

# University of British Columbia, Vancouver

Department of Computer Science

## CPSC 304 Project Cover Page

Milestone #: 1

Date: 6 of October

Group Number: 43

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your email address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

## **Project Description:**

This project will focus on the domain of inventory management, a detailed description of the project we plan to build is given below.

The company has many warehouses across the world, each warehouse has a unique location. The warehouse stores various types of goods depending on the kind of warehouse. The general type of warehouse stores most of the goods except dangerous explosives and food products, as these go to dangerous explosive warehouses and food-grade warehouses.

Every warehouse is managed by some manager, a manager could manage multiple warehouses in an area. Each manager has a unique ID, name, contact info and house address.

Each warehouse will keep a list of the products it stores, each product has a unique product ID and a short description, the warehouse keeps track of the inventory and the last restock date, and it will also remind the manager to restock once the inventory for one specific product drops to some pre-set threshold.

For each warehouse, every product will have a supplier. We will keep the suppliers' contact info, contract start date and location.

The clients are assigned a unique ID. We also kept a record of the client's name, location and contact info.

Every client could make multiple orders, each order records the client's ID who made the order and the product's ID contained in the order, and then the program will decide which warehouse will participate in this shipment based on the distance between the client and warehouse.

Different kinds of insurance may apply to warehouses. Each type of insurance will have a unique ID and an insurance policy.

Every warehouse will have a seasonal audit. Inventory and safety audits will apply to all kinds of warehouses. The food quality audit will only apply to food-grade warehouses, each audit will record the warehouse ID being evaluated, audit type ID, inspector ID and an audit score on a hundred-point scale.

Every audit is carried out by some inspector, an inspector could be responsible for multiple audits. Each inspector has a unique ID, name, contact info and house address.

### **Database specifications:**

Managers should be able to see the inventory present in their own warehouses keeping track of how many items they have and if they lack any specific products. They also should be able to track orders of their specific products to see who bought the item, where it is going and which car will do the delivery. They also should be able to change prices of specific items as if they found a better supplier. On the other side of the spectrum, customers should be able to make orders, and the database internally makes the adequate changes to all the tables and informs the managers of the recent purchase.

### **Project Platform:**

The main idea for our warehouse management system would be to build a web application using php and the oracle servers of the university. This web application would probably require javascript, html and css but no specific framework as we consider more important to focus on the design of the database rather than the front end of the application.

## ER Diagram:

