

ITEC324 Principle of Computer Science III

Programming Assignment #1

What to do:

Analyze, design, and implement a program that simulates a vending machine.

Customer Mode

- Products can be purchased by inserting **coins** into the machine. The vending machine can take one quarter, one dime, one nickel, or one penny each time.
- A User selects a product from a list of available products, add coins, and either gets the product or gets the coins returned if insufficient money was supplied or if the product is sold out.

Operator Mode

- Products can be restocked and money in the vending machine can be removed by an operator. To access the operator mode, you need to enter a password.

Note:

You don't need to have a graphical user interface (GUI) for this assignment. Yet, if you prefer, you may include GUI in this assignment. Both ways are acceptable.

What to Submit:

Submit **ReadMe file** including an instructions on how to execute your program.

Submit Use cases, CRC cards, UML diagrams (class diagram, sequence diagram, and state diagram) and your programs to a dropbox in D2L by the deadlines.

For the CRC cards, you don't need to use an actual index card this time. Instead, you can draw a rectangle in your editor.