Kiosk Project

# Background

You will be able to work on your final project throughout the course. As we go through the class, you will learn the skills for the requirements of the final project.

You have the task to write an application for a new Customer Service Kiosk installed at a customer’s business. Customers will use the kiosk to purchase items and make direct payments. The following paragraphs contain all of the client’s requirements for the Kiosk program.

The client wants its customers to be able to choose to have a plain single item or with additional items. Your program must ask customers to select between serving the item plain or with various additional items. The various selections must be group by type, such as creamers and sweeteners if you have a coffee kiosk. It must have at least three different additions.

The Customer Service Kiosk system can produce multiple order of the item; however, it does have a limited amount of resources since it does not connect to an external supply system. The Customer Service Kiosk system has an option for frequent customers. Each frequent customer has a special code. When the application calculates the final cost, the customer can enter the special code to receive a ten percent discount.

# Requirements

1. Main Module
   1. New customer
      1. Capture data
         1. Name
            1. First
            2. Last
         2. Address
         3. City
         4. State
         5. zip code
         6. phone number
      2. Assign a generated customer number using an index the phone number
   2. Returning customer
      1. Validate customer number
      2. Display data
         1. Name
            1. First
            2. Last
         2. Address
         3. City
         4. State
         5. zip code
         6. phone number
2. Single Item Module
   1. Create an array of single item types
   2. Set default single type to the first item
   3. Initialize beginning supply level
3. First addition Module
   1. Create an array of the first addition items
   2. Set default to “None”
   3. Initialize beginning supply level
4. Second addition Module
   1. Create an array of the second addition items
   2. Set default flavor to “None”
   3. Initialize beginning supply level
5. Third addition Module
   1. Create an array of the third addition items
   2. Set default to “None”
   3. Initialize beginning supply level
6. Menu Module
   1. Display current date/time
   2. Display primary item listing
   3. Display first addition listing
   4. Display second addition listing
   5. Display third addition listing
   6. Allow selection from lists
7. Input Module
   1. Create an array for sizes
   2. Create an array for prices
   3. Capture number of orders
   4. Warn customer when supply levels are below 10% capacity
   5. Do not accept additional orders when supplies are exhausted
   6. Allow customer to cancel order
   7. Allow customer to complete order
8. 10% Discount module
   1. Verify customer has correct discount code
   2. Apply 10% discount on pre-tax total of order
9. Tax modules
   1. Calculate county taxes of 3%
   2. Calculate state taxes of 7%
10. Final receipt module
    1. Calculate total sale
    2. Display items ordered
    3. Display total price
11. General
    1. Documentation required
    2. Make appropriate module calls
    3. Proper variable initialization
    4. Set additional items usage levels, such as creamers dispenses at 2 ounces

### U.S. Liquid Measurements

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Teaspoon | Tablespoon | Fluid ounce | Gill | Cup | Pint | Quart | Gallon |
| 1 teaspoon = | 1 | 1/3 | 1/6 | 1/24 | 1/48 | 1/96 | 1/192 | 1/768 |
| 1 tablespoon = | 3 | 1 | 1/2 | 1/8 | 1/16 | 1/32 | 1/64 | 1/256 |
| 1 fluid ounce = | 6 | 2 | 1 | 1/4 | 1/8 | 1/16 | 1/32 | 1/128 |
| 1 gill = | 24 | 8 | 4 | 1 | 1/2 | 1/4 | 1/8 | 1/32 |
| 1 cup = | 48 | 16 | 8 | 2 | 1 | 1/2 | 1/4 | 1/16 |
| 1 pint = | 96 | 32 | 16 | 4 | 2 | 1 | 1/2 | 1/8 |
| 1 quart = | 192 | 64 | 32 | 8 | 4 | 2 | 1 | 1/4 |
| 1 gallon = | 768 | 256 | 128 | 32 | 16 | 8 | 4 | 1 |