Design /設計

1.pojo

Ship Class

|  |  |  |
| --- | --- | --- |
| **Field** | **Data Type** | **Describe** |
| shipNo | String | The name of ship. |
| capacity | int | Capacity of the ship. |
| goodsLoaded | int | The quantity of goods loased. |
| freeDeadWeight | int | free Dead Weight |

Order Class

|  |  |  |
| --- | --- | --- |
| **Field** | **Data Type** | **Describe** |
| orderNo | long | The order number. |
| orderQuantity | int | The Quantity of Goods. |
| orderDetail | OrderDetails | The Order Detail. |

OrderDetails Class

|  |  |  |
| --- | --- | --- |
| **Field** | **Data Type** | **Describe** |
| orderNo | long | The order number. |
| ships | Ship[] | The Array of Ships. |

2.model

ShipList Class

ShipList is a singleton mode class. In constructor create shiplist.

|  |  |  |
| --- | --- | --- |
| **Field** | **Data Type** | **Describe** |
| instance | ShipList | Singleton object. |
| shipList | List<Ship> | The List of Ships. |

3. BusinessException

Custom exception.

4. Business

public interface Business {

Order takeOrder(final int orderQuantity) throws BusinessException;

}

5. Client

public class Client {

public Order orede(final int orderNum) {

// Code here.

}

}