Cairo University
Faculty of Engineering
Systems & Biomedical Engineering Dept.
Software Engineering

4th Year
October 12, 2016
Due Date: October 19, 2016
Task#1

The main objective of this task is to assess your understanding of the concept of encapsulation and building data access objects (DAO). Before starting with your implementations, make sure that you have all the necessary components (MySQl, JDK, or Eclipse) installed on your machine.

You are required to build a handler to insert, update, retrieve, and delete products from an online store database. Each product is characterized with the following:

1. Product ID
2. Type
3. Manufacturer
4. Production Date
5. Expiry Date

You need to define a model describing the product to be used as an interoperability object. Make sure to implement all the needed accessors within this model (class).

The data access object must include the following methods:

1. Insert a new product in to the database (arguments: Product)
2. Delete an existing product from the database (arguments: Product id)
3. Update an existing product in the database (arguments: Product)
4. Retrieve all the products with provided by a certain manufacturer (arguments: Manufacturer).

You will need to construct a simple database of only a single table (Product) to use for testing your application. The implementation has to be in Java, you are free to use any way to demo DAO (Console or GUI).

Hosting your code on GitHub is a bonus.

Instructions:

1. This assignment should be delivered individually.
2. Due date is **12:01 PM** Saturday **October 22, 2016**.
3. You need to submit your source code via email (an archive or a GitHub repo link) to yassin.amer1@gmail.com
4. You can clone or download the DAO session's example from https://github.com/yassinamer/DAO1.git