

Emerging Technologies CSD3444
Project – 40% (15% + 25%)

The Business:

Smart-Mart is a convenient store that is located in Toronto, Canada. The store needs an application to use it in its daily business. The application will be written by your company for the store.

The Application Description:

- **Registering products:** Each product that the system will be dealing with must be registered. The product has the following info:
 1. Product Number
 2. Product Name
 3. Product Description
 4. Product Unit selling Price
- **Individual Billing:** When a person shops in the convenient store, the user will do the following:
 1. User will input the product number and number of units purchased (sold)
 2. Step 1 will be repeated until all products entered
 3. At the end of the billing, the bill will be generated
 4. Consider 13% tax ALWAYS
- **Sales Report:** At end of the day or when requested, the system will create a report that shows the following:
 1. The product Number & Names bought
 2. Number of units bought per product
 3. Total price of the product
 4. Totals of the ALL products bought in that day
- **Shipping Products to the store:** User will add product to the store after being ordered and received to the store. The information includes the following:
 1. The product's number
 2. The product units received into the store

3. The product wholesale price
 4. Product expiry date (if exist)
- **Stocking Report:** Another report can be generated. The report will show the products that are about to finish. The minimum number of the product that should be in store is 10. otherwise, system will put the product on order list

Discussion: 15%

- The project will be discussed and every student must answer questions being asked about the project (code or design)
- Attending the discussion is mandatory. Any student absence from the discussion will get grade 0 out of 35 in the project

Project-B: 20%:

- Write the code that implements the above-described operations
- Your code must be completely documented (i.e. commented)
- The code must use Object Oriented Programming including inheritance and polymorphism
- The code must have exception handling so it does not crash for any reason
- Your code must Not use more than 20% of Internet or not discussed code.
- You must submit ALL .py files of the whole application (the database, other codes)
- You must submit also a .doc file (NOT .pdf) file that works as user's guide. In this file, you must explain what all operations the application does, the application files description (what each .py file does), how the user can use the application (i.e. steps), initial password(s) if exists, application hardware and software requirements, etc.
- **Due Date: 3 days before the discussion day**

If you have any question, please email me at:

ahmad.alhamed@cestarcollege.com