**Lab4:** Coffee Vending Machine

Coffee vending machine is designed to dispense coffee in required quantity by collecting information such as type of coffee from the customer and estimating the price and quantity necessary for preparation of particular type of coffee.

The machine collects coin from the customer and asks for type of coffee to dispense.

Classes with attributes and functions are as follows:

**Controller:**

Attributes:

* id

Function:

* dispense the product
* dispense the coin to customer
* compare price of coin to that of product price
* check availability of the product
* update the product quantity after each dispense

**Selection Panel:**

Attributes:

* product name, status
* gets the product name from the customer (attributes)

Function:

* customer can select the product

**Coin Collector:**

Attributes:

* Coin price, count
* get the coin from the customer (attributes)

Function:

* collect and count the coins from the customer

**Coin Dispenser:**

Attributes:

* count of coin

Function:

* dispense the remaining amount to the customer

**Product:**

Attributes:

* price, quantity
* get the product price and quantity (attributes)

Function:

* update the quantity of product after each dispense
* retrieve the selected product

**Product Dispenser:**

Attributes:

* product, quantity
* get the product name and its quantity (attributes)

Function:

* dispense the selected product