

College of Electronic Technology - Tripoli

Software Engineering Department

**Title of Project**

Inventory Management System

Advanced Visual Programming

**Students**

Ghassan Aljaafri: 162131

Moataz Hajres: 162132

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# Intro

An inventory management system (or inventory system) is a system that enables you to track your products’ stock through your supply chain, that includes Importing and exporting products.

There is a section ‘Products Management’ where the user will be able to Display, Add, Edit, Delete products.

The system also provides Authentication system with Password hashing and a ‘Users Management’ section that you can access to display, create, delete users.

All the features in the system are accessible only to authenticated users thus the users that have an account and was able to validate their credentials.

# Architecture

we tried to implement Clean Architecture in our project as possible as we can, Clean architecture refers to organizing the project so that it's easy to understand and easy to change as the project grows, below we have attached a picture showing the Clean architecture.

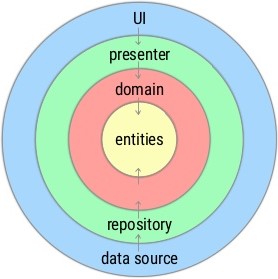


Figure 1 Clean Architecture

# Functional Requirements

* Login, Logout.
* Create, List, Delete Users.
* Create, Update, List, Delete Products.
* Import, Export product.

**Note:** The systemdoesn’t include Purchases, Sales, Invoices nor Reports.

# Use Case Diagram



Figure 2 Use Case Diagram

# Data Flow Diagram (Context)



Figure 3 Data Flow Diagram (Context)

# Data Flow Diagram (Add Product - Level 0)



Figure 4 Data Flow Diagram (Add Product - Level 0)

# Data Flow Diagram (Add Product - Level 1)



Figure 5 Data Flow Diagram (Add Product - Level 1)

# Entity Relationship Diagram



Figure 6 Entity Relationship Diagram

# Class Diagram



Figure 7 Class Diagram