



VENDING MACHINE KATA

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In this exercise, you will build the brains of a vending machine. It will accept money, make change, maintain inventory, and dispense products. All the things you would expect a vending machine to accomplish!

FEATURES:

Accept Coins:

As a vendor, I want a vending machine that accepts coins so that I can make money.

The vending machine will accept valid coins (nickels, dimes, and quarters) but reject invalid ones (pennies). When a valid coin is entered, the amount of the coin will be added to the current amount, and the display will be updated. When no coins are inserted, the machine displays "INSERT COINS." Rejected coins are placed in the coin return.

Select Product:

As a vendor, I want customers to select products as an incentive to put money in my vending machine.

There are three products: cola for \$1.00, chips for \$0.50, and candy for \$0.65. When the respective button is pressed and enough money has been inserted, the product is dispensed and the machine displays "THANK YOU." If the display is checked again, it will display "INSERT COINS" and the current amount will be set to \$0.00. If there is not enough money inserted into the vending machine, the machine displays "PRICE" and the price of the item. Subsequent checks will display either "INSERT COINS" or the current amount, as appropriate.

Make Change:

As a vendor, I want customers to receive correct change so that they will use the vending machine again.

When a product selected costs less than the amount of money in the machine, then the remaining amount is placed in the coin return.

Return Coins:

As a customer, I want my money returned so that I can change my mind about buying stuff from the vending machine.

When return coins is selected, the money the customer placed in the machine is returned and "INSERT COINS" is displayed.

Sold Out:

As a customer, I want to know when the item I've selected is not available so that I can select another item.

When the item selected by the customer is out of stock, the machine displays "SOLD OUT." If the display is checked again, it will display the amount of money remaining in the machine or "INSERT COINS" if there is no money in the machine.

Exact Change Only:

As a customer, I want to be told when exact change is required so that I can determine if I can buy something before putting my money in the machine.

When the machine is not able to make change with the money in the machine for an item that it sells, it will display "EXACT CHANGE ONLY" instead of "INSERT COINS."