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

«enumeration» **State**

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

Customer

Customers

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

Pizzaiolo

Pizzaiolo

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

Deliverer

Deliverer

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

PizzeriaConfigurator

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

Pizzeria

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

