Project 1: Warehouse Management System
CSCI 430 – Object Oriented Programming
Saint Cloud State University

Group 11

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Warehouse Management Business Process

Warehouse Client Operations – New clients will be able to add themselves to the system before they begin shopping. After registration, the system will generate their unique client ID, which will be used in the checkout process. As a client of warehouse, they can fill their shopping cart and check out.

Client Checkout – When a client goes to check out, everything in their cart is rang up. For each item that is rang up its cost is added to the invoice for this order, which is associated to their unique client ID. The invoice is a line by line record that records purchase price and amount purchased. The stock count for that item in the warehouse is appropriately adjusted. If an item on the list cannot be fulfilled it is added to the waitlist order that is attached to their ID. After the order is finished processing the transaction is logged, invoices are generated, and the client's account is billed. If there is an order that needs to be added to the waitlist it is added. Then the order is shipped off to the customer once payment is received.

Warehouse Resupply – When the warehouse receives a shipment of stuff in there are several processing steps that are required. First, the waitlist is checked for the arriving product and a clerk is notified to fulfill an order on the waitlist with the new product. After waitlist orders are filled, the rest of the shipment is entered into the stock of the warehouse. During the receiving process, the counts and data of the received products are logged to later compare with supplier shipped products. With this logged data the warehouse can query products and data, such as prices, from suppliers.

Runnable Queries:
- Analyze data by running scripts on the database
- Retrieve the transaction history for a specific client ID
- Collect manufacturers information in the system such as the given price for a product they provide with the warehouse
- View clients registered with the warehouse with an outstanding balance on their account
- Search products in the warehouse and find their attributes such as stock count, purchase price, and number on wait list