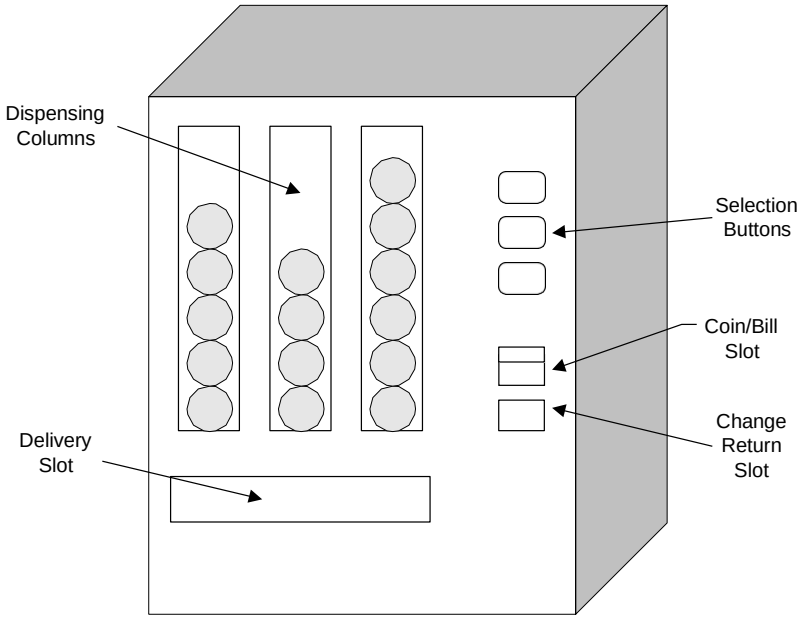
Object-Oriented Programming Using C++
605.604

JOHNS HOPKINS UNIVERSITY
Whiting School of Engineering

Mini-Project #1
Due 07/05/21

This project will involve developing software that models a soft drink vending machine. A schematic of the vending machine appears below. The vending machine holds and dispenses various types of soft drinks in cans. The machine has a number of columnar holders for storing cans. Each holder stores cans for one particular type of soft drink (e.g., Coke, Pepsi, etc.). Each type of soft drink has a price, which is displayed on the selection button. Customers enter money for a soft drink (bills and/or coins), make a selection, and a can of the selected soft drink is dispensed to a delivery slot on the machine. If necessary, the machine returns change to the customer via a change return slot.



You must use an object-oriented approach (classes, layered design architecture, object-oriented principles) in developing your solution to this problem. You should clearly state all assumptions that you make. Hand in a design class diagram, a commented source code listing, a source file, and a screen capture of your program executing. Submit all deliverables in a single zip file. No extra credit will be given for elaborate user interfaces. Your solution should not make use of any compiler-specific libraries (such as GUI components).

Put all deliverables in a single zip file named (assuming your name is Jane Smith) as follows: *project1_jsmith.zip*.

You will be graded based upon the clarity & correctness of your design and code, proper use of object-oriented design and coding principles, understandability of your solution.