**Project Part 1:**A screen shot of a computer program

AI-generated content may be incorrect.The method above is the location where issues with the output were coming from. To fix it, four things were done, the first being fixing the input range from 1 through 70 to 1 through 7, this way any input beyond the given seven choices. The second fix was with the first else if statement where it was only triggering the course block if the same choice is made 3 times. To fix this, it was switched from && (AND) to || (OR) which checks to see if the selection has already been made before. The third fix is with the second else if statement where it calculates if the total course credit count is 9, and if it is, then no new selection can be made. The issue was with how it was checked, as it wasn’t checking if you could add a course before letting the choice validate. To fix this, we have the method add 3 to the totalcredit value and if it is greater than 9, then the next selection is blocked. The final fix was with the return -4 line. If everything is cleared and satisfies all other checks, then it should return 0, not -4 which means it never confirms. So this change now returns the message that the selection is clear. This method required me to modify math operations, modify control structures, modify Boolean code, and modify a method. There was no need to change variable declarations and data type references.  
  
A screenshot of a computer program

AI-generated content may be incorrect.  
The image here is of the program executing the way it is suppose to. Giving all the course choices and then having the user put in a value. It then successfully tells that the course is ok and adds it to the list of 3 courses the user is making.  
  
  
A computer screen with white text

AI-generated content may be incorrect.  
This image is showing the program seeing that a course that was already chosen has been selected again and so it lets the user know that it won’t add it a second time. Then continues to let the user try to register for another course.  
  
  
A computer screen shot of a black screen

AI-generated content may be incorrect.  
This image shows the program seeing that a fourth course has been selected and since each course is worth 3 credits, it means that any courses added after the initial three won’t be added and the user will be informed that they can’t have more than 9 credit hours, and the program continues like normal after.  
  
  
A screenshot of a computer

AI-generated content may be incorrect.  
This final image shows the user inputting a value outside the course selection range and having the program see that it can’t be used and asking for the user to try and again so it can get a valid input.  
  
  
  
Below is the edited code from the ValidateChoice method where the issues were happening:  
  
//Issues were located within the ValidateChoice method

int ValidateChoice(int choice, int firstChoice, int secondChoice, int thirdChoice, int totalCredit)

{

if (choice < 1 || choice > 7)

return -1;

else if (choice == firstChoice || choice == secondChoice || choice == thirdChoice)

return -2;

else if (totalCredit + 3 > 9)

return -3;

return 0;

}

**Project Part 2:**A screenshot of a computer

AI-generated content may be incorrect.The screenshot above shows the program giving a success message to the user letting them know that the course has been registered for them. I did try to do the message the way the supporting resource video did, but learned that it would require me to edit the more detailed parts of the program, including color and size, so I chose to use a pop up box instead which is what you’ll see in these images. Take notice of how the courses are displayed correctly and in the right box, as is the same with the credit display.  
  
  
A screenshot of a computer screen

AI-generated content may be incorrect.  
The image above is showing how the program will not allow the user to register for the same class more than once, telling the user within the pop up box this message.  
  
  
  
A screenshot of a computer screen

AI-generated content may be incorrect.  
This image shows the other error message saying that no more than 9 credit hours can be assigned, and with each course being 3 credit hours, that means only 3 courses can be chosen. The program checks the credit hours instead of number of courses so that if the credit hours change, the system still works.  
  
  
The code that has been written are as shown below with the specific lines they are written on:

Lines 24-26:

//Tracks registered courses and initializes the totalCredits

private Course choice;

private List<Course> registeredCourses = new List<Course>();

private int totalCredits = 0;

The code here is meant to keep track of the registered courses and the list they are added to as well as make sure the credit count starts at zero when the program starts up.

Lines 62-97:

//Message boxs appear to confirm success or tell the user about an error

if (choice == null)

{

MessageBox.Show("Please select a course.", "Error");

return;

}

if (choice.IsRegisteredAlready())

{

MessageBox.Show($"You have already registered for {choice.getName()}.", "Error");

return;

}

if (totalCredits >= 9)

{

MessageBox.Show("You cannot register for more than 9 credit hours.", "Error");

return;

}

//Register the course

choice.SetToRegistered();

registeredCourses.Add(choice);

totalCredits += 3;

//Update the list of registered courses in the display

listBox.Items.Clear();

foreach (Course c in registeredCourses)

{

listBox.Items.Add(c.getName());

}

//Update credit hour display

textBox.Text = totalCredits.ToString();

//Show confirmation

MessageBox.Show($"You have successfully registered for {choice.getName()}.", "Success");  
  
  
This set of code is used to display the pop up box messages once the “Register for this course” button is pressed. The lines below the message box lines are used to set the courses status to registered and add 3 credits to the total credits. It then updates the displayed number of courses and credits, and then if the registration was a success, it displays a message saying that the course has been registered.