
Instructions

Problem

Mshayas Edetech is the company located Amanzimtoti, Adams mission. The company deals with liquid detergents manufacturing. Recently, the demand for their products is increasing at a rapid rate. Thus, the company now finds it difficult to monitor their stock levels as it requires to manually count stock at hand, so as to know when to manufacture those products that may be low on stock. As a result, their customers usual surfer a huge delay on their orders and they are now beginning to lose some of them.

The hired business analyst has recommended moving the stock taking component from manual to electronic part of the system, to easy the long process of manual counting stock at hand, this recommendation was adopted by the company and ready to be implemented.

Business rules

- If the stock is either low or too low, need to be manufactured, too low being the priority.
- The following products expected to be in stock as follows:

Products	25 Litres
Dishwashing liquid	27
Hard surface cleaner	12
Thin bleach	27
Thick bleach	27
Pine Gel	16
Pine Disinfectants	27

Stock levels indicators

Stock levels

Stock	Level
Greater than 50%	Good
Less than equals to 40%	Too low
Greater than 40% but less than equals to 50%	low

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- A new stock must be added as the current stock is going low or too low.
 - The stock at hand must be always updated as the changes are made either by adding new products or selling them out and the date must also be indicated as and when the changes happen.
 - The manufacturing staff should be able to view which product should be manufactured which one is still ok.

Requirements

The company hired the system Analyst who came up with the following system requirements:

Technical specification

1. text files are required to Store products in stock and other as it may be necessary.
2. The use of classes is required.
3. Arrays of objects as way to structure data as it will be read in the text file should be part of the implementation.
4. Graphical user interface design is required (IDE: Netbeans Language : Java)
 - MDI, Menu bar, menu items are strong recommended.

Functionality

- Login to the application
- Read and Write to/from text file
- Necessary calculations
- Validate input
- Writing to excel
- Add and update stock
- Display on JTable
- Exception handling
- Run

Design

- Easy to use
- Consistency
- Layout