UML class diagram

SharedQueue

SharedQueue<T>

- -Queue<T> queue
- -int queueCapacity
- -Object empty
- -Object full
- +SharedQueue(int queueCapacity)
- +isEmpty() : boolean
- +isFull(): boolean
- +waitOnEmpty()
- +waitOnFull()
- +notifyForEmpty()
- +notifyForFull()
- +add(<T> data)
- +remove(): <T>

AbstractProducer

«abstract»

AbstractProducer

+run()

#produce()

#stop()

AbstractConsumer

«abstract» AbstractConsumer +run()

#consume()
#stop()

Order

Order -int number -int deliveryTime -State state +Order(int number, int deliveryTime) +getNumber(): int +getDeliveryTime(): int +getState(): String +printState() +updateState(): boolean

«enumeration»
State

+State PENDING
+State COOKING
+State COOKED
+State DELIVERING
+State COMPLETED

Customer

-SharedQueue<Order> orderQueue -boolean isRunning -Random random -int DELIVERY_TIME -int SLEEP_TIME +Customers(SharedQueue<Order> orderQueue) +produce() +stop()

Pizzaiolo

Pizzaiolo

- -SharedQueue<Order> orderQueue
- -SharedQueue<Order> deliveryQueue
- -int cookTime
- -boolean isRunning
- +Pizzaiolo(SharedQueue<Order> orderQueue, SharedQueue<Order> deliveryQueue, int cookTim
- +produce()
- +stop()

Deliverer

Deliverer

- -SharedQueue<Order> deliveryQueue
- -int bagCapacity
- -boolean isRunning
- -Random random
- -int SLEEP_TIME
- +Deliverer(SharedQueue<Order> deliveryQueue, int bagCapacity)
- +produce()
- +stop()

PizzeriaConfigurator

PizzeriaConfigurator -int queueCapacity -int nPizzaiolos -int[] pizzaiolosCookTime -int nDeliverers -int[] deliverersCapacity -Gson gson +PizzeriaConfigurator() +PizzeriaConfigurator(int queueCapacity, int nPizzaiolos, int[] pizzaiolosCookTime, int nDeliver +getQueueCapacity(): int +getNPizzaiolos(): int +getPizzaiolosCookTime(): int[] +getNDeliverers(): int +getDeliverersCapacity(): int[] +serialize(Writer writer) +deserialize(Reader reader)

Pizzeria

-Customers customers -List<Pizzaiolo> pizzaiolos -List<Deliverer> deliverers -SharedQueue<Order> orderQueue -SharedQueue<Order> deliveryQueue -int SLEEP_TIME +Pizzeria(PizzeriaConfigurator pizzeriaConfigurator) +start() +stop()

Class diagram

