Step 3:

Design outline:

Modules required:

AddStudent module

AddSubject module

ViewStudentsRecords module

Main module where menu and options will guide user to use above modules

Coding components:

A Class for subject

Variables:

Name - name of subject

Grade - the grade the student has received this subject

Methods:

ToString() - string representation of a Subject

A Class for Student:

Variables:

AverageGrade

Name

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List of Subjects a student has attended and received a grade for

Methods:

CalculateAverageGrade() - calculate average grade from all subject grades

ShowAverageGrade() - calculate and show average grade

AddSubject(string subjectName, decimal grade) - add a subject the student has studied and has a grade for ToString() to print out the student and their courses with their grades and average grade.

A Class for StudentGradeManager - that will handle subjects and students

Variables:

List of Students

List of subjects per student variable (part of Student class)

Methods:

AddStudent()

AddSubject()

ViewStudentsRecords()

Switch statements:

To handle the user's input in regards to the menu options they are presented

if/else statements:

Check on add Subject module if students exist and provide message if so

Check on View students module if students exist and provide message if so

Loops:

The main menu should be in a while true loop to keep repeating the user their menu options

The ViewStudentsRecords module should loop through all students and through all the courses per student

