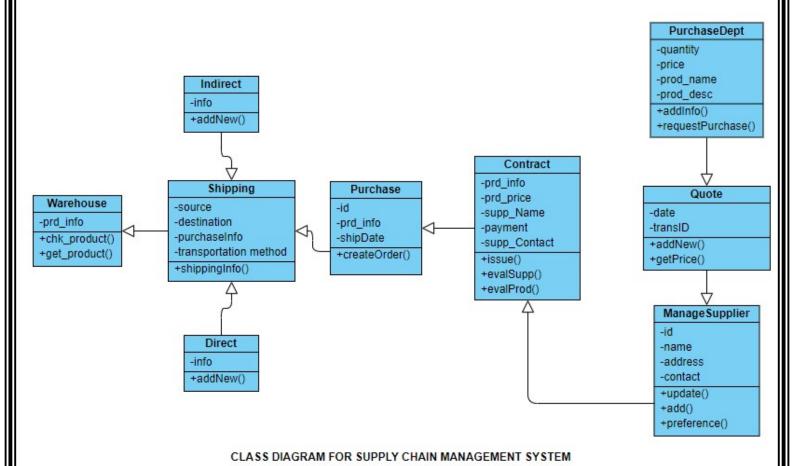
CLASS DIAGRAM

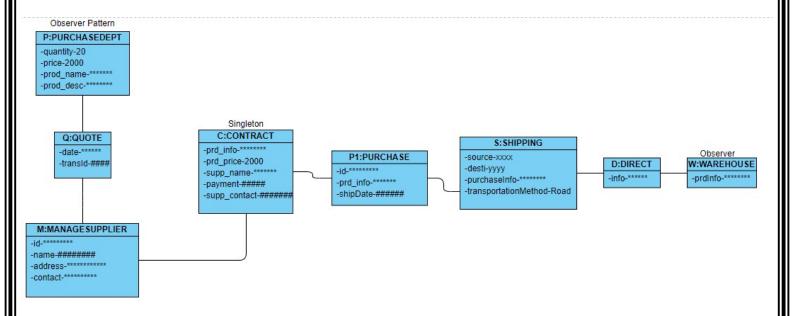


The classes listed in the SUPPLY CHAIN MANAGEMENT system are :

- 1. PurchaseDept
- 2. Quote
- 3. Manage Supplier
- 4. Contract
- 5. Purchase
- 6. Shipping
 - Direct
 - Indirect
- 7. Warehouse

PurchaseDept specifies the product name price and quantity based on which the quotation is made having attributes date and transID. This is followed by a Manage Supplier Class having ID,Name,Address and Contact. Based on these a Contract is made which is a Singleton class only one instance of which can exist at any given time. Based on that particular instance a purchase is made and a shipment date is assigned which specifies the Shipping class and defines whether direct/indirect shipping is taking place. Finally this goes into the warehouse and the inventory is updated.

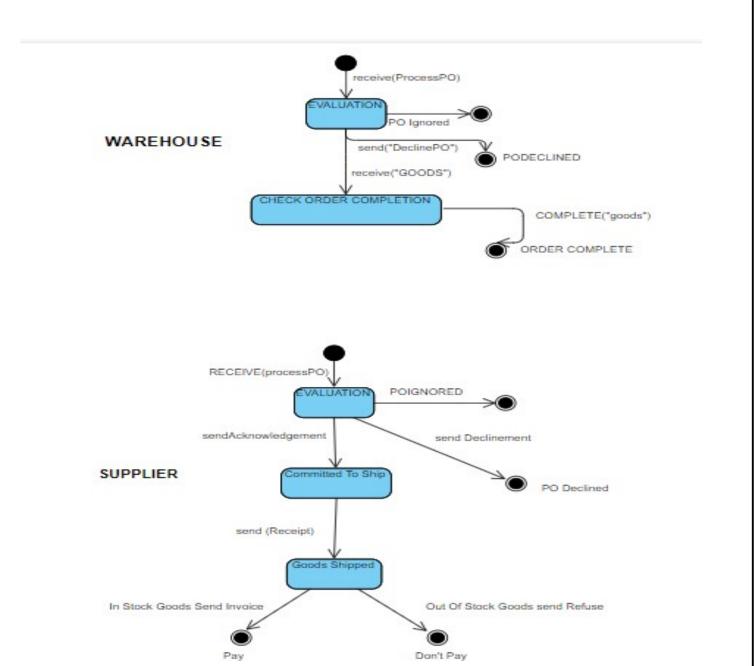
OBJECT DIAGRAM



Object Diagram for Supply Chain Management

The object diagram is basically an instance of the CLASS diagram wherein the same classes are specified but for a specific instance of the same. The various design architectures namely Singleton, Observer are specified for the classes as and where applicable. All the classes have their instances initialized with values. These values define a sample scenario for the normal operation and interaction of classes with each other.

STATE DIAGRAM



The states of WareHouse and Supplier are shown through the state diagrams above wherein basically WareHouse receives a process and evaluates the request and based on the result it is either ignored or declined or completed after checking the values.

On the other hand for the supplier it receives the request and based on the evaluation it is either ignored or declined or otherwise committed for Shipment and receipt is sent whether the goods are shipped or not. If in stock the payment is done otherwise no payment is made.