home address or any other address. There must be a shipping status with a discreet set of values.

There should be a minimum of 6-8 rows (6-8 insert statements for each data table). You should populate your tables with meaningful data.

SUBMISSION DETAILS:

1. Word document as per the Template
2. Separate. Sql file for
 - i. Create table and insert records.
 - ii. Sequences
 - iii. Indexes
 - iv. Triggers
 - v. Packages.
3. Submit Peer Review form (Individual Submission)

***Note:** Any form of plagiarism will be severely dealt with, and no mark will be awarded for the project. Please refer to the College policy outlined in the student's rights and responsibilities provided to you by the college.*