CSC 1310: LAB 6

CONCEPTS

- Stacks
- Template Classes
- Storing Objects in Stacks

DESCRIPTION

Inventory Item Stack

You are writing an Inventory program that will allow the user to enter a part into the inventory, take a part from the inventory, or quit. You are provided with the InvItem class (**InvItem.h**) and a partial **Driver.cpp**. You will be creating a DynamicStack class that should implement a Stack data structure. The DynamicClass should be implemented as a template class to allow any data type be added/removed from the stack. **You will submit three files: InvItem.h, DynamicStack.h, and Driver.cpp.**

SPECIFICATIONS

STACK CLASS (DYNSTACK.H)

You will have a header file that contains a DynamicStack class specification and member function definitions. This should be a **template class** that can accept any data type. **The stack should be implemented using a linked list**.

The Stack class should have the following member functions:

- Constructor
- Push
- Pop
- isEmpty

INVENTORY ITEM CLASS (INVITEM.H)

This class is provided for you.

DRIVER (DRIVER.CPP)

Comments that begin with "LOOK!" are provided in the given Driver.cpp file that indicate what code needs to be added.

SAMPLE OUTPUT

User input is highlighted in yellow.

```
------ Inventory Menu --------

1.  Enter a part into the inventory.
2.  Take a part from the inventory.
3.  Quit.

Please make a choice (1, 2, or 3):  1

You have chosen to add an item to the inventory bin.

Enter the item's serial number: 3561565
Enter the item's manufacture date: 04/02/1996

------ Inventory Menu --------

1.  Enter a part into the inventory.
2.  Take a part from the inventory.
3.  Quit.

Please make a choice (1, 2, or 3):  1

You have chosen to add an item to the inventory bin.

Enter the item's serial number: 488963
Enter the item's manufacture date: 10/31/2019

------ Inventory Menu --------

1.  Enter a part into the inventory.
2.  Take a part from the inventory.
3.  Quit.

Please make a choice (1, 2, or 3):  1

You have chosen to add an item to the inventory bin.

Enter the item's serial number: 6866781
Enter the item's manufacture date: 11/18/2019

------ Inventory Menu --------

1.  Enter a part into the inventory.
2.  Take a part from the inventory.
3.  Quit.

Please make a choice (1, 2, or 3):  2
```

```
You have chosen to remove an item from the inventory bin.


The part you removed was:
        Serial number: 6866781
        Manufacture date: 11/18/2019


------ Inventory Menu --------

1.   Enter a part into the inventory.
2.   Take a part from the inventory.
3.   Quit.

Please make a choice (1, 2, or 3):  2

You have chosen to remove an item from the inventory bin.


The part you removed was:
        Serial number: 488963
        Manufacture date: 10/31/2019


------ Inventory Menu --------

1.   Enter a part into the inventory.
2.   Take a part from the inventory.
3.   Quit.

Please make a choice (1, 2, or 3):  2

You have chosen to remove an item from the inventory bin.


The part you removed was:
        Serial number: 3561565
        Manufacture date: 04/02/1996


------ Inventory Menu --------

1.   Enter a part into the inventory.
2.   Take a part from the inventory.
3.   Quit.

Please make a choice (1, 2, or 3):  2

You have chosen to remove an item from the inventory bin.

No parts to remove.

------ Inventory Menu --------

1.   Enter a part into the inventory.
2.   Take a part from the inventory.
3.   Quit.

Please make a choice (1, 2, or 3):  3

Goodbye!
```

WHAT TO TURN IN

Zip all the following files and upload to ilearn.

- InvItem.h
- DynStack.h
- Driver.cpp