

# I. Units

1. **Currency** – initial currency – euro

2. **Money** – coins –

- euro cent – 5, 10, 20, 50;

- euro 1, 2

3. **Vending machine**

- Type -

1. Product readiness

- for ready to use products

- making - ....

2. Temperature

- room

- cooling

- freezing

- Capacity –  $T * S * P$

1. For ready to use products

- number of trays - T

- number of slots - S

- number of products pre-slot – P

- States -

- ready

- waiting – for product choosing / money entering

- working / delivering

- error -

- Operations -

1. Operations that is related to actions

- Insert money

- Choose product and options if there is any
- Return money
- Delivering a product

## 2. User operations -

- insert money
- pressing control buttons for choosing and to start the process

## 3. Internal operations in addition to main

- money - check for availability in received money, receive, check money type, return, check for enough amount of money for return
- product – check for availability, let go,
- temperature – if needed

### NOTES:

**For the project it will be used VM for ready to deliver products. The VM tray will receive only coins.**

## 4. **Inventory** –

Initial state - products for three types of VM

## 5. **Products** -

They will be classified based of the type of VM

## II. Structure

### 1. Objects

1. VM – plain object

**Props - Id, name, type, trays, slots, slot\_capacity**

Name in app – book, cold drink, combo

2. Product - plain object

**Props - Id, name, brand, vm\_id, tag, price, type**

Type – ready, making

3. Money – pieces

4. Money - currency

4. Inventory products – array of Products – ids Products

5. Inventory VM – array of VM – ids VM

**Enums VM type, product type**

2. Interface units VM

1. VM money tray

2. VM storefront

3. VM displaying the current state

4. VM control slot

4. VM add products

6. Tray for getting product



### III. CRUD operations

1. For product
2. For VM
3. Interface list module for displaying PR/VM, insert, delete, edit