Programming Fundamentals Lab – Student Grade Manager

The goal of labs are to simulate the act of working for a company while also re-enforcing the concepts you learned for the week. The questions are posed as application features. You will be expected to make a personal private repository, associated issues & branches for each feature and submit pull requests for each feature. You will be graded on how many features you can complete. **This is hard, you will need to start very early and work on it on off hours, including research. But, this is a full app that will you can be very proud of.**

**Due Date: Sept. 5th 2021**  
  
=========================================================================

We need a console app that manages student grades.  
  
Feature 0:  
As a user, I need a text menu to manage and interact with the app.

Feature 1:  
As a user, I need to be able to see all grades.

Feature 2:  
As a user, I need to be able to add grades to the system.  
  
Feature 3:  
As a user, I need the system to automatically calculate the averages grade for the class.  
  
Feature 4:  
As a user I need the system to show me the top student.

Feature 5:

As a user I need the system to show me the bottom student.  
  
Feature 6:  
As a user, I need to be able to be able to remove students who drop from the class.   
  
Feature 7 :  
As a user, I need to be able to edit the current grade of an existing student.

Feature 8 :  
As a user, I need to be able to exit the app.

Bonus:   
Check the validity of the users selections and inputs everywhere and provided sensible responses. (This will require research on your part of a topic we have not covered yet, which is why its a bonus. That topic is called Exception Handling)

Hints:  
**You will need to use everything you’ve learned up until this point to build this app**, including:  
loops – even potentially infinite ones.

Loop control constructs like **break** and **continue**

methods

variables of many data types

conditional statements of many kinds including many ifs

potentially switch statements

Console.ReadLine()

Console.WriteLine()

Lists or Arrays

arithmetic operators

See the associated video for a complete walk through of the app you are building.  
  
Note: ***Do not use classes yet***. There is a way to do this with primitive types and not classes. Then later you’ll see how valuable classes are.