

CS 162 Pre Assessment Survey Question

Write an algorithm to create a simple shopping cart program.

The program should allow user to

- Add an item
- Change the quantity of a specific item
- Show all the items in the cart
- Remove an item
- Calculate the total price

For each item, the program needs to keep track of

- Bar code
- Item description
- Quantity
- Price

Questions to answer:

1. How would you model the individual item?
2. How would you model a collection of items?
3. When scanning the bar code, you should be able to retrieve the item description and price. How would you model that inventory?
4. The inventory is potentially big. How would you speed up the retrieval process?