Vending Machine

Design a vending machine to buy the water, soda, and candies

Customer can:

1. Put in the coins
2. Select the goods(candies or soda)
3. Get the soda or candies
4. Hand out the changes
5. Cancel the transaction

I only choose soda and use cash to pay to make an example to let the project more simple.

Class: VendingMachine

States: hasCoins, noCoins, goodsSoldOut, goodsCount

statesNow=noCoins, price, totalAmount

Behavior:addDrinks, insertCoins, backCharges, chooseGoods, dispense

String statesNow=noCoins;

Int getTotalAmount(){

Return totalAmount;

}

Int setTotalAmount(totalAmount){

This.totalAmount=totalAmount;

}

Void insertCoins(){

If (statesNow==noCoins)

System.out.println(“please insert money”);

StatesNow=hasCoins;

System.out.println(“has money now”);

Else

System.out.println(“already has money”);

}

Void backCharges(){

If (statesNow==noCoins)

System.out.println(“has no money to return”)

Else

StatesNow=noCoins;

}

int chooseGood(){

drinkID[ ] drinkYouWant=new drinkID[7];

scanner i=new Scanner(system.in);

return drinkYouWant(i);

}

Void dispense(){

switch (statusNow)

{

case noCoins;

case hasCoins:

system.out.println(“something wrong”);

case totalAmount=0:

system.out.println(“sold out”);

case totalAmount>0:

totalAmount--;

System.out.println("please waiting for a second");

}

break;

Class: customer

States: cashNumber, name,

Behavior: chooseSoda, chooseCandy, inputCoins, receiveSoda, receiveCandy, receiveCharges

Void main(){

VendingMachine machine=new machine;

Machine.chooseGood();

Machine.insertCoins();

Machine.backCharges();

Machine.dispense();

}

Class: drink

States: drinkID, price, totalAmount, drinkName

Public drinkID(string drinkID){

Return drinkID;

}

Public drinkName(int drinkName){

Return drinkName;

}

Public price(int price){

Return price;

}

Class: saler

Behavior: getDrinkName, getPrice, setDrinkName, setPrice

public String getDrinkName() {

return drinkName;

}

public void setDrinkName(String drinkName) {

this.drinkName = drinkName;

}

public int getPrice() {

return price;

}

public void setPrice(int price) {

this.price = price;

}