

SHOPPING LIST

Objectives: Generic Collections, Data Processing

Task: Make a shopping list application which uses collections to store your items.

What will the application do?

- Display a list of at least 8 item names and prices.
- Ask the user to enter an item name
 - If that item exists, display that item and price and add that item and its price to the user's order.
 - If that item doesn't exist, display an error and re-prompt the user. (Display the menu again if you'd like.)
- After adding one to their order, ask if they want to add another. If so, repeat. (User can enter an item more than once; we're not keeping track of quantity at this point.)
- When they're done adding items, display a list of all items ordered with prices in columns.
- Display the average price of items ordered.

Build Specifications/Grading Points

- Application uses a Dictionary<string, double> to keep track of the menu of items. You can code it with literals. (2 points for instantiation & initialization)
- Application uses parallel Lists (one of strings, one of doubles) to store the items ordered and their corresponding prices. (2 point for setting up empty lists)
- Application takes item name input and:
 - Responds if that item doesn't exist (1 point)
 - Adds its name and price to the relevant List if it does (1 point)
- Application asks user if they want to quit or continue, and loops appropriately (1 point)
- Application displays list of items with their prices (2 points)
- Application displays correct average for list (1 point)

Extended Challenges:

- Implement a menu system so the user can enter just a letter or number for the item.
- Make a third List for quantities of items ordered and allow the user to order more than one at a time.
 - Extended extended: If they order an item already in their cart, increase the quantity rather than adding another entry.
- Display the most and least expensive item ordered.



Console Preview:

```
Welcome to Guenther's Market!

Item          Price
=====
apple         $0.99
banana        $0.59
cauliflower   $1.59
dragonfruit    $2.19
Elderberry    $1.79
figs           $2.09
grapefruit    $1.99
honeydew       $3.49

What item would you like to order? apple
Adding apple to cart at $0.99

Would you like to order anything else (y/n)? y

{menu redisplays}

What item would you like to order? watermelon
Sorry, we don't have those.  Please try again.

{menu redisplays}

What item would you like to order? dragonfruit
Adding dragonfruit to cart at $2.19

Would you like to order anything else (y/n)? y

{menu redisplays}

What item would you like to order? honeydew
Adding honeydew to cart at $3.49

Would you like to order anything else (y/n)? y

{menu redisplays}

What item would you like to order? figs
Adding figs to cart at $2.09

Would you like to order anything else (y/n)? n

Thanks for your order!
Here's what you got:
apple         $0.99
dragonfruit    $2.19
honeydew       $3.49
figs           $2.09
Average price per item in order was 2.19
```

