

Mr. Giansante



Visual Basic

Pop Machine

August 2016

Pop Machine

Learning Objectives:

Using multiple variables.
Using If-Then Statements.
Disabling Controls.

Design a Visual Basic program that simulates a pop vending machine.

The user should be presented with coins (5¢, 10¢, 25¢, 50¢ and \$1). The user should be able to add coins to the machine and then purchase colas. The machine should keep track of (and display) the amount of money put in.

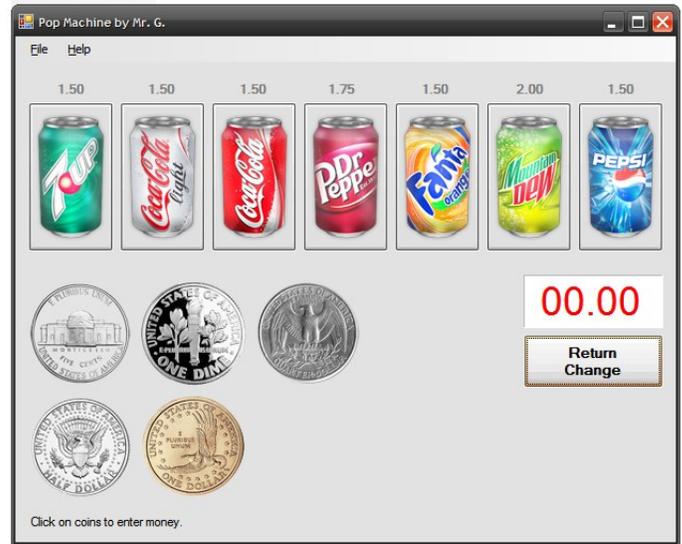


The user should also be able to select from the various colas with prices ranging from \$1.00 to \$2.50

Refer to the screenshot on the right.

The machine should start off with ten cans of each beverage and should give a message when it is sold out of any beverage.

The machine should make change when necessary.



Note: These graphics are available for download from the course website.



Pop Machine

Declare the variables in **General | Declarations ...**

```
Dim money As Single
Dim coke As Integer
Dim dietcoke As Integer
Dim pepsi As Integer
Dim mountaindew As Integer
Dim sevenup As Integer
Dim fanta As Integer
Dim drpepper As Integer
```

Set the initial values of the variables in **Form | Load ...**

```
coke = 10
dietcoke = 10
pepsi = 10
mountaindew = 10
sevenup = 10
fanta = 10
drpepper = 10

money = 0
```

In the "**Seven Up**" Button ...

```
If money < 1.5 Then
    MessageBox.Show("The cost of 7-Up is $1.50", "Enter More Money",
        MessageBoxButtons.OK, MessageBoxIcon.Information)
    Exit Sub
End If

sevenup = sevenup - 1
If sevenup = 0 Then Button1.Enabled = False

money = money - 1.5
Label1.Text = Format(money, "00.00")

If coke = 0 And dietcoke = 0 And pepsi = 0 And mountaindew = 0 And sevenup = 0
    And fanta = 0 And drpepper = 0 Then

    response = MessageBox.Show("The machine is completely empty. Refill?",
        "Contact Supplier", MessageBoxButtons.YesNo, MessageBoxIcon.Information)

    If response = DialogResult.No Then
        Me.Close()
    Else
        Put the code here to reset all the
        variables, clear the Label controls,
        re-enable the Buttons, etc.
    End If
End If
```

Note: Put this all on ONE line.

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Pop Machine

Please fill out all the information in this column using a pen before getting this assignment marked.

Name

Date

Class

Academic Honesty

The work I am submitting is completely my own creation and has not been copied from anyone else's work. If I have received help on this project, the names of those who have assisted are listed below.

Signature

Pre-Marking

The following people have pre-marked this assignment: (minimum of two)

Deductions

Each which is checked indicates the item was not satisfactory and results in the loss of one mark.

Deduction for late assignment is 1 mark per day.

Deduction for program crashing is 2 marks.

User Interface

- Appropriate Text in Title Bar (Form.Text)
- Separators and Access Keys in Menu, Capitalization
- "Exit" DialogBox meets requirements
- "About" DialogBox meets requirements
- Efficient and Esthetically-Pleasing User Interface
- Appropriate controls are used
- Spelling and Grammar are correct

Code / Programming Style

- Variables are declared and logically named
- Code is commented where appropriate
- Code is indented and spaced to show
- Code is efficient

Work Ethic / Problem Solving Skills

- Problem Solving Skills are demonstrated
- Makes Productive Use of Time
- Only Seeks Help when Necessary

Program-Specific Criteria

- Amount of money is displayed
- Amount of money increases when coins added
- Amount of money decreases when pops are bought
- All money amounts display with 2 decimal places
- User is informed when they do not have enough money
- Program keeps track of inventory (10 of each pop)
- User is informed when a selection is no longer available
- User is informed when machine is empty

Comments

Mark _____ / 10