

DATA

```
List<Order> orders;
```

```
class Order {  
    Cook c;  
    List<FoodOrder> orders;  
    orderState s;  
}
```

```
class Food {  
    String type;  
    int inventory;  
}
```

```
enum OrderState { none, received, processed, readyForDelivery, delivered };
```

```
Timer timer; // For delivery times
```

```
Map<String, Food> foods;
```

MESSAGES

```
FoodOrder(CookAgent c, List<FoodOrder> orders) {  
    orders.add(new Order(c, order));  
}
```

SCHEDULER

```
if there is an o in orders such that o.s = received  
    processOrder(o);
```

```
if there is an o in orders such that o.s = processed  
    prepareOrder(o);
```

ACTIONS

```
processOrder(Order o) {  
    for(FoodOrder fo : o.orders) {  
        Food tempFood = foods.get(fo.foodType);  
        if tempFood.inventory = 0;
```

```

        fo.amount = 0;

        if tempFood.inventory > fo.amount
            tempFood.inventory -= fo.amount;

        if tempFood.inventory < fo.amount
            fo.amount = tempFood.inventory;
            tempFood.inventory = 0;

        if none of the orders can be fulfilled
            o.c.msgCannotFulfillOrder(o.orders);
            o.s = none;
        else
            o.c.msgWeWillDeliver(this, o.orders);
            o.s = processed;
    }

    prepareOrder(Order o) {
        o.s = readyForDelivery;
        timer.run(deliverFood(o), 10000); //wait 10 seconds to send food
    }

    deliverFood(Order o) {
        o.c.msgFoodDelivery(this, o.orders);
        o.s = delivered;
    }

```