Niklas Roberts

Peter Tucker

11/15/18

CS172

CS172 Final Project Proposal

For my problem, I want to create a program simulating a reflexive vending machine. I want this vending machine to have a list of vending objects, which can be added to at any time (vector). The items in the vending machine are vending objects, which has subclasses of snacks, sweets (which includes chocolate and candy), gum, and drinks. All vending objects have a name and a price, but the individual classes have more specified listings, such as size for drinks, number of pieces for gum, fun size vs king size for sweets. I want to then create a scenario where a buyer enters a file that acts like a gift card. The card has a defined amount of money, and the buyer can buy whatever they want, but only one of each item, as after each purchase memory is reallocated and the vending machine shrinks. After the buyer has finished, it then puts whatever money is left over back onto the card.

Class inheritance: snacks, candy, gum, drinks

Reads in “money” file, and determines how much it is worth, if it is legit, then gives amount of money to purchase as many items as desired, then outputs the same file with a redefined amount of money: like a gift card