

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 must 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 the Assignments submission folder 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.