Class Diagram of Order System of an application:

Order and Customer are the two elements of the system. They have a one-to-many relationship because a customer can have multiple orders. Order class is an abstract class and it has two concrete classes (is-a relationship) SpecialOrder and NormalOrder. The two inherited classes have all the properties as the Order class. In addition, they have additional functions like dispatch () and receive ().

Sequence Diagram of an Order Management System:

The sequence diagram has four objects -- Customer, Order, SpecialOrder and NormalOrder. It shows the message sequence for SpecialOrder object. The message flow is nothing but a method call of an object. The first call is sendOrder() which is a method of Order object. The next call is confirm () which is a method of SpecialOrder object and the last call is Dispatch() which is a method of SpecialOrder object. The sequence diagram mainly describes the method calls from one object to another.

Use Case Diagram of an Order Management System:

There are three use cases(functionalities) -- Order, SpecialOrder, and NormalOrder and one actor which is the customer. The SpecialOrder and NormalOrder use cases are extended from Order use case. Hence, they have extended relationship. Another important point is to identify the system boundary. The actor Customer lies outside the system as it is an external user of the system. The customer interacts with the system through Order use case.

Activity Diagram of an Order Management System:

There are four main activities −

- Send order by the customer
- Receipt of the order
- Confirm the order
- Dispatch the order

After receiving the order request, condition checks are performed to check if it is normal or special order. After the type of order is identified, dispatch activity is performed and that is marked as the termination of the process.