

Inventory Module

Assignment 1



**User's Manual
Document**

**Ohana Ron
Litman Tal**

["Tuki" on GitHub](#)



USER'S MANUAL

TABLE OF CONTENTS

	<u>Page #</u>
1	4
1.1 SYSTEM OVERVIEW	4
1.2 INVENTORY SYSTEM ENTITIES	4
2	5
2.1 LOGGING ON (GAINING ACCESS TO THE SYSTEM):	5
2.1.1 <i>Starting the app:</i>	5
2.1.2 <i>Entrance Menu:</i>	5
3 SYSTEM SUBMENUS	6
3.1 <i>Product management system</i>	6
3.2 <i>Reports System</i>	7
3.3 <i>Damaged / Expired Products management system</i>	7
3.4 <i>Category management system</i>	8
3.5 <i>Discount management</i>	8
3.1.5. <i>Register a new user:</i>	9
4. DEVELOPER'S SECTION:	9

1 GENERAL INFORMATION

1.1 System Overview

We introduce our “Tuki” Management System!

The system will provide tools for managing Inventory in the "super-lee" supermarket.

1.2 Inventory System Entities

- Stock Product -
represents products that the store is CURRENTLY holds in the stock.
e.g : “Milk 3%”, a stock product has a unique **Product ID**, selling price,category which the product belongs to,a minimum storing amount, quantity in store/warehouse/total and discount period if applied.
- Product Instance -
represents a single entity of a stock product:
e.g: “Milk 3%” can have 3 Products instance’s 2 in the store shelves and one in the Stock.
each Product instance have a unique **Serial Number** and holds the following data:
buying price, a label that inform that the product is damaged/expired and expiration date.
- Category -
each product may belong to a category, and each category may be a sub-category of another category - e.g: Category “Milk Products” and sub category “Small Milk 3%”
each category have a name and unique **Category Id**
(note: we defined a default category with name “Default Category” and Category ID is ‘0’)

2 QUICK START GUIDE

2.1 Logging On (Gaining Access to the System):

2.1.1 Starting the app:

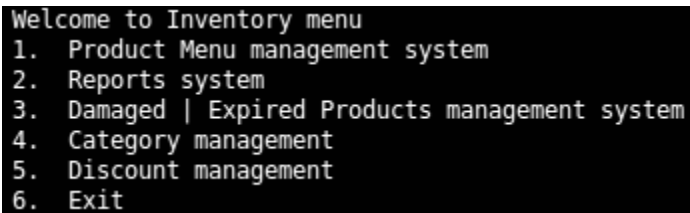
At first you should start our program using the next command through CLI:

```
java -jar @ID1_@ID2.jar
```

2.1.2 Entrance Menu:

Once our program started you will be the following menu will appear:

(*to choose the correct option type the option number and press Enter key!*)

A screenshot of a terminal window showing the program's entrance menu. The text is as follows:

```
Welcome to Inventory menu
1. Product Menu management system
2. Reports system
3. Damaged | Expired Products management system
4. Category management
5. Discount management
6. Exit
```

(*Note! Please make sure to close the program in a proper way! which mean using the exit function closing the program ungracefully may cause unexpected behavior)

the following parts describes each of the system sub-menu's:

- Product Menu Management System(1)
- Reports System(2)
- Damaged and Expired Products management System(3)
- Category Management(4)
- Discount management (5)

3. SYSTEM SUBMENUS:

3.1 Product Management System(1):

(*to choose the correct option type the option number and press Enter key!*)

```
1. Add a Product to the current stock
2. Define new Product in the Stock system
3. Remove a specific Product from the system
4. Remove all Product records from the system
5. Update Product minimum amount
6. Edit product details
7. Back
```

1. Add a Product to the current stock - add a **Product Instance** to the stock note that you need to provide a unique Serial Number and a Stock Product ID if no Stock Product is related to the product instance use "2)Define a new Product in the Stock system"
2. Define new Product in the Stock System - use this option when you want to define a Stock Product to the the Stock system e.g: the store just started to sell "Bamba", means that you need to supply "Bamba" with a unique Product ID and and a Category related (use category id '0' if you want to use the default category), also note you should supply the product location (where to product is located in the store e.g: "2B" where 2 represents row and B is the column) after that you can add product to the current stock(1) using the "Bamba" unique Product ID
3. Remove a specific Product from the system - **Removes a Products Instance** from the system by supplying the Product Instance Serial Number
4. Remove all product records from the system - this option will delete the **Stock Product** from the system when supplying a **Product ID** note that all the **Product Instances** related to this Stock Product will also be removed.
5. Update Product minimum amount - this option will set a Minimum storing amount for a specific product after providing a valid **Product ID**, note that if the sum of Stock Product related instances is below this minimum amount a warning message will appear.
6. Edit product details - used to edit a Stock Product details such as - name, selling price etc..
7. Back - back to main menu.

3.2 Reports System (2):

The reports menu is providing useful reports regarding the stock

```
Welcome to reports menu!
1. General stock report
2. Report category
3. Back
```

(*to choose the correct option type the option number and press Enter key!*)

1. General stock report - calling the general stock report will make a general stock report which specify the following information for each **Stock Product**: Product ID, Product Name, Category ID, Category Name, Total Quantity, Storage Quantity, Store quantity, Minimum storing amount.

example:

```
-----
Product ID: 5552   Name: Bamba Category id: 0   Category: DefaultCat
Total Quantity: 1   Storage: 1 Store: 0   Minimum amount: 2
Selling price: 2.0   discount: 0%
-----
```

2. Report by category - calling the report by category option will generate a report with the same details as General Stock Report but will show **only** Stock Products related to given category, note that you can generate this report for more than 1 category if needed.
3. Back - back to main menu

3.3 Damaged | Expired Products management system (3)

The Damaged | Expired Products management system providing tools to supervise and conduct the damaged and expired products in the system.

```
Welcome to Damaged Products Management menu!
1. Report damaged product
2. Print damaged/expired products report
3. Refresh the expired list
4. Back
```

(*to choose the correct option type the option number and press Enter key!*)

1. Report damaged product - in order to report a damaged product you will need to supply a valid product serial number, after reporting the product the related Stock Products quantity will decrease by 1 and the product will be marked as “damaged”
2. Print damaged/expired products report - using this method the system will generate a report with all the damaged/expired products.

3. Refresh the expired list - using “Refresh the expired list” the system will scan all the products expired dates and will set the expired products as damaged without a need to manually scan and report each product.
4. Back - back to main menu

3.4 Category management (4)

```
Welcome to Categories menu!  
1. Display all store categories  
2. Add new category  
3. Delete category  
4. Edit category  
5. Back
```

(*to choose the correct option type the option number and press Enter key!*)

1. Display all store categories - will display for each category the following: Category ID, Category Name, Parent Category ID.
2. Add new category - will create a new category after providing : Category ID, Category Name, Parent Category ID (use 0 as default parent if no need to connect with a parent category).
3. Delete category - will delete a category with a given category id
4. Edit category - will allow you to edit the category information (parent category, and category name)
5. Back - back to main menu.

3.5 Discount management (5)

```
Welcome to discounts menu!  
1. Enter new product discount  
2. Enter new category discount  
3. Cancel product discount  
4. Cancel category discount  
5. Back
```

1. Enter new product discount - using this option you can add a discount on a specific Stock Product by providing a Product ID, you should specify the discount percentage with number from 0 - 100.

2. Enter new category discount - using this option you can add a discount to a group of Stock Products related to the same category, you should specify the discount percentage with number from 0 - 100 and a valid category id.
3. Cancel product discount - will cancel any discounts related to this product.
4. Cancel category discount - will cancel any discounts related to a category.
5. Back - back to main menu.

4. DEVELOPER'S SECTION:

Note that all the source code is located in the git repo inside the "Dev" folder.
Our project was build using MAVEN with Hibernate using SQLITE driver.
In order to run our program/creating jar please use: "mvn clean package"

we also provided with the .jar file some example products so you can check out our system functionality.
if you want to know which product is already loaded in the system you can generate a general report that will show you the DB state.

we also provided a Junit tests class in with 10 tests as the assignment requires you can view them in GitHub in the branch - "203519848_203314604"

Useful links:

GitHub - ["Tuki" on GitHub \(link to the Inventory Module brach\)](#)
more on maven - [QuickStart With MAVEN](#)