Input validation requiring a selection: A screenshot of a computer

AI-generated content may be incorrect.

Validation to check to see if course is already registered:

A screenshot of a computer screen

AI-generated content may be incorrect.

Successful registration:

A screenshot of a computer

AI-generated content may be incorrect.

Validation ensuring that user does not register for more than 9 credit hours:  
A screenshot of a computer

AI-generated content may be incorrect.

Input validations look first to see if course is already registered before returning error based on total credit hours registered:  
A screenshot of a computer screen

AI-generated content may be incorrect.

Modified source code in MainWindow.xaml.cs:  
  
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

{

/// Interaction logic for MainWindow.xaml

public partial class MainWindow : Window

{

//Field to keep track of total credit hours

private int totalCreditHours = 0;

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 = "";

//Makes sure that the course listbox is clear

this.label3.Content = "";

}

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

{

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

// Rule 1: Ensure a course was selected.

if (choice == null)

{

label3.Content = "Please select a course to register";

return;

}

// Rule 2: Do not allow duplicate registration for the same course.

if (choice.IsRegisteredAlready())

{

label3.Content = "You have already registered for this " + choice.getName() + " course.";

return;

}

//Rule 3: Make sure user has not registered for more than 9 credit hours

if (totalCreditHours >= 9)

{

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

return;

}

// Register the course by marking it as registered.

choice.SetToRegistered();

// Assume each course counts for a fixed number of credit hours.

totalCreditHours += 3;

// Provide a registration confirmation message that includes the course name and credit hour details.

label3.Content = "Registration Confirmed for course " + choice.getName() + ".";

// Update the textbox that displays the total credit hours.

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

//Adds course to listbox

this.listBox.Items.Add(choice);

}

}

}