**7-2 Final Project Part II**

**WPFRegisterStudent**

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**Part I: Output Screen Shots**

**A screenshot of a computer screen

AI-generated content may be incorrect.**

**Screen Shot 1:** Program launched with the title updated to show my last name.

A screenshot of a computer screen

AI-generated content may be incorrect.

**Screen Shot 2:** First course registered. Course that is currently registered displayed. Total Credit Hours updated.

A screenshot of a computer screen

AI-generated content may be incorrect.

**Screen Shot 3:** Registering for the same course prompts an error. Total Credit Hours do not update. IT 145 is not added twice to the list.

A screenshot of a computer

AI-generated content may be incorrect.

**Screen Shot 4:** Second course registered. Course list updates to show both courses. Total Credit Hours goes up another 3 credit hours.

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AI-generated content may be incorrect.

**Screen Shot 5:** Third course registered. Course list updates to show all three courses. Total Credit Hours goes up another 3 credit hours.

**A screenshot of a computer screen

AI-generated content may be incorrect.**

**Screen Shot 6:** Attempting to register for a fourth class does not work. 9 credit hours are the limit. Total credit hours do not update past 9.

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AI-generated content may be incorrect.

**Bonus Screen Shot:** Failing to select a course and then attempting to register prompts the user to select a course.

**Part II: Source Code**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows;

using System.Windows.Controls;

using System.Windows.Data;

using System.Windows.Documents;

using System.Windows.Input;

using System.Windows.Media;

using System.Windows.Media.Imaging;

using System.Windows.Navigation;

using System.Windows.Shapes;

namespace WPFRegisterStudent

{

/// <summary>

/// Interaction logic for MainWindow.xaml

/// </summary>

public partial class MainWindow : Window

{

Course choice;

public MainWindow()

{

InitializeComponent();

}

private void Window\_Loaded(object sender, RoutedEventArgs e)

{

Course course1 = new Course("IT 145");

Course course2 = new Course("IT 200");

Course course3 = new Course("IT 201");

Course course4 = new Course("IT 270");

Course course5 = new Course("IT 315");

Course course6 = new Course("IT 328");

Course course7 = new Course("IT 330");

this.comboBox.Items.Add(course1);

this.comboBox.Items.Add(course2);

this.comboBox.Items.Add(course3);

this.comboBox.Items.Add(course4);

this.comboBox.Items.Add(course5);

this.comboBox.Items.Add(course6);

this.comboBox.Items.Add(course7);

this.textBox.Text = "";

}

private List<Course> registeredCourses = new List<Course>(); // List for storing the registered courses as we add them

private const int CreditPerCourse = 3; // Value of each course

private const int MaxCreditHours = 9; // Maximum credit hours allowed

private int totalCreditHours = 0; // Keeps track of the total credit hours added so far

private void button\_Click(object sender, RoutedEventArgs e)

{

if (comboBox.SelectedIndex == -1) // Added as extra validation for when the user fails to select a course

{

label3.Content = "You have not made a selection. Please chose a course.";

return;

}

Course selectedCourse = (Course)comboBox.SelectedItem; // selectedCourse is a Course.cs object. Gets the course from the drop down.

if (selectedCourse.IsRegisteredAlready()) // Checks if the user has registered for that course already, calls IsRegisteredAlready from Course.cs

{

label3.Content = $"You have already registered for this {selectedCourse.getName()}.";

return;

}

if (totalCreditHours + CreditPerCourse > MaxCreditHours) // Checks if adding another course would put us above 9

{

label3.Content = "You cannot register for more than 9 credit hours.";

return;

}

selectedCourse.SetToRegistered(); // Calls SetToRegistered from Course.cs

registeredCourses.Add(selectedCourse); // Adds a course to the list

totalCreditHours += CreditPerCourse; // Increases the credit hours

listBox.Items.Add(selectedCourse.getName()); // Updates the list on the GUI

textBox.Text = (registeredCourses.Count \* CreditPerCourse).ToString(); // Updates the credit hours displayed on the GUI

label3.Content = $"Registration Confirmed for course {selectedCourse.getName()}."; // Displays this message when registration is successful

}

}

}