SUNSTONE

“Stock Inventory Application”

# Task - 1

# Stock Inventory Application

- **Inventory management** is a set of activities aimed at tracking stock and maintaining optimal stock amounts. It encompasses control over the entire flow of goods, from purchase to sale, with the purpose of having the right amount of the right stock at the right place at the right time.

| LMS Username | Name | Batch |
|---|---|---|
| | Leesiya.R | 03 |
| | Janani.k | 03 |
| | Swetha.B | 03 |
| | Savitha.C | 03 |
| | | |

# Task - 1

## Creation of SRS & Github

- Create SRS : “Stock Inventory Application”
- Creation & Set-up of Github account
- Creation & Hands-on to various commands of Git Bash

## Evaluation Metric:

- 100% Completion of the above tasks

## Learning Outcome

- To ensure a continuous supply of materials and stock so that production should not suffer at the time of customers demand.
- To keep material cost under control as they contribute to reducing the cost of production.
- To supply the required material continuously.
- To maintain a systematic record of inventory.

# 1.Introduction

## 1.1 Purpose

The main objective of this document is to illustrate the requirements of the project Stock Inventory Application. The main purpose of Stock Inventory Management is to help businesses easily and efficiently manage the ordering, stocking, storing and using of inventory. The purpose of this project is to provide a friendly environment to maintain the details of Products and Customers. This project describes the hardware and software interface requirements using ER diagrams and UML diagrams.

### Document Conventions

Entire document should be justified.

Convention for Main title

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- Font style: Bold
- Font Size: 14

Convention for Sub title

- Font face: Times New Roman
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Convention for body

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## •1.3 Scope of Development Project

Inventory Management helps to manage the stock of the company. It provides proper details of the products what kind of raw material, what are the size we require and etc, to the purchasing department. When the Inventory management provides proper information to management, they buy according to them which helps the company to store fewer products.

Inventory Management helps to improve the productivity of the machines and manpower. Inventory Management helps to improve the profits of the company. It provide proper information about stocks, that saves the unnecessary expenses on stocks. The main aim of an Inventory Management system is to keep the stock in such a way that it is neither overstock nor under stock. The overstock condition will reduce the other production processes under stock will lead to stoppage of work. The objectives of Stock Inventory Application are operational and financial.

### Definitions, Acronyms and Abbreviations

JAVA -> platform independence
SQL-> Structured query Language
ER-> Entity Relationship
UML -> Unified Modeling Language
IDE-> Integrated Development Environment
SRS-> Software Requirement Specification
ISBN -> International Standard Book Number
IEEE ->Institute of Electrical and Electronics Engineers

## References

Books

Software Requirements and Specifications: A Lexicon of Practice, Principles and Prejudices (ACM Press) by Michael Jackson
Software Requirements (Microsoft) Second EditionBy Karl E. Wiegers
Software Engineering: A Practitioner’s Approach Fifth Edition By Roger S. Pressman

## 2.Overall Descriptions

Product Perspective

Use Case Diagram of Stock Inventory Application.

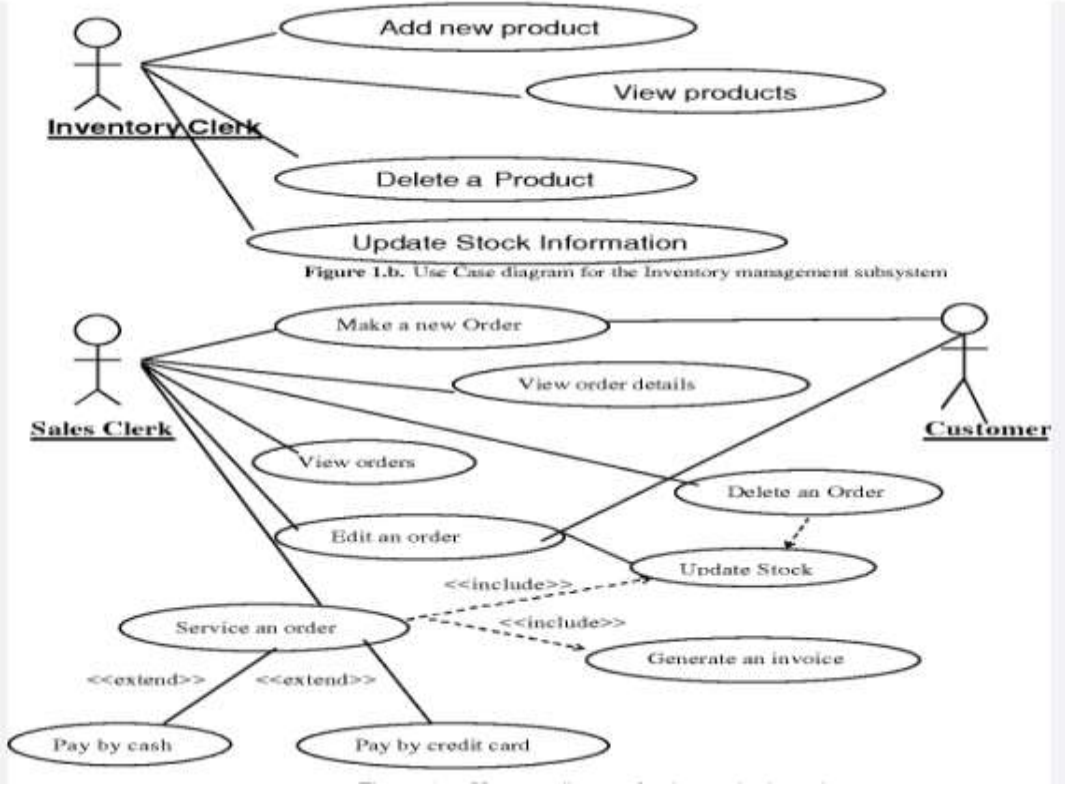
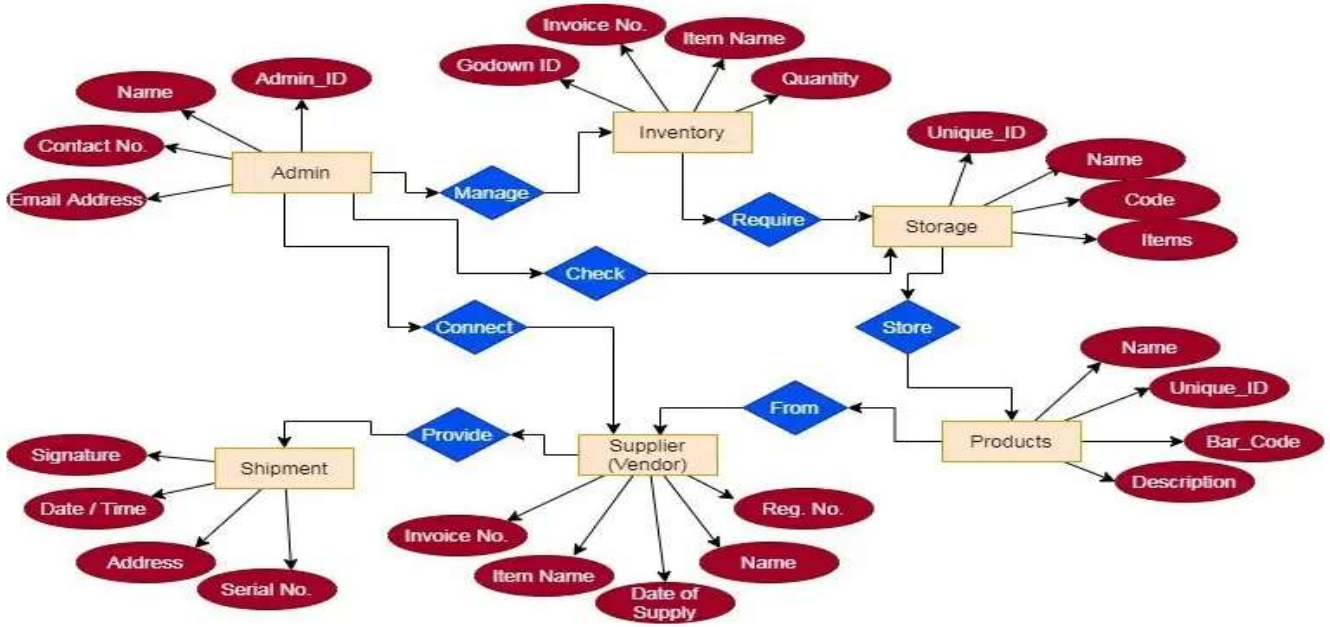



Figure 1.b. Use Case diagram for the Inventory management subsystem

This Use Case Diagram is a graphic depiction of the interactions among the elements of Inventory Management System. It represents the methodology used in system analysis to identify, clarify, and organize system requirements of Inventory Management System.

**Product Function**

Entity Relationship Diagram of Stock Inventory Application.




The diagram explicitly explains the use of data in a centric manner to showcase the different entities in a unified format along with the sundry attributes. It shows the relation among various entities and the type of information which is needed to be exaggerated in a civilized manner. The inventory system saves the data of every transaction which is done in a day.This is the supreme entity who controls the whole system, provides troubleshoot and help whenever the error occurs in the system irrespective of the supplier or inventory entity. It adds the receiving stock in the system, manage the data of vendors and the in house stock in the godown

## User Classes and Characteristics

The system provides different types of services based on the type of users[Customers/Manager]. The Customer-owned inventory management is the practice of a supply chain management. Stock management is the practice of ordering, storing, tracking, and controlling inventory. Stock management applies to every item a business uses to produce its products or services – from raw materials to finished goods.

**Features of customer and manager**

Contact Management
Sales Team and Customer Opportunity Management
Lead Management for Determining High-Quality Leads
Reports and Dashboards
Sales Analytics
Sales Forecasting
Email Client Integration
Workflow and Approvals
Sales Performance Management
Marketing Automation Integration
Call Center Automation and Integration
Web Analytics Integration
Product Level Quotes
Testing Environment
Customization Options
Social Media Management Integration
Customer Service Automation
Tracking

## Operating Environment

The product will be operating in windows environment. The Library Management System is a website and shall operate in all famous browsers, for a model we are taking Microsoft Internet Explorer , Google Chrome, and Mozilla Firefox . Also it will be compatible with the IE 6.0. Most of the features will be compatible with the Mozilla Firefox & Opera 7.0 or higher version. The only requirement to use this online product would be the internet connection.

The hardware configuration include Hard Disk: 40 GB, Monitor: 15" Color monitor, Keyboard: 122 keys. The basic input devices required are keyboard, mouse and output devices are monitor, printer etc.

### Assumptions and Dependencies

The assumptions are:-

- The coding should be error free
- The system should be user-friendly so that it is easy to use for the users
- The information of all users, stocks and dealers must be stored in a database that is accessible by the website
- The system should have more storage capacity and provide fast access to the database
- The system should provide search facility and support quick transactions
- The Stock Inventory is running 24 hours a day
- Users may access from any computer that has Internet browsing capabilities and an Internet connection
- Users must have their correct usernames and passwords to enter into their online accounts and do actions

The dependencies are:-

- The end users (admin) should have proper understanding of the product
- The system should have the general report stored
- The information of all the users must be stored in a database that is accessible by the Library System

## Requirement

Software Configuration:-

This software package is developed using java as front end. Microsoft SQL Server as the back end to store the database. Operating System: Windows NT, windows 98, Windows XP Language: Java Runtime Environment, Net beans 7.0.1 (front end) Database: MS SQL Server (back end)

Hardware Configuration:-

Processor: Pentium(R)Dual-core CPU Hard Disk: 40GB

RAM: 256 MB or more

## Data Requirement

Include the cost of each item, the location of the warehouses where it's stored if you have more than one, the specific customer or distribution location for which it's intended and its shipping cost. If you used credit to pay for the order or production, include the weekly or monthly interest the inventory costs you. The number of days it takes for the product to reach your warehouse once you've placed your purchase order with the supplier. A good inventory management system can factor in these lead times along with existing sales data to calculate your safety stock and recommend reorder points for each item.

## External Interface Requirement

GUI

The software provides good graphical interface for the user and the administrator can operate on the system, performing the required task such as create, update, viewing the details of the book.

It allows user to view quick reports like Book Issued/Returned in between particular time.

It provides stock verification and search facility based on different criteria.

The user interface must be customizable by the administrator

All the modules provided with the software must fit into this graphical user interface and accomplish to the standard defined

Login Interface:-

In case the user is not yet registered, he can enter the details and register to create his account. Once his account is created he can ‘Login’ which asks the user to type his username and password. If the user entered either his username or password incorrectly then an error message appears.

Search:-

The customers or sales person can enter the type of products he is looking for and the title he is interested in, then he can search for the required product by entering the product name.

Categories View:-

Categories view shows the categories of products available and provides ability to the sales person to add/edit or delete category from the list.

## 4.System Features

The users of the system should be provided the surety that their account is secure. This is possible by providing:-User authentication and validation of members using their unique member ID Proper monitoring by the administrator which includes updating account status, showing a popup if the member attempts to issue number of stocks that exceed the limit provided by the Inventory policy, assigning fine to members who skip the date of return Proper accountability which includes not allowing a member to see other member’s account. Only administrator will see and manage all member accounts.

## 5.Other Non-functional Requirements

### Performance

It is a measure of how quickly a system responds to data requests based on throughput and utilization improves efficiency by allowing you to manage your sales revenue inventory within one click. For example, the website's load time should not be more than one second for users.

### Safety Requirement

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup so that the database is not lost. Proper UPS/inverter facility should be there in case of power supply failure.

### Security Requirement

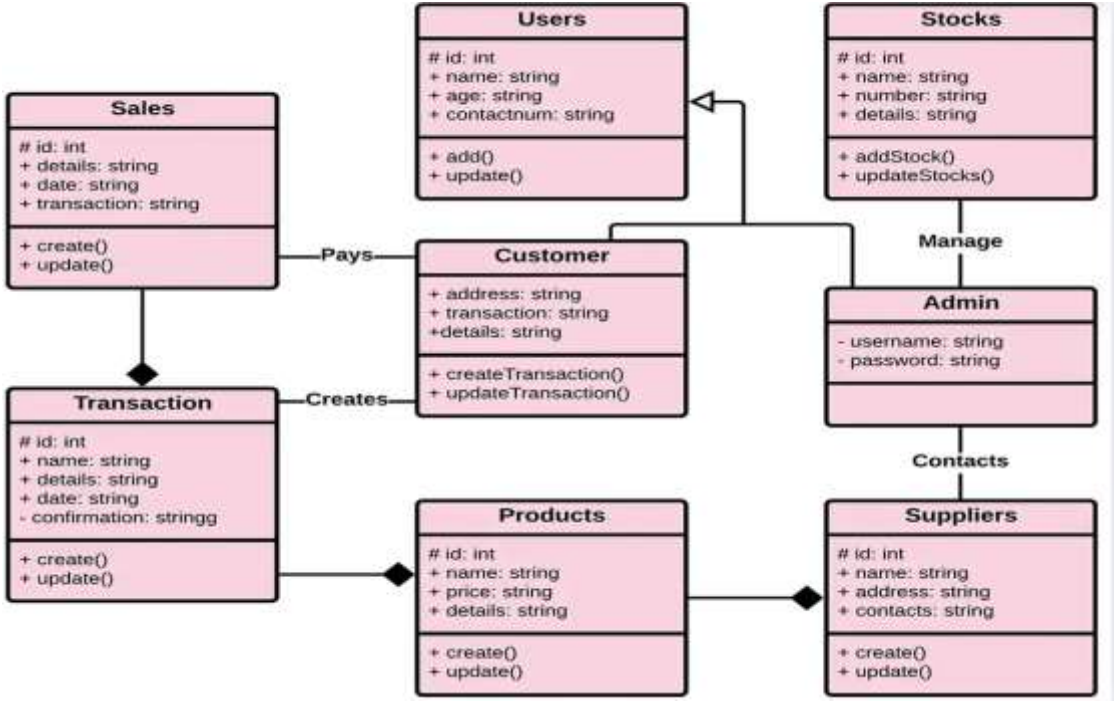
System will use secured database Normal users can just read information but they cannot edit or modify anything except their personal and some other information . System will have different types of users and every user has access constraints Proper user authentication should be provided. No one should be able to hack users' password There should be separate accounts for admin and members such that no member can access the database and only admin has the rights to update the database.

### Business Rules

A business rule is anything that captures and implements business policies and practices. A rule can enforce business policy, make a decision, or infer new data from existing data . This includes the rules and regulations that the System users should abide by. This includes the cost of the project and the discount offers provided. The users should avoid illegal rules and protocols. Neither admin nor member should cross the rules and regulations.

## Class Diagram

A class is an abstract, user-defined description of a type of data. It identifies the attributes of the data and the operations that can be performed on instances (i.e. objects) of the data. A class of data has a name, a set of attributes that describes its characteristics, and a set of operations that can be performed on the objects of that class. The classes' structure and their relationships to each other frozen in time represent the static model. In this project there are certain main classes which are related to other classes required for their working. There are different kinds of relationships between the classes as shown in the diagram like normal association, aggregation, and generalization. The relationships are depicted using a role name and multiplicities



# Submission Github


https://github.com/janani0602/NM-DSCET-03

# Thank you!