Assignment Click & Collect

Customer

* name: String
* address: String
* zipCode: String
* city: String
* Customer(name: String, address: String, zipCode: String, city: String)

Product

* name: String
* price: double
* Product(name: String, price: double)

Order

* orderId: int
* customer: Customer
* orderDate: LocalDate
* products: Set<Product>
* BASE\_PRICE: double = 2.50
* Order(orderId: int, customer: Customer, orderDate: LocalDate)
* addProduct(product: Product): void
* getTotalPrice(): double

Store

* orders: List<Order>
* Store()
* placeOrder(order: Order): boolean *(Minimum €15 required)*
* pickupOrder(orderId: int, customer: Customer): Order?
* removeOldOrders(): void *(Removes orders older than 14 days)*
* calculateTotalValue(): double

Assignment Fire Department

Firefighter

* name: String
* dateEnteredService: LocalDate
* Firefighter(name: String, dateEnteredService: LocalDate)
* getYearsOfExperience(): int

FireTruck

* maxWaterCapacity: double
* currentWaterLevel: double
* firefighters: List<Firefighter>
* FireTruck(maxWaterCapacity: double, currentWaterLevel: double)
* addFirefighter(firefighter: Firefighter): void
* useWater(amount: double): boolean *(Checks if enough water is available and deducts it)*
* refillWater(): void

Emergency

* description: String
* priority: int *(0-6)*
* estimatedWaterNeeded: double
* completed: boolean
* Emergency(description: String, priority: int, estimatedWaterNeeded: double)
* markAsCompleted(): void

FireDepartment

* firefighters: List<Firefighter>
* fireTrucks: List<FireTruck>
* emergencies: List<Emergency>
* FireDepartment()
* reportEmergency(emergency: Emergency): void *(Assigns truck & firefighters)*
* findAvailableTruck(waterNeeded: double): FireTruck?
* assignFirefighters(priority: int): List<Firefighter>
* completeEmergency(emergency: Emergency): void *(Releases truck & firefighters*