

IT 230 Final Project Submission Template

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**Class:** IT 230

**Module:** Module 5 Final Project Part 1 – Console Register Student

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| **1.** | Insert a copy of your assignment of the ZIP file of all your Visual Studio project files here so that it can be loaded and run in another Visual Studio: |
| Insert here a copy of your \*.cs source code text you used here (copy and paste source code here, do **not** simply insert \*.cs files):  /\* The task for this final project portion was to modify existing code to make it run as intended.  \* Changes made to this program is indicated in the comments by the editor listed below.  \*  \* Editor: Ryan Hutton  \* SNHU IT 230 - Software Development with C#  \* 11/28/2019  \*/  using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace ConsoleRegisterStudent  {  class Program  {  static void Main(string[] args)  {  (new Program()).run();  }  void run()  {  int choice;  int firstChoice = 0, secondChoice = 0, thirdChoice = 0;  int totalCredit = 0;  string yesOrNo = "";  System.Console.WriteLine("Ryan Hutton");  do  {  WritePrompt();  choice = Convert.ToInt32(Console.ReadLine());  switch (ValidateChoice(choice, firstChoice, secondChoice, thirdChoice, totalCredit))  {  case -1:  Console.WriteLine("Your entered selection {0} is not a recognized course.", choice);  break;  case -2:  Console.WriteLine("You have already registerd for this {0} course.", ChoiceToCourse(choice));  break;  case -3:  Console.WriteLine("You can not register for more than 9 credit hours.");  break;  case 0:  Console.WriteLine("Registration Confirmed for course {0}.", ChoiceToCourse(choice));  totalCredit += 3;  if (firstChoice == 0)  firstChoice = choice;  else if (secondChoice == 0)  secondChoice = choice;  else if (thirdChoice == 0)  thirdChoice = choice;  break;  }  WriteCurrentRegistration(firstChoice, secondChoice, thirdChoice);  Console.Write("\nDo you want to try again? (Y|N)? : ");  yesOrNo = (Console.ReadLine()).ToUpper();  } while (yesOrNo == "Y");  Console.WriteLine("Thank you for registering with us");  }  void WritePrompt()  {  Console.WriteLine("Please select a course for which you want to register by typing the number inside []");  Console.WriteLine("[1]IT 145\n[2]IT 200\n[3]IT 201\n[4]IT 270\n[5]IT 315\n[6]IT 328\n[7]IT 330");  Console.Write("Enter your choice : ");  }  int ValidateChoice(int choice, int firstChoice, int secondChoice, int thirdChoice, int totalCredit)  {  if (choice < 1 || choice > 7) // Changed "...choice > 70" to "choice > 7".  return -1;  else if ((choice == firstChoice) || (choice == secondChoice) || (choice == thirdChoice)) // Changed the logical ANDs to logical ORs.  return -2;  else if (totalCredit == 9) // Changed "totalCredit > 9" to "totalCredit == 9".  return -3;  return 0; // Changed return from -4 to 0.  }  void WriteCurrentRegistration(int firstChoice, int secondChoice, int thirdChoice)  {  if (secondChoice == 0)  Console.WriteLine("You are currently registered for {0}", ChoiceToCourse(firstChoice));  else if (thirdChoice == 0)  Console.WriteLine("You are currently registered for {0}, {1}", ChoiceToCourse(firstChoice), ChoiceToCourse(secondChoice));  else  Console.WriteLine("You are currently registered for {0}, {1}, {2}", ChoiceToCourse(firstChoice), ChoiceToCourse(secondChoice), ChoiceToCourse(thirdChoice));  }  string ChoiceToCourse(int choice)  {  string course = "";  switch (choice)  {  case 1:  course = "IT 145";  break;  case 2:  course = "IT 200";  break;  case 3:  course = "IT 201";  break;  case 4:  course = "IT 270";  break;  case 5:  course = "IT 315";  break;  case 6:  course = "IT 328";  break;  case 7:  course = "IT 330";  break;  default:  break;  }  return course;  }  }  } |
| **2.** | Insert a screenshot here of the output that resulted from running your program, showing your last name as the first printed text to the screen: |
| **3.** | Explain the design of your program, the steps you took to complete it, and how you coded it:  This portion of the final project did not require much coding on my part because much of the project was already built. Therefore, I served the role as the code editor/ tester. The design of the program uses the concepts we learned in IT 230 including methods, variable types, and conditional statements. To establish a starting point to edit the code, I loaded up the project and ran the code before making any changes. Next, I observed the flow of the program and where there are errors. Per the course instructor’s video guidelines in his lecture, I concentrated all my editing on the method ValidateChoide(int, int, int, int, int) and reran the program with each change. The changes I made include, changing the if statement to if (choice < 1 || choice > 7)…(Line 79). Next, in line 81, I changed all the logical ANDs to logical ORs to add flexibility in the different choices the user inputs. Next, I changed the if statement to if(totalCredit == 9) in line 83 to check if there are more than 9 credit hours added. Lastly, I changed the return -4 statement in line 85 to return 0 to improve the control of the program when the method is invoked elsewhere in the program. |
| **4.** | Reflect on this experience and the lessons you learned from it:  This was a good assignment to learn how to take another person’s complex code and debug and correct the errors. These types of activities help to strengthen one’s ability to solve problems. I created many ideas to complete this task, which became increasingly complex with each solution I came up with. I had to remind myself to keep it simple and just solve the problem straightforward. This was especially true when I initially could not figure out how the program worked but it would allow me to add a fourth course without the program recognizing that it exceeded the credit requirements. After taking a 1-day break and coming back to it, I realized that the variable totalCredit needed to have the value of 9 (Line 83)before proceeding elsewhere in the program. |