A screenshot of a computer screen

Description automatically generatedThis screenshot shows the program working as intended when selecting a course. The program adds the course into the box that says “You are currently registered for:” and keeps track of credit hours.

A screenshot of a computer screen

Description automatically generated

This screenshot displays the program showing an error message when an attempt is made to register a course that has already been added.

A screenshot of a computer

Description automatically generatedThis screen shot shows the error message the user would receive if they tried to register for more than 9 credit hours.

**MainWindow.xaml.cs 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

{

public partial class MainWindow : Window

{

Course choice;

public MainWindow()

{

InitializeComponent();

}

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

{

// Initialize courses and populate ComboBox

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 void button\_Click(object sender, RoutedEventArgs e)

{

// Clear any previous status message

statusLabel.Content = "";

// Get the selected course

choice = (Course)(this.comboBox.SelectedItem);

// Check if the course is already registered

if (choice.IsRegisteredAlready())

{

statusLabel.Content = $"You have already registered for this {choice.getName()} course.";

return;

}

// Checks hours to see if able to add class

int totalCreditHours = CalculateTotalCreditHours();

if (totalCreditHours >= 9)

{

statusLabel.Content = "You can not register for more than 9 credit hours.";

return;

}

// Register the course

choice.SetToRegistered();

statusLabel.Content = $"Registration Confirmed for course {choice.getName()}.";

// Update total credit hours

UpdateCreditHours();

// Update the registered courses display

this.listBox.Items.Add(choice.getName());

}

private void UpdateCreditHours()

{

int totalCredits = CalculateTotalCreditHours();

// Update the TextBox with total credits

this.textBox.Text = totalCredits.ToString();

}

private int CalculateTotalCreditHours()

{

int totalCredits = 0;

// Calculate total credits for registered courses

foreach (var item in this.comboBox.Items)

{

if (item is Course course && course.IsRegisteredAlready())

{

totalCredits += 3;

}

}

return totalCredits;

}

}

}

**Course.cs code**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Xml.Linq;

namespace WPFRegisterStudent

{

class Course

{

public string name = "";

private bool isRegisteredAlready = false;

public Course(string name)

{

this.name = name;

}

public void setName(string name)

{

this.name = name;

}

public string getName()

{

return name;

}

public bool IsRegisteredAlready()

{

return isRegisteredAlready;

}

public void SetToRegistered()

{

isRegisteredAlready = true;

}

public override string ToString()

{

return name;

}

}

}