## Develop an **Inventory Management System** with following requirements:

- 1. The inventory keeps track of different products. A product is identified by a unique id, quantity in stock among other details. Any product can be categorised into a good or cargo depending on the mode of shipment (land vs sea).
- 2. The system must be capable of handling concurrent requests to procure a product. If the product requested is out of stock, then the system must prompt a suitable message and continue to procure products as specified by the system or abort the purchase altogether. Also, once a product count falls below a certain limit, a notification shall be generated.
- 3. The system can generate statistics such as maximum items ordered from a given location, total number of remaining products in the inventory (good vs cargo), number of products ordered over a period etc.
- 4. The system currently caters to two different types of users- the manager who can add products, receive notifications, view statistics; a customer who can receive the product list with its type, price and other details. The customer must be able to add one or more products and receive an order confirmation with total amount the mode of shipment and expected date of delivery.