

## INVENTORY CONTROL SYSTEM

correctness of the diagrams depends on the problem statement she gives so copy mindfully!

### Termwork 1:

#### Functional Requirements:

**Item Management:** The system should allow for the creation, editing, and deletion of item information, such as product names, descriptions, prices, and quantities.

**Inventory Tracking:** The system should allow for the tracking of inventory levels, including real-time updates on stock availability and alerts for low inventory levels.

**Order Management:** The system should allow for the management of orders, including the processing of orders, tracking of order statuses, and updating of inventory levels as orders are fulfilled.

**Reporting and Analytics:** The system should provide reporting and analytics features to help managers measure inventory levels, monitor stock levels, and forecast future inventory needs.

**Purchase Order Management:** The system should allow for the creation, tracking, and management of purchase orders to help maintain adequate stock levels.

**Integration with Other Systems:** The system should be able to integrate with other systems, such as accounting or e-commerce systems, to streamline inventory and order management.

#### Non-Functional Requirements:

**Performance:** The system should be fast and responsive, with minimal latency when processing data or communicating with users.

**Scalability:** The system should be able to scale to accommodate large volumes of data and users as the company grows.

**Security:** The system should be secure, with features such as data encryption, secure authentication, and role-based access control.

**Availability:** The system should be available 24/7 with minimal downtime or maintenance windows.

**Usability:** The system should be user-friendly and intuitive, with a clear and consistent user interface that is easy to navigate and use.

**Reliability:** The system should be reliable, with minimal downtime or system errors, and the ability to recover quickly from any system failures.

#### Ambiguities:

->The system may not provide clear guidelines on how to handle inventory discrepancies or errors.

->The system may not provide clear guidelines on how to handle returns or exchanges of products.

->The system may not provide clear guidelines on how to handle inventory transfers between different locations or warehouses.

->The system may not provide clear guidelines on how to handle inventory management for products that are temporarily out of stock.

#### Inconsistencies:

->The system may have inconsistencies in the way it handles inventory data across different stages of the supply chain.

->The system may have inconsistencies in the way it handles product information, leading to inaccurate or incomplete data.

->The system may have inconsistencies in the way it handles order processing, leading to fulfilment errors or delayed orders.

->The system may have inconsistencies in the way it handles purchase orders, leading to discrepancies in inventory levels or order fulfilment.

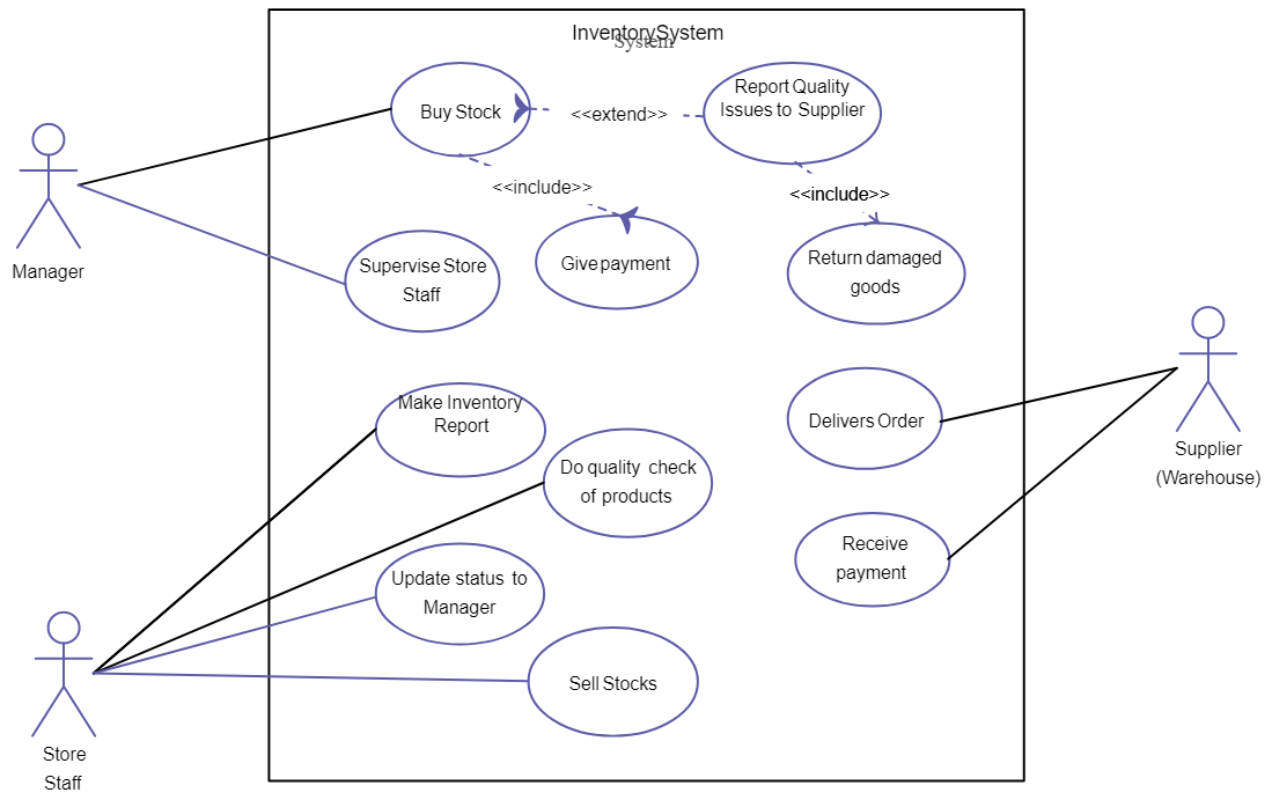
#### Incompleteness:

->Inaccurate inventory counts: The inventory control system may not accurately count the number of items in stock, leading to incorrect information about available inventory.

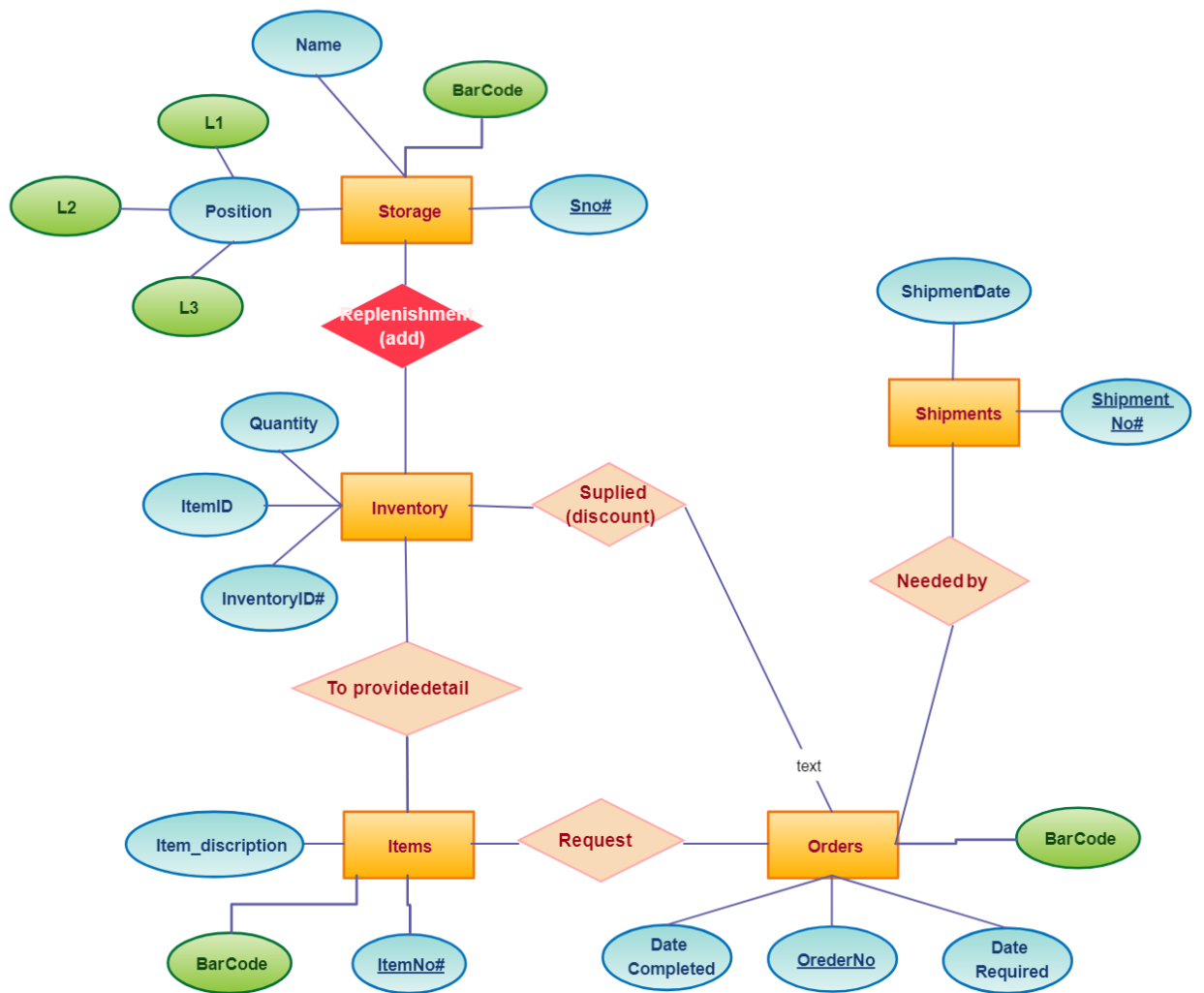
->Inadequate tracking of inventory movements: The system may not be able to accurately track inventory movements, such as items being sold or transferred between locations, leading to errors in inventory levels.

->Lack of integration with other systems: The inventory control system may not be integrated with other business systems, such as the point of sale system, making it difficult to accurately track inventory levels.

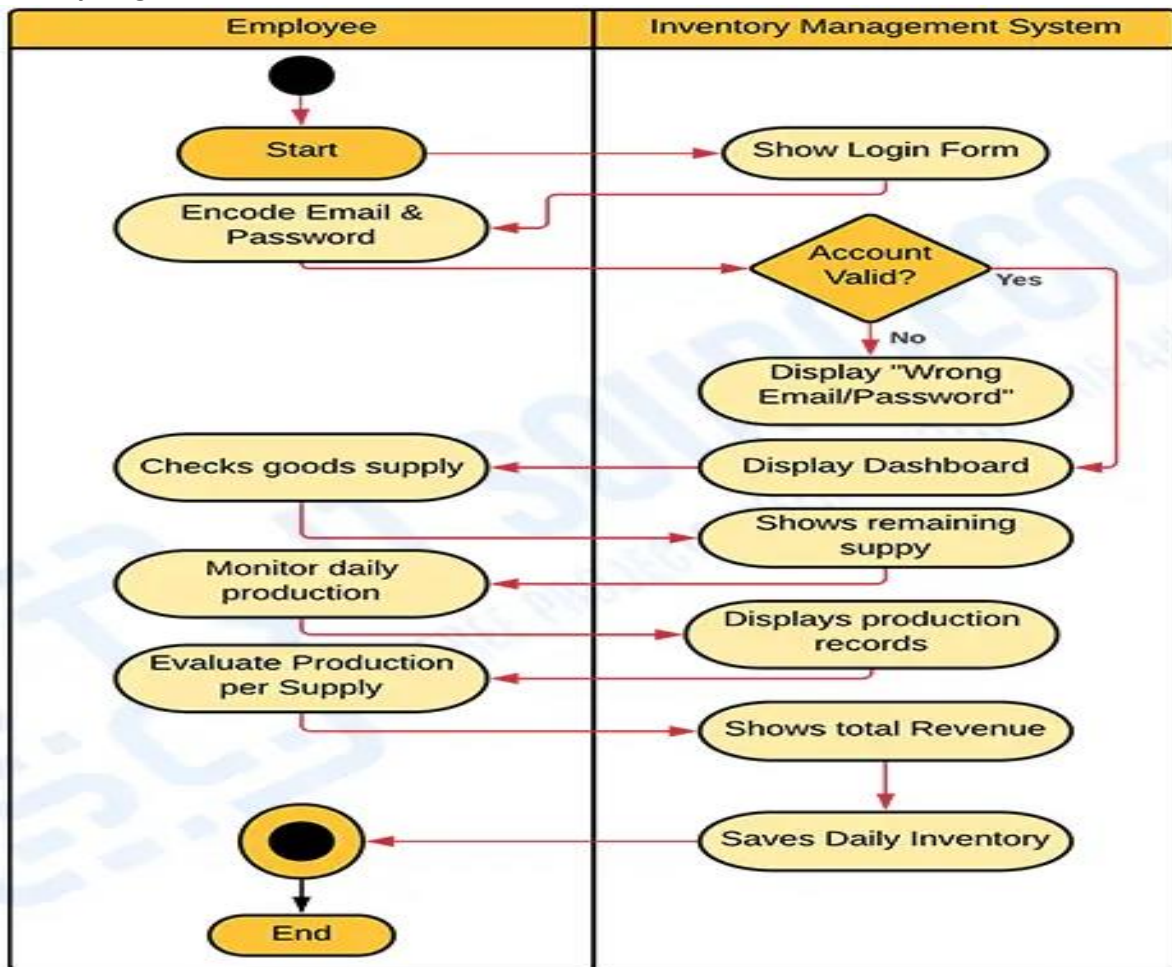
## Termwork 2:



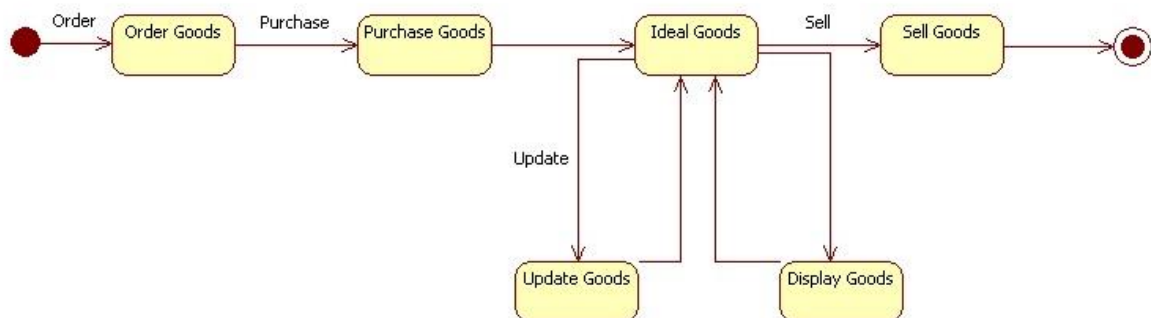
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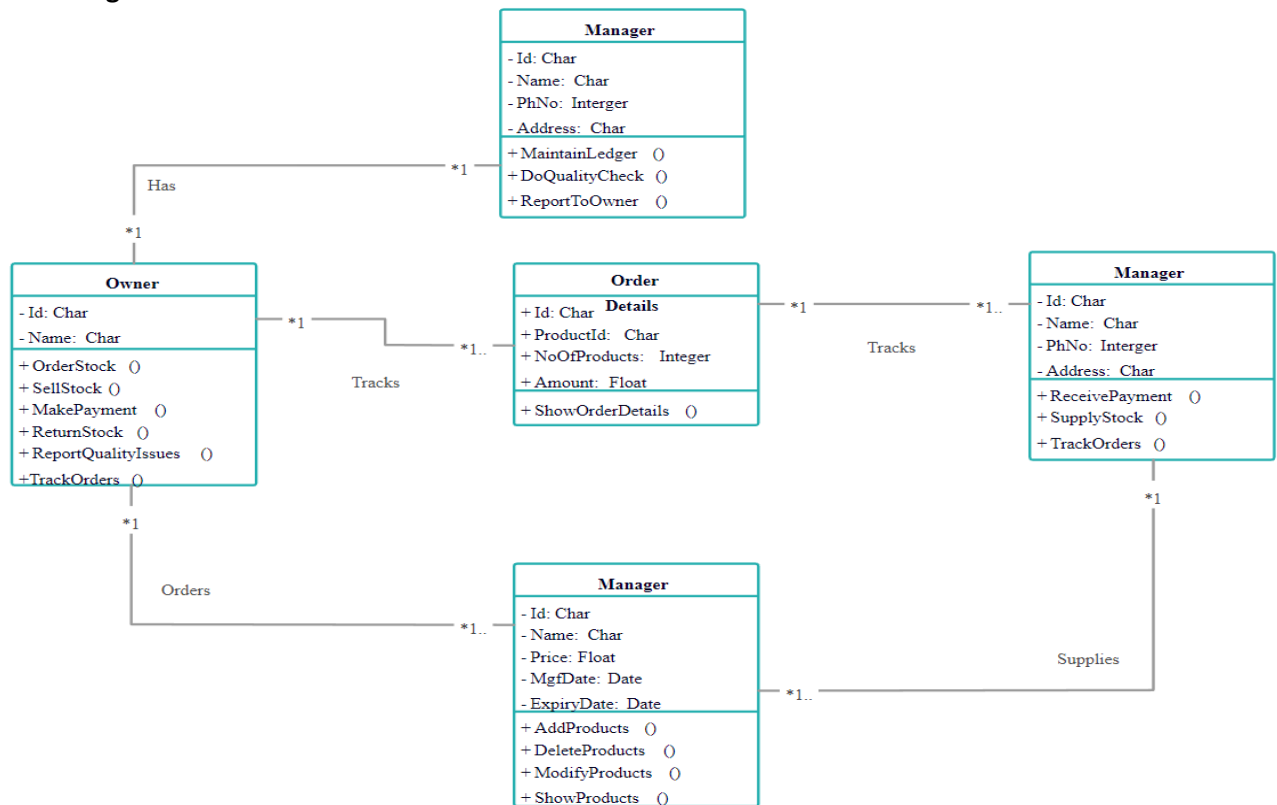
Termwork 5:  
activity diagram:



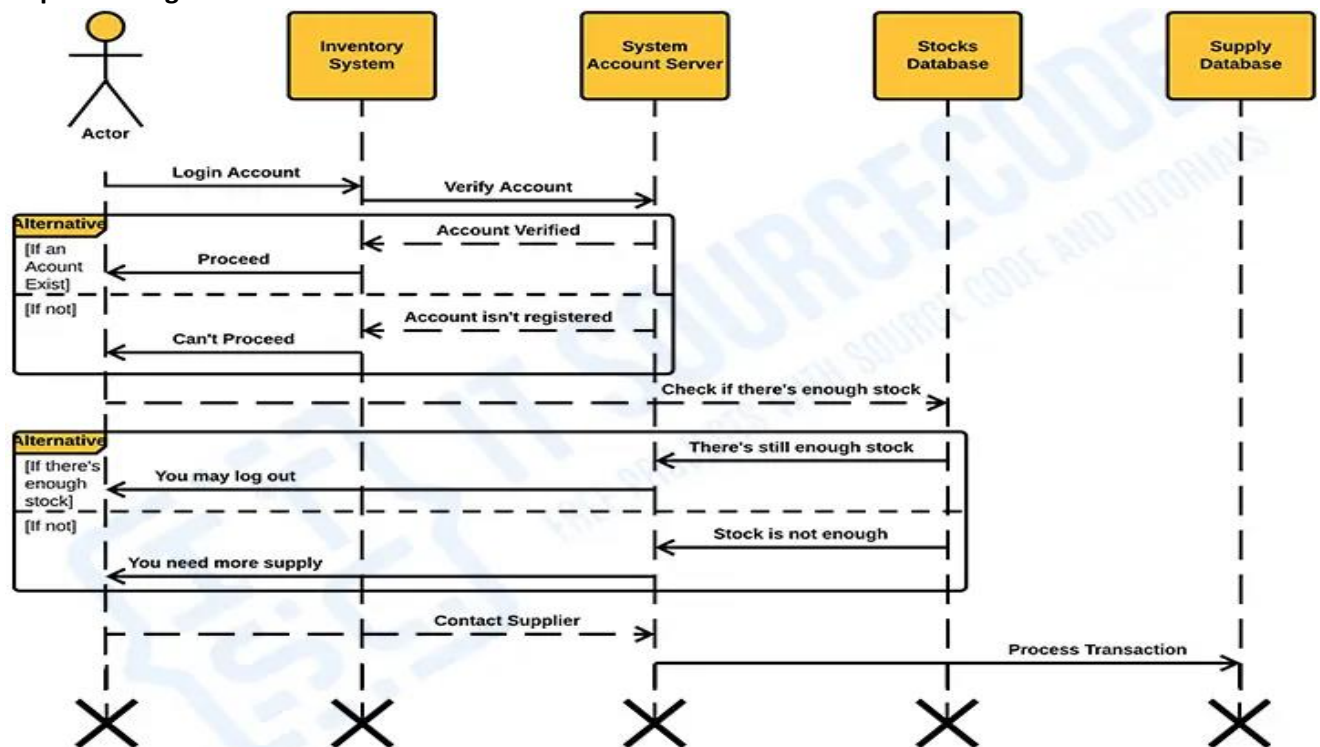
state diagram:



## Termwork 6: class diagram:



## sequence diagram:



## Termwork 7:

